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**INTENTION TO CHOOSE GREEN PRODUCT CONSEQUENCES OF
ATTITUDE AND SUBJECTIVE NORM:
THE CASE OF CUSTOMERS IN PENANG**

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By

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ABSTRAK

Kajian ini bertujuan untuk menyelidikii kesan pengetahuan persekitaran ke atas kelakuan persekitaran dan norma subjektif, dan juga kesan kelakuan persekitaran dan norma subjektif ke atas niat pelanggan di dalam memilih produk hijau. Kaji tinjauan telah dilakukan ke atas 150 orang pelanggan di Pulau Pinang sebagai sampel dan digunakan untuk analisis statistic. Selepas analisis faktor, kelakuan terhadap persekitaran, kelakuan terhadap pemerhatian persekitaran, norma subjektif manusia dan akhirnya norma subjektif media atau kerajaan telah ditambah pakai sebagai elemen ke atas kelakuan persekitaran dan norma subjektif. Kajian mendapati pengetahuan persekitaran mempunyai pengaruh yang penting ke atas kelakuan terhadap persekitaran, norma subjektif manusia dan norma subjektif media dan kerajaan, tetapi ianya tidak mempengaruhi kesan perlakuan terhadap pemerhatian persekitaran. Tambahan pula, kelakuan terhadap persekitaran dan norma subjektif manusia mempunyai pengaruh ke atas niat pelanggan di dalam memilih 'barangan hijau' atau 'barangan persekitaran'. Sebaliknya, kelakuan terhadap pemerhatian dan norma subjektif media atau kerajaan tidak mempunyai pengaru ke atas niat pelanggan yang memilih barangan hijau.

ABSTRACT

The purpose of this research was to determine the impact of environmental knowledge as external variable on environmental attitude and subjective norm, along with an effect of environmental attitude and subjective norm as independent variables on customers' intention to choose green products. A survey was conducted on Penang's customers as sample. A total of 150 useable respondents were collected and were statistically analyzed. After factor analysis, some of elements were added to environmental attitude and subjective norms, such as attitude towards environment, attitude towards environmental conservation, subjective norm of people/society and finally subjective norm of government/media. It was found that environmental knowledge which is an external variable have significant impact on attitude towards environment, subjective norm of society/people and subjective norm of government/media, but it is not effect on attitude towards environmental conservation. Moreover, attitude towards environment and subjective norm of society/people have influence on intention of customers in choosing green product. Conversely, attitude towards conservation and subjective norm of government/media do not have impact on intention of people to choose green product.

Chapter 1

INTRODUCTION

1.0 Introduction

Environmental problems have been the main issue for the consumers in the last three decades. This consciousness has been increased by some factors like media coverage, awareness of environmental problems, activities of pressure groups, strict legislation (both national and international) and effects of industrial disasters on people's attitude. (McIntosh, 1991; Tapon & Leighton, 1991; Charter, 1992; Wagner, 1997).

Some people believe that marketing is responsible for partly damaging the environment because they produce the products which have short time life and by advertising, they encourage people to buy different goods, and then their activities make increase people's consumptions. (Yam-Tang & Chan 1998). Pattern of production by industries, pattern of consumption and consumers' behavior cause environmental problems directly or indirectly (Said, Ahmadun, Paim & Masud 2003). And with these continuing patterns, environmental problems increased and then lead to ecological degradation. The environmental degradation has caused problems to environment like global warming, depletion of stratospheric ozone layer, pollution of the sea and rivers, noise and light pollution and acid rains (Ramlogan, 1997). Almost 30-40 percent of environment degradation is contributed by the activity of private households (Grunert, 1993).

Malaysia is one of the fastest developing nations in Asia, and its economy has grown over the last few decades, from industrialization, agriculture and tourism. However,

Malaysia now faces problems of deforestation, pollution of inland marine waters, soil and coastal erosion, over fishing and coral reef destruction, along with air pollution, water contamination and the problem of waste disposal. (<http://www.panda.org/malaysia>).

1.1 Background of the study

Malaysia has faced large amounts of toxic and hazardous chemical waste materials formed from the rapid growth in the manufacturing sector (Awang 1998; Goh 1990). Air quality, river water quality, deforestation, household wastes and hazardous wastes are some of the examples of environmental issues faced by the nation.

Rivers are precious resources that need to be preserved. They are sources for domestic and industrial water supply, commercial fishing, power generation and irrigation. There are also habitats for various kinds of aquatic organisms. Regrettably, rivers are often contaminated with domestic and industrial wastewater, solid waste, chemicals and various pollutants from human activities. River pollution is fast becoming an alarming problem in Malaysia. Since 1995, the number of clean rivers has decreased from 48 to 34 rivers. Nonetheless, the number of much polluted rivers has dropped slightly in the same period from 14 to 12 (Department of Statistics Malaysia, 2001). In 2004, based on Biochemical Oxygen Demand (BOD) parameter, 18 river basins in Malaysia were classify as polluted, 37 as slightly polluted and 65 as clean. The Department of Environment started the marine water quality monitoring in 1987. In 2004, the contaminants of the marine water were completely suspended solid materials, *Escherichia coli* and oil grease. According to the interim marine water quality standards, 77 percent of the samples exceeded the standards for total suspended solids, 50 percent

for Escherichia coli and 49 percent for oil and grease. A study from the Department of Environment (DoE) in 1996 revealed that motor vehicles contributed 82% to air pollution. Other sources contributing to air pollution were power stations, 9%; domestic and commercial furnaces, 0.2%; and open burning at solid-waste disposal sites, 0.8% (DoE1996 cited in Yahaya 2006). Solid domestic waste is one of the major environmental problems which most municipalities face in the country, especially in urban areas. Although rigorous campaigns of recycling have been in progress, the recycling rate has increased from 1-2 percent in 1997 to merely 5 percent in 2001 (Aini & Roslina, 2002).

Malaysia imports recycled waste from other countries in order to produce its own recycled products (The Star 2003). Not only does recycling mean to protect environment, it also can help the economy by recovering and reusing valuable materials (Isa, Asaari, Ramli, Ahmad & Seiw 2005). four main recycle items in Malaysia are: 1) all colored and clear glass, including drink bottles, food containers, vitamin bottles and cosmetic jars 2) All types of aluminum and steel cans like drink cans and food cans 3) All paper, books, newspaper, magazines, paper scraps, calendars telephone books, catalogues, pamphlets, cards, envelops & carton boxes4) All plastics shopping bags, supermarket bags, plastic mineral water bottles, plastic food containers & vitamin containers (Loo, 2004).

Deforestation is another environmental problem in Malaysia. There are many causes of deforestation; one of the most important is population growth. Demand for houses increases as the population increases rapidly. Many forests were cleared to fulfill this huge demand. Meanwhile, another main cause of deforestation in Malaysia is developing thousands of acres of forest areas into palm oil plantations. Thus, now Malaysia has the

biggest palm oil plantations in the world. Other environment problems related to deforestation is the loss of habitat of many animals and not enough foods for them in the remaining forest areas. Another effect of deforestation is increasing landslides. As trees are cut down, the soil would be unprotected and when it rains, the solid would flow and its structure would be weak (<http://dewa87.blogspot.com/2008/02/deforestation-in>).

Since 1970s, environment issue has started to know the environmentally friendly customer. More and more consumers have realized that their consumption activities will lead to environmental problems and have turned their environment concern into action (Kangun, Carlson & Grove 1991). Suchard and Polonski (1991) pointed out that ecologically conscious consumers will try to protect the environment in various shapes. In other words, they would focus on the aspects like recycling, where at the phase of 'checking that a package is made of recycled material' and the 'buying only green products'. Research has shown that consumers have translated their resulting environmental concern into actively purchasing green products (Smith, 1990). As cited by Bridget and Antonis (1995), companies answers to increasing consumers concern about environment with producing a variety of green products (Kangun et al., 1991). For example in UK, 80 percent of people stated were aware about the environment (marketing, 1990) and one in five consumers purchased green products (marketing, 1992). Smith (1990) concluded that with increasing consumer consciousness to environment issue, they were willing to buy green products.

Ecologically responsible consumption refers to a special type of socially conscious or socially attentive consumer behavior that may be viewed as involving an 'environmentalist perspective' (Scheffer, 1991) and may also be termed as 'green

consumerism' (Elkington, Hailes & Makower, 1990) or 'environmentally concerned consumption' (Henion, 1976). Survey of selected companies on green purchasing in Malaysia showed that NSK (M) Sdn. Bhd. (NSK Malaysia), a subsidiary of NSK Ltd., Japan (NSK Japan), was established in 1993, to promote sales of NSK Products in Malaysia. NSK Japan has also taken actions to protect the environment beyond its corporate operations by encouraging their suppliers to take environmentally friendly actions. Policies and Activities of NSK are containing green procurement (raw materials, parts, material resources, etc).

- (a) Reduce the environmental impact of our use of raw materials, parts, and material resources
- (b) Promote controls for hazardous chemical substances
- (c) Encourage suppliers to implement voluntary environmental

MSP Industries is related to NSK Micro Precision Co. Ltd., in Malaysia, which is also a subsidiary of NSK Ltd., Japan. MSP Industries Sdn. Bhd. was established in 1995 with fifty-one employees. Their annual sales are RM 14 million in 2001. MSP Industries is a manufacturer of miniature ball bearing parts. MSP has been processing in full pursuit of high precision, high cleanliness, and the metal stamping, plastic injection moulding and mould processing are their specialties. Since the beginning of operations, MSP was very much aware of environmental issues and safety measures. MSP has acquired ISO 14001 certification in 1996 and has been continuously promoting improvement activities in an attempt to reduce environmental impact. (<http://www.apotokyo.org>).

Kuala Lumpur, Malaysia (2006), Earth & Garden is a brand new corporation with the ambition and structure to become a major global brand. It's manufacturing 100% organic

and environmentally friendly products are suitable for all agricultural, horticultural and floricultural applications. Earth & Garden will produce a 100% organic and environmentally friendly growing medium and garden mulch mix by utilizing waste products from palm oil milling together with other organic materials. (<http://www.earthandgarden.com>).

This research seeks to examine the relationship between the knowledge, attitudes and subjective norm of the consumers and their intention to choose green products in Malaysia. This study is based on Theory of Reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the Theory of Planned behavior (Ajzen, 1985) which is an extension of TRA. In this research, we examine the effect of attitude and subjective norms on intention and it is similar with variables used in those models.

In terms of TRA, two main factors determine consumers' intentions for buying more green products, one is attitude towards environment that it is personality and the other is subjective norm that is social's influence on a person.

1.2 Problem statement

Based on the above argument the intention to choose green product amongst customers are expected to be influenced by attitude and subjective norm of the customers. On the other hand, knowledge about green products is predicted to influence customers' attitude and subjective norm.

1.3 Research questions

The research questions set for this study are:

- 1) Are consumers in Penang knowledgeable about green products?
- 2) What is the relationship between environmental knowledge and attitude towards the environment?
- 3) What is the relationship between environmental knowledge and subjective norms?
- 4) What is the relationship between attitudes towards the environment and intention to choose green products?
- 5) What is the relationship between subjective norms and intention to purchase green products?

1.4 Research Objectives

The **research objectives** set for this study are:

- 1) To identify the level of consumers' knowledge about green products.
- 2) To determine whether environmental knowledge affects attitude towards environment and green products.
- 3) To determine whether environmental knowledge affects subjective norms with regard to green products.
- 4) To determine whether attitude towards environmental issue affects intention to choose green products.
- 5) To determine whether subjective norms affects intention to choose green products.

1.5 Significance of study

This study will identify factors which have effect on the intention of consumers to choose environmentally friendly products and it will also indicate how they make decision for buying these products and to create ecologically sensitive marketplace.

1.5.1 Theoretical Significance

In terms of theoretical significance, the Theory of Reasoned action (TRA) by Ajzen and Fishbein (1975 & 1980) and extension of this theory that is the Theory of Planned Behavior (Ajzen, 1985; Ajzen, 1991) will be applied. The purpose of this research is to find out the relationship between knowledge, attitude and subjective norms with the intention to choose green products. In this study knowledge is as external variable, attitude and subjective norms are independent variables and intention to choose green product is dependent variable.

1.5.2 Practical significance

This study is significant to understand the people's knowledge with regard to environmental protection that is important to encourage people to purchase green products. The research findings will be benefited in the following ways:

Firstly, this study is important to provide knowledge and commitment towards environmental protection by consumer that would create positive attitude to the environment and consequently, concern about green products. According to Krause (1993), consumers with increasing consumer environmental awareness will be more

concerned about everyday purchasing behavior, and the effects that they can have on the environment.

Secondly , this study provides information on media influence on the consumer towards green products by giving information and educate people about environment that can encourage them to have positive belief towards environment protection; thus, encourage people to consider green products with compared to non-green products.

Thirdly, the manufacturing industry in Malaysia can gain in knowledge from this study and apply into research and development to produce the green products. Therefore, more varieties of green products can be produced to accommodate and satisfy different needs and demands of the Malaysian consumer. According to (Yam-Tang & Chan (1998) in North America and Europe a variety of green products are available, however, this is not so in most of Asia.

1.6 Definition of key terms

The followings are the key terms and their definitions used throughout this study:

1.6.1 Environmental Knowledge as an External Factor

Arcury and Johnson (1987) describe environmental knowledge as “factual information that individuals have about environment, the ecology of the planet, and the influence of human actions on the environment/ecology”.

1.6.2 Environmental Attitude

Manners in which an individual’s positive or negative feelings shapes when performing an object behavior can be referred to as their attitude (Fishbein & Ajzen, 1975). It refers

to the degree that a person has a favorable or unfavorable evaluation of the behavior in question. (Ajzen, 1991).

1.6.3 Subjective Norm

Subjective norms refer to an individual's beliefs that are influenced by society for example family, friends, and co-worker, whether an individual should or should not carry out a particular behavior. The subjective norm mirrors the person's insight of social pressures put on him/her to perform or not to perform the behavior in question (Ajzen, 1991).

1.6.4 Intention to purchase green products

Behavior intention is defined as the perception of an individual towards performance of a particular behavior (Fishbein and Ajzen, 1975). The degree of intentions involved in choosing or deciding to buy green products.

1.7 Organization of Remaining Chapters

Basically, chapter 1 is the introduction of the study, chapter 2 is the literature review, a theoretical framework that is developed to show the relationship between variables and hypotheses. Chapter 3 focuses on the methodology of the study that covers the research design, population and sampling method, variables, measures, data collection and data analysis. The result of the study will be presented in chapter 4. Chapter 5 discusses and concludes the finding of the study.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Discussion on the concept of green products that related to environment and marketing has attracted many research.

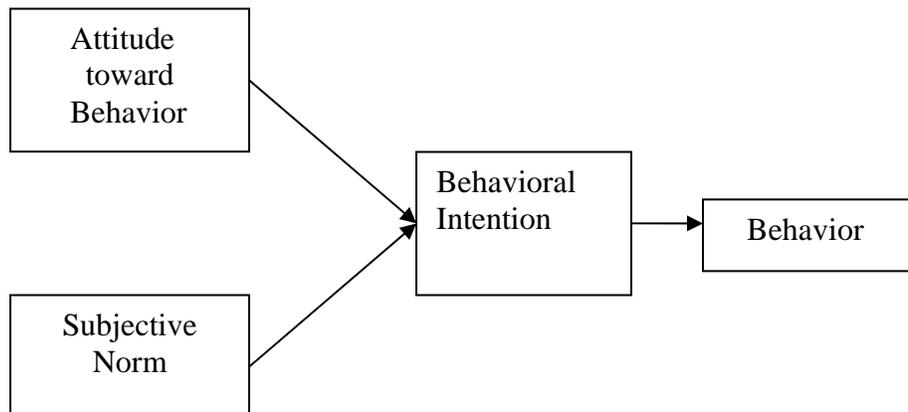
Roarty (1997) explained as follows: A definition for “green” products includes organic, durable, non-toxic, recyclable and using production methods that are not harmful to the environment. These products are in high demand as well as being more highly priced. Companies cash in on this demand for green products as a way of diversifying their interests. Green products are produced from a wide range in industry including recycled paper products, energy-saving appliances and organic food as well as others. Organic food is an area which is in high demand. Consumers of green products are those who are environment conscious and make effort to protect the environment.

2.1 Theory of Reasoned Action and Theory of Planned Behavior

Subsequently, the theoretical model that employed in this research is based on Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB).

In details, as can be seen in Figur2.1, in TRA model, Fishbein and Ajzen (1975) classified beliefs into two conceptually separate sets: behavioral beliefs and normative. The behavioral beliefs influenced on an individual’s attitude toward performing the

behavior, while normative beliefs influence the individual's subjective norm about performing the behavior.

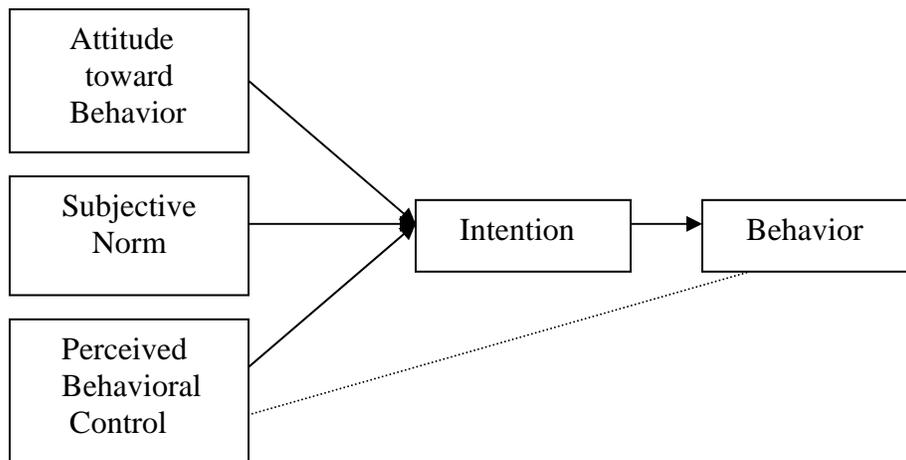


Source: Fishbein, M., & Ajzen, I. (1975)

Figure 2.1 Theory of Reasoned Action (TRA)

Moreover, as can be perceived in Figure 2.2, the TPB model is the extension of TRA theory which is developed by Ajzen, in (1975& 1980) to answer the limitation in the TRA. In details, TPB model added the perceived behavioral with the idea that the possession of essential resources and opportunities for performing a given behavior. Ajzen (1991) defined perceived controls as “people’s perception of the ease of difficulty of performing the behavior of interest”. Attitude towards behavior, Subjective Norm and Perceived Behavior Control can be broken down into component parts. Attitude toward Behavior are decided by beliefs and evaluations that the consumers hold about consequences of behavior. Subjective Norms are determined by the consumers’ belief

about responses of other regarding the intended behavior, and the consumers' motivation to comply with their standards of behavior. In the similar way, Perceived Behavior Control is determined by perceived likelihood of the control factor and Summed for number of beliefs.



Source: Ajzen, 1985

Figure 2.2 Theory of Planned Behavior (TPB)

This research was focused on two main factors which have effect on consumers' intentions of choosing green products. To classify, the first one is concentrating on environmental attitude that is totally rely on individual believes and the second factor is subjective norm that has a direct connection with the social's influence on a person.

Also, as an extension of this research, was considered on important external variable named Knowledge that has drastic effect on these two factors and thereby have an indirect influence in intention

2.2 Environmental Knowledge

In Laurian (2003) points of view, knowledge was made of two discrete and logical components: awareness and information. Awareness is defined as just knowing about existing of one issue while being informed is defined as knowing specific details about the issue and awareness is a precondition of being informed.

Specifically, D'Souza, Taghian and Lambet, (2006) pointed out that Environmental knowledge as a component which is composing of two sections. Firstly there has to be awareness by the consumer about the general impact of the product to the environment. Secondly it is required for customers to be ensured that the production method is environment friendly.

For instance, obviously, the consumption of any products leads to environmental pollution. Certainly, Zero pollution is not possible, but pollution can be controlled within permissible limits. A consumer who has sufficient environment knowledge about pollution, and aware of its adverse impact on the environment, surely have more favorable attitude towards green products (D'Souza et al, 2006).

Also, Laurian (2003) noted that, since, environmental knowledge has gained important in more recent years and is conceptualized as a two-stage process. Firstly, distribution of environmental knowledge increase the public understands of the dynamics of the physical environment. On the other hand, this type of knowledge distribution promotes environmental education among the public comprehensively (Wilcox 1994; Macnaghten & Jacobs 1997). Secondly, building on the argument of a broad-based environmental education, environmental knowledge informs the public about specific

issues and motivates citizen participation in environmental decisions, fostering environmental citizenship (Smyth, Blackmore, & Harvey 1997; Isbell, Terry, Thomas, Abbott, Kenneth, Carlson, Hawthorne & Alabaster, 1998). McComas and Scherer (1999) are also in line with Laurian (2003) with the fact that, access to information increases the effectiveness of citizen participation in making a policy for environmental.

Thereby, having knowledge about environment and products that effect on environment can influence in consumers' making decision to buy green products. As a result, by increasing consumers' information towards environment, companies produce a variety of green products and grant these requirements (Kangun, Carlson & Grove, 1991). As it mentioned by Laroche, Bergeron and Barbaro-Forleo (2001), knowledge is a relevant and significant variable that affects how consumers collect and organize information. Also (Alba & Hutchinson, 1987), focusing on how much information is used in decision making (Brucks, 1985) and how consumers evaluate products and services (Murray & Schlacter, 1990).

Moreover, Chan, (1999) believe that when consumers find out more about environment issue and are aware of ecologically consumption, then they have more tendency to care about green products. Smith (1990) concluded that with increasing consumer conscious to environment issue they were willing to buy green products. Furthermore, Laroche et al., (2001) indicate that, "Consumer research recognized Knowledge as a criterion that influences all phases in decision process".

For example, as general points of view, people have an incorrect knowledge about soapsuds that is "using more soapsuds, cleaner their cloth will be". But in fact if they are

aware of the harmfulness of this chemical product toward environment, it has a tremendous effect on their decision in using this particular product (Crane 2000).

Petzelka and Korsching's (1996), found with changing farmer's knowledge about sustainable agriculture also changed their environmental attitudes and behavior toward sustainable agriculture.

One important investigation that is done by Said et al. (2003), clarify the fact that, even though the environmental knowledge of group of people can be moderate, but because of the poor understanding and perception causes a lot of environmental problems. To illustrate, they have investigated to determine the level of knowledge, environmental concern and ecologically conscious consumer behavior and recognize the degree of concern in nature-relate activities of group of school teachers in Selangor, Malaysia. It is worthwhile to mention that, although they had a fairly good understanding of the general environmental issues, causes and general impact of the human activities to the environment, but they were unable to correctly answer the underlying causes of environmental problem and the solution to resolve these environmental issues such as waste problem, water and air pollution. Moreover, interestingly, almost all the respondents have agreed that the responsibility to maintain and protect the environment is the responsibility of all including the government, private sectors and individuals.

2.3 Environmental attitude

Initially, attitude is defined as an individual's positive or negative feeling about performing a specific kind of behavior (Fishbein & Ajzen, 1975). Furthermore, according to (Athiyaman, 2002), attitude refers to individual's evaluation about the outcome of performing a behavior.

Specifically, attitude towards the behavior is defined when person evaluate the particular behavior by questioning of himself to find out the degree of the favorable and unfavorable of that behavior (Ajzen, 1991). As a result, when the behavior turns out to be favorable, the intention of people to perform that particular behavior strongly increases. In the other hand, the more desirable the behavior get, the stronger is in people's intention to perform that behavior (Ajzen, 1991).

Moreover, attitude can be measured either through direct or belief-based measure. Belief-based measure of attitude is the weighted average of the strengths and result of evaluation of person's behavioral beliefs (Ajzen, 2002b). Buttel (1979), clarify that environmental attitudes are capturing individuals' levels of attention and interest about particular or general aspects of environmental such as ecological, or energy-saving phenomena.

In addition, the relationship between attitudes and knowledge has been studied in several varieties of populations and manners. As Kaiser, Ranney, Hartig and Bowler (1999), mentioned "factual knowledge about the environment is precondition of one's environmental attitude." The relationship between knowledge and attitude is a complicated one and is not completely understand (Zimmerman 1996). Moreover, Ramsay and Rickson, (1976) point out that positive attitude towards the environment are not essentially indicative of high levels of environmental knowledge. For instance,

In order to figure out the importance of relationship between knowledge and attitude, many surveys is done so far. For instance, Synodinos (1990) argued that there is no significant correlation existed between knowledge and attitude, leading him to conclude that knowledge is independent of attitude. However, according to Bradley,

Waliczek and Zajicek (1999), experiments to find out the relationship between knowledge and environmental attitude, he found that after the environmental science course for high school students, students had grasp higher environmental knowledge and attitude between the pre- and post test. To clarify, in both the pre-and post-test, students who get the better scores, also had display higher attitude toward environment compared with students who had lower environmental knowledge scores. Similarly, Mangas, Martinez and Redaue (1997) study regarding university students enrolled in elective environmental education course showed that students' environmental knowledge increased at the end of the course and was accompanied by an increase in environmental attitude. If a consumer has knowledge about the environment and pollution promulgation, the causes and impact on the environment, then their awareness levels would increase and thus would, potentially, promote a favorable attitude towards green products. (D'Souza et al, 2006).

Waliczek and Zajicek (1999) investigated about students' environmental knowledge and their attitude toward environment. They found those student's knowledge who took the environmental science course, is increased approximately 22% compared with the previous time before taking this particular course. Moreover, the investigation indicates that the environmental attitude of this group of students' positively improved. According to Laroche, Tomiuk, Bergeron and Barbaro-Forleo (2001), attitude is the most significant predictors of consumers' willing to pay more for ecologically favorable products. According to these authors, they found that the two most factors that are influence attitude are importance and inconvenience. In details, importance respect to the environment can be defined as the degree to which one expresses concern about

ecological issue (Amyx et al., 1994). Secondly, inconvenience refers to, how inconvenient is understandable for the individual to behave in an ecologically compatible fashion (Laroche et al., 2001).

For instance, McCarty and Shrum (1994) discover the relationship between recycling and inconvenience is negative. To illustrate, because of the fact that, individuals believed recycling was inconvenient, thereby, they are less likely to do it. On the other hand, beliefs about the importance of recycling were not significantly related to recycling behavior. Consequently, it appears that regardless of how important individuals believed recycling to be, the perception of the inconvenience of the recycling activity had a greater influence on their actions. Concurrently, one of the main explanations that prevent people from participating in ecologically friendly activities is their perceived level of self-involvement toward the protection of the environment (Wiener & Sukhdial, 1990).

Chyong-Huey, Phang, Grace, Haslinda, Buncha, and Rita (2006) indicate that considering environmental issues specifically recycling could be effective in purchase behavior and can positively increase consumers' willingness to pay for green products. Laroche et al, (2001) found that, consumers that willing to pay more for green products are not believes that, behaving in an ecologically desirable way are inconvenient. However, they believe it is very important to behave in ecologically desirable way.

Attitude is considered to be highly correlated with one's intentions, which in turn is a reasonable predictor of behavior (Ajzen & Fishbein, 1980). Ultimately, according to several studies that been investigated, the relationship between environmental attitudes and product purchase tendency. If we make customers more involved with the

environment, the more likely they are to purchase green products (Schuhwerk & Lefkokk-Hagius, 1995). As cited in Gopi and Ramayah (2007) Many studies have shown the significant effect of attitude towards intention (Shih & Fang, 2004; Ramayah et al., 2003; Ramayah et al., 2004; Eri, 2004; Ramayah et al., 2005; Ramayah & Mohd. Suki, 2006).

2.4 Subjective Norm

Furthermore, according to Fishbein and Ajzen (1975) point of view, subjective norm or normative pressure is defined as “the person’s perception that most people who are important to him think he should or should not perform the behavior in question”.

To clarify, strong-interactive relationship exists when the source was someone who knew the decision maker personally and in weak-interactive relationship if the source was merely and acquaintance or one who did not know the decision maker at all has a trifle influence in him to make decision. (Miniard & Cohen, 1981).

Subjective norms are deals with the impact of social environment or social pressure on the individuals and as a result it has effect on behavior intention. (Fishbein & Ajzen, 1975, 1991). Subjective norm has effect on behavioral intention of persons by environment or social pressure (Fishbein & Ajzen, 1975).

As cited in Kalafatis, Pollard, East and Tsogas, (1999) Subjective norm controls that behavior which makes you conform to the way that others think that you should act. Sometimes, socially appreciate some particular acts, for instance, recycling of paper and bottles, generate feelings of self-respect or pride, while failure to do so generate feelings

of shame or self-blame. Subjective norm is sometimes internally controlled; not necessarily externally, and can be enforced by appreciate or blame of others.

In particular, in purchasing of EF clothes washing detergent products, consumers might be influenced by the messages of environmental pressure groups who claim that packaging and product formulations can adversely affect the environment.

Moreover, to clarify the relationship between subjective norm and intention, Taylor and Todd (1995) found that, subjective norm is a better predictor of intention when there is lack of experience about subjects. Ventaktesh and Davis (2000) on the other hand, mention that, in the mandatory condition, subjective norm significantly influence in intention strongly but it get weak overtime.

In addition, government can encourage consumers to purchase green products by set up procurement policies and developed recycling programmers (Isa, et al., 2005). Jain and Kaur (2004), investigated about environmental problems in India. Their survey indicate that, lack of strict laws that is appointed by government and regulation in society for protecting environment is lead to huge amount of the environmental problems. At the same time, campaigns in the mass media that provide environmental information or prompts to behave in an environmentally friendly manner have brought disappointing results (Staats, Wit, & Midden, 1996).

Research finds that media use, particularly news consumption, plays an important role in predicting such socially conscious consumption (Keum, Devanathan, Nelson & Shah, 2004). Studies about influencing subjective norms in intention have shown varied result. As cited in Gopi and Ramayah (2007) some studies have proved no significant relationship between subjective norm and intention (Mathieson, 1991; Chau

and Hu, 2001) while numerous of studies have provide significant relationship between subjective norm and intention (Ramayah et al., 2003, 2004; Ma' ruf et al., 2003). Also, it is noted by Ramayah et al., (2004) that, element of subjective norms had greater influence on intention compare with the attitude towards intention.

2.5 Intention

Bandura (1986) refers to intention as “the determination to perform certain activities or to bring about a certain future state of affairs”, while Malle and Knobe (1997) claimed that intention involves choosing or deciding to perform an act.

Also Ajzen (1975) defined intention as, “a Persons location on a subjective probability dimension involving a relation between himself and some action”.

Intention is undergone changes overtime, to illustrate, when the interval period between intention and behavior increase, the probability of occurrence the changes in intention increase correspondingly. (Ajzen, 1985). Behavioral intention is assumed to be the immediate antecedent of behavior (Ajzen, 2002b). Furthermore, Söderlund and Öhman (2005) classify Intentions in terms of other propositions about the future in following order.

Firstly, Intentions-as-plans are propositions that the individual makes about himself or herself in relation to future behavior, it becomes obvious that an individual can connect himself or herself with future behavior in many other ways than those that have an explicit content of planning. Measurement items are “I am planning to...”, “I intend to ...”, “I intend to choose”,

Secondly, intentions-as-expectations. One frequently used intention construct is behavioral expectations. It refers to the individual's evaluation of the subjective probability that somebody will perform a particular behavior in the future. This is measured with questionnaire items such as “The probability that I will do B is...respondent is thus asked to estimate the probability that anyone will perform the operation.

Finally, Intentions-as-wants. An additional intention construct is a conceptualization in terms of wants. To clarify, wants also appear in Heider (1958) who emphasize that intention is often considered as the equivalent of wish or wanting. Measures of this type of connection with the future usually take the form of Likert-type statements such as “I want to”.

Attitude and subjective norms determine a person's behavior intention, which leads to whether the behavior is done or not. Some times consumers have positive attitude to specific issue and it motive the intention of them but necessarily it is not lead to performing a specific behavior.

To illustrate, as cited in Laroche et al., (2001) UK's consumers claimed that they are willing to buy green products but the purchasing behavior is not happening in reality. According to Pearce, (1990) Although British Customers claimed they have adequate motivation to buy green products, but supermarkets were overstocked with these products due to the fact that, they are willing to buy these products but their price is too expensive. The same result reported in 1991 by Simmons Market Research Bureau's (SMRB) even if the people care about environment, but this matter do not necessarily

have effect on customer's intention to change their buyer behavior. On the other hand, there is low relationship between environmental concern and consumers' willingness to change their buying behavior in favor of green products.

Consumers claimed that they are concerned to environment issue but they are reluctant to change their purchasing pattern. This is supported by the finding of recent UK survey which indicates that with increasing consumers' conscious to the environment issue their willingness to buy green products has declined (Mintel, 1991; 1995).

Kalafatis et al., (1999) examined customer's intention to buy green products between two different market conditions in UK and Greece. They found different result through the experiments that is performed on these groups that explained these differences. In the nutshell, difference in intention is depends on the level of people's awareness' about environmental issue. Specifically, The result of their finding shows that in UK social norms (SN) has a great influence on consumers' intention to buy environmentally friendly products and other factors such as attitude and behavior control indirectly effect to intention to buy green products, while in Greek experiment showed that behavior control was only determinant intention to buy green products. Because of the fact that, in UK there is number of high profile pressure groups (e.g. Friends of the Earth, Greenpeace etc.) the wide variety of EF products are available. Therefore, it is arguable that UK society plays a determinant role in forming intention to purchase EF products while personal influences are dominant in the Greek market.

Moreover, Choo and Mokhtarian (2004), who studied on organic food product purchasing behavior, found that attitudes had significant effect on behavioral intention