Understanding Green Purchasing Behavior among Gen Y in Malaysia by Examining the Factors Influenced

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Abstract:
The purpose of this study is to examine the factors that influence green purchasing behaviors of Generation Y and to contribute the Theory of Reasoned Action (TRA). Respondents in this study among generation Y in Malaysia (North, South, East and West) and will considered their demographics profile. A target total of 500 usable questionnaires will be analyzes by using Statistical Package for Social Science Software version 19. Five hypotheses have been developed from Literature Review reading and will tested using bivariate Pearson Correlation Analysis and analysis of variance (ANOVA) to find the relationships between demographics variables and the background of green purchasing behavior. All the variables are social influence, environmental attitude, environmental concern, eco-label and government’s role.
Keywords: Green Purchasing Behavior, Social Influence, Environmental Attitude, Environmental Concern, Eco-Label and Government’s role.

1. Introduction
1.1 Research background
Malaysia is one of the earliest countries in the world that have taken a serious consideration regarding the environment by enacting the Environment Quality Act way back in 1974. Besides enacting acts about environmental protection, the government has also formed the Ministry of Energy, Green Technology and Water, recently in order to cater the rising need and importance of green technology towards sustainable advancement. The ministry has enacted the National Green Technology Policy right after the formation of the ministry (Malaysia Green Forum, 2010). The government has taken a holistic approach which is known with the acronyms of AFFIRM for the sustainability of the environments. AFFIRM stands for Awareness, Faculty, Finance, Infrastructure, Research, development and commercialization and Marketing. This acronym is mainly designed to obtain commitment from all stakeholders in committing towards the environmental protection in Malaysia (Malaysia Green Forum, 2010).

The consumers’ preferences are changing over time. Although, people now-a-days are more aware of the environmental issues some might have unpleasant perception towards environmentally friendly goods and less readiness to pay more for eco-friendly products. Firms need to be responsive to this socio-demographic change in
order to remain competitive in the market place. An important challenge that marketers are facing now is thorough understanding on consumer’s behavior regarding green marketing and green purchasing.

While the demand is increasing, there have been very few studies conducted on green purchasing behavior (Tanner and Kast, 2003; Soonthonsmai, 2007; Lee, 2008; Cheah, 2009). Apart from this, the result varies either due to different countries were set as the origin or different samples were used. Together, the green marketing studies in Asian countries are relatively less compare to Western countries (Lee, 2008). Thus, it is important to perform a study in the context of Asian country such as Malaysia to understand their green purchasing behavior. Studies performed by Cheah (2009) and Chen and Chai (2010) found an increased demand for green products in the Malaysian market. Their studies has offered understanding on green purchasing behavior however, limited to only a few determinants influencing consumers towards positive green purchasing behavior. In fact, their studies which focused on young consumers have caused a query regarding other age groups perception and attitude towards green products.

Generally, consumers who are aware of the environmental issues tend to have a positive attitude towards green purchasing. However, a variety of factors typically can influence them. A number of individual drives and external factors could be the determinants of such behavior. Therefore, this study is conducted to narrow the gap by studying the factors that influence green purchasing behaviors of Malaysian consumers and the weight of these factors. Together, it is important to study if the factors affecting green purchasing behavior differ by demographic profile.

1.2 Problem statement

The current rapid growth in the economy and the patterns of consumers’ consumption and behavior worldwide are the main cause of environmental deterioration. As the environment continues to worsen, it has become a persistent public concern in the developed countries and has recently awakens developing countries to the green movement (Chen and Chai, 2010).

The consumers’ spending pattern has been growing over the past decades (Punitha Sinnappan, 2011). The manufacturing, processing and consumption of goods involve the usage and damage of natural resources such as air, timber, fossil fuels ore and water. High consumption and exploitation of the nature have caused environmental deterioration. The more things people purchase, the higher their contribution to the environment. The use of goods themselves creates toxic waste which becomes the pollutant to the land. All environmental problems have sources, several effects and the most prominently, a resolution. Therefore, the awareness of environmental problems and the respond to these issues without delay is absolute necessary.

1.3 Aim of Investigation

The purposes of this study are:

1. To examine the factors that influence green purchase behaviors of Gen Y.

2. To contribute the Theory of Reasoned Action (TRA).
1.4 Scope of work

Respondents in this study are consumers from various age groups, education level, ethnic group, type of occupation and income level. The results show that the best predictor for green purchasing behavior is environmental attitude followed by perceived environmental responsibility; environmental concern, perceived seriousness of environmental problems, perceived effectiveness of environmental behavior and government’s role. While for demographic variables, only age group is significant in explaining the environmental factors (Punitha and Azmawani, 2011).

1.5 Significance of Study

Marketers basically are facing a lot of challenges in convincing the consumers towards purchasing the green products. In order to be successful in this, it involves an understanding of the route that shifts the environmental factors to green purchasing behavior. By getting themselves prepared on this, marketers would be able to create successful marketing strategies. At the same time, those manufacturers and producers can also get benefits out of the result obtained in this study.

Understanding that environmental attitude is the main predictor, closing the gap would lead towards higher intention to consume green products. According to Baker and Ozaki (2008), consumers have highly engaged in recycling of waste materials such as bottles and study as they are consistently provided with information about recycling and its benefits. This signifies that information is highly important to change the attitude of consumers towards green purchasing behavior. Schiffman and Kanuk (2010) stated that consumers basically have a strong need to know and enthusiasm about things that they encounter. They have also indicated that fulfilling the need to know interest would develop the consumers’ attitude towards the products. Thus, the knowledge function can be known as one of the best strategy to change the attitude of consumers towards a favorable green purchasing behavior.

As the consumers are well educated and informed about the importance of preserving the environment, a sense of responsibility need to be incorporated in the marketing efforts of the company. Lee (2008) has given a suggestion to express a message such as each of us is responsible to save our earth. By doing this, the marketers can create a feel of high involvement among consumers towards the message and further increases the intention of personal contribution and importance of engaging in particular purchase decision.

At the same time, environmental concern which is highly known as emotional appeals or affective component need to be integrated in the marketing efforts to increase the consumer’s sense of responsibility and involvement in buying decision of environmentally friendly products.

Malaysian government has also involved in stimulating green purchasing behavior among the consumers. Through holistic approach like AFFIRM (Awareness, Faculty, Finance, Infrastructure, Research, development and commercialization and Marketing), the government is involving all stakeholders in the country to make it a realization. The financial incentives proposed by the government encourage the companies to produce...
environmentally friendly products. Malaysian government also encourages the manufacturers within the country to partner with foreign green institutions for mutual benefit (Malaysia Green Forum, 2010). Lastly, younger generation believes that the environmental factors are very much important in inducing green purchasing behavior compare to the adults. This shows that the adolescence are highly informed and educated about the importance of protecting and preserving the environment for the benefit of all. This also explains that this group of people is the future prospect for green products.

2. Literature Review

Green consumerism and green marketing: A green consumer is defined as consumers who are conscious of and interested in ecological issues (Soonthonsmai, 2007). They consider that all products and services have environmental impact and their initiative is to reduce them to the minimum. Consumer purchases green products when their prime requirement for quality, performance and easiness were achieved and when they realized how a green product could facilitate to answer environmental tribulations. The knowledge gap or skepticism towards the usage of green products would stop consumers in engaging themselves to any buying decisions. Poor description about green claims would always put the green consumers in question and this will lead to switching to better green products.

According to Renner (2002) consumers are requesting for more reliable information about the society and ecological effect of the goods that they are purchasing besides the information that the product is environmentally friendly. Companies which are improving indicates that they are revising their policies and updating themselves with regards to the current environmental issues and fulfilling the changing needs of green consumers.

Green marketing is the practices of advertising products or services by refering on their ecological advantages. It can be defined as the actions taken by firms that are concern about the environment or green problems by providing the environmentally sound goods or services to build consumers and society’s satisfaction (Soonthonsmai, 2007). Green marketing was defined as the way to conceive exchange relationships that goes beyond the current needs of the consumers, considering at the same time the social interest in protecting the natural environment (Chamorro and Banegil, 2005). According to them, green marketing involves three players: the firm, consumers and the environment.

The background of green purchasing behavior referring to factors influencing green purchasing behavior have been carried out especially in a develop countries. However, dominant factor that affect the green purchasing behavior in one country might be different in another due to the differences in cultural and socio-economic conditions of each countries. In fact, variables used as antecedents of green purchasing behavior are vary from one study toanother. From the review of the literature, this study have identified five factors which contribute to green purchasing behavior, namely; social influence, environmental attitudes, environmental concern, eco-label, and government’s role.
Generation Y: Gen Y consumer are groups that born in the year of 1977 to 1994 (Bakewell & Mitchell, 2003; Broadbridge et al., 2007; Morton, 2002). Nevertheless, some researchers confined the group to those born in year 1977 to 1995 (Focsh et al., 2009). Whereas, generation Y was referred to population group born in year 1980 to 1994 (Archana & Heejin, 2008). They are also referred to as the internet or dot.com generation, echo boomers, millenials and Nexters. In the Malaysia context, generation Y refer to individuals born from 1980 onwards and who entered the workforce after 1 July 2000 (Price waterhouse Coopers, 2009), those born since 1980 (Erickson, 2008).

Theory of Reasoned Action (TRA): TRA was established by Fishbein and Ajzen (1975) is used to argue that consumer’s attitudes and subjective norm towards environmental issues can influence their behavior and action towards green purchasing. This theory includes consumers’ attitudes how these attitudes are formed and how other people could influence their behavior. This theory is also being used by many researchers from different fields in order to analyze human’s behavior. Relating to marketing researches, TRA is used to explore purchasing intention or behavior of consumers (Mostafa, 2007; Cheah, 2009).

Social influence: The social dynamic in which individual associate with other people by presenting similar qualities is identified as homophily (Ryan, 2001). In different words, it can be known as situations that an individual shares the same values, thoughts and beliefs as the person that they are communicating with. In a study done by Chen-Yu and Seock (2002), they had found that conformity by peers is an important factor for purchasing certain clothing among adolescents. The same result was obtained by Lee (2008) in which the peer influence was the most important factor for Hong Kong’s adolescents green purchasing behavior compare to other factors.

Environmental attitude: Lee (2008) stated that environmental attitude refers to the individuals value judgment and it taps the individuals cognitive assessment of the value of environmental protection. Some studies have identified a positive relationship between environmental attitude and environmental behavior (Kotchen and Reiling, 2000). To date, a study was done by Mostafa (2007) among Egyptian consumers and he has found that consumer’s attitude towards green purchase can influence their green purchase intention and directly affects their actual green purchase behavior.

Environmental concern: Environmental concern can be known as affective traits that can signify an individual’s worries, consideration, likings and dislikes about the environment (Yeung, 2004). Few studies were done on environmental concern (Barr, 2003; Milfont and Duckitt, 2004). Mostafa (2007) has indicated in his study that environmental concern would be an essential factor for marketers as they can easily target environmentally conscious consumers. High level of environmental concern is expected due to the health issues (Said et al., 2003). Meanwhile, young consumer in Hong Kong believes that environmental concern is the 2nd top predictor of green purchasing behavior (Lee, 2008).

According to Rotherham (1999), eco-labels as synonymous descriptors that refer to information a product provides “about the environmental impacts associated with the production or use of a product”. The environmental labels are increasingly being utilized by marketers to promote the identification of green products (D’Souza et al., 2006). Many of the studies on eco-labels looking for the ways to make them effective in consumers’ purchase behavior of environmental safe products (D’ Souza et al., 2006). In addition, refers to Nik Abdul Rashid (2009), argues that the
awareness of eco label has positive effect between knowledge of green product and consumer’s intention to purchase. There are approximately 30 different green label schemes worldwide. Asian countries like China, Japan, Korea, India, Thailand, Malaysia and Singapore have launched their own eco-labeling schemes (Nik Abdul Rashid, 2009). As far as it concern, the Eko-Sirim (Eco-labeling Scheme) was officially launched on September 17th, 2005 by the Standards and Industrial Research Institute of Malaysia (SIRIM) on Malaysia national environmental labeling program.

The role played by the Malaysian Government in environmental protection is undeniable (Diekmeyer, 2008). According to Pavan Mishra (2010), that government can raise a campaign to promote public awareness of eco-labels as it is proven in some studies that awareness and trustfulness of eco-labels can exert a significant influence on green purchase behavior (Nabsiah Abdul Wahid, et al. 2011). From both Punitha and Rahman (2011) and Tsen, et al. (2006) indicated that government’s role is a strong predictor towards green purchasing behavior.

Demographic profile: The identification of demographic variables on consumer behavior would be helpful for marketers to perform segmentation or targeting their consumers. Soonthonsmai noted that consumer’s green purchase intention has positive correlation with different age and income group but education was found does not influence the intention to purchase green products. Studies done by Ottman et al. (2006) found that younger generations accept new or innovative ideas better compare to older people. Result from several studies have revealed that male and female have significant dissimilarity in environmental attitude in which female showed more positive attitude compared to the males (Tikka et al., 2000; Zelezny et al., 2000; Stern et al., 1993; Lee, 2008). However, this is contradict to a study done recently by Chen and Chai (2010) who found there is no significant differences among males and females in environmental attitude or green purchasing behavior. They have also indicated that demographic variables have less explanatory power compare to psychographic variables. However, studies by Chen and Chai (2010) only focused on undergraduates students. Working adults with dissimilar gender could be different in terms of green purchasing behavior. Therefore, demographic variables such as gender, age, ethnic group, education level, occupation and income level will be considered in this study.

The hypothesis that has been developed for this research are as follow:

H1 : There is a significant relationship between social influence and green purchasing behavior in Malaysia
H2 : There is a significant relationship between environmental attitude and green purchasing behavior in Malaysia
H3 : There is a significant relationship between environmental concern and green purchasing behavior in Malaysia
H4 : There is a significant relationship between eco-label and green purchasing behavior in Malaysia
H5 : There is a significant relationship between government’s role and green purchasing in Malaysia

3. Methodology

Research instrument: The sampling design used in this study is non-probability sampling where the elements do not have a known or predetermined chance of being selected as subjects (Sekaran, 2003). The questionnaires that will be used are structured close-ended questions and they were distributed within Peninsular Malaysia. This
The questionnaire is designed with questions for each variable and is divided into two parts: part A and B. Part A contains statements relating to antecedents of consumer’s green purchasing behavior. The items were adopted and modified from studies done by Lee (2008) and Chen and Chai (2010). A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) will be used. Meanwhile, part B requests the respondents to provide some details about themselves. This generally covers the demographic profile of the respondents such as gender, age, ethnic group, education level, occupation, and income level.

**Data collection:** This study employed the quantitative and qualitative survey method. Since this study is a short-term research study, time and cost are very limited, so this study targeted a total of 500 respondents (Generation Y, aged 18–28 all around Malaysia). The method of data collection that will be practiced in this study is personally administered questionnaires. This research will use quantitative approaches by using analysis of bivariate Pearson correlation analysis whereby to indicate the effect of multicollinearity among independent variables which has been stated earlier. Meanwhile, this research also uses the analysis of variance (ANOVA) to find the relationships between demographics variables and the background of green purchasing behavior. All the data from the collected questionnaires will be entered using Statistical Package for Social Sciences (SPSS) software as a tool to analyze all the obtained data. For the qualitative, the materials will be gathered from the academic databases such as Science Direct, Emerald, and so on.

**4. Expected Outcomes**

1. The result of this study can serve as a guideline for firms to strategize their marketing approaches that caused buying behavior while analyzing the demographic characteristics would give firms better knowledge towards targeting these groups of people.

2. This study also offers practical guidelines to marketers who are planning to target the Malaysian market. The understanding on the changing consumption pattern of Malaysian consumers and the value of attachment, they gave to the environment provides useful insights that are especially pertinent to an improved understanding of green purchasing behavior in the South East Asia context.

3. This study also can be used as a reference for undergraduate students (example: Consumer Behavior and Principles of Marketing).

4. Theory contribution – TRA (practical guidelines to marketers who are planning to target the Malaysian market).

**5. Results and Discussions**

As mentioned, the questionnaires that were used are structured close-ended questions and have been distributed within all around Malaysia (focusing on Generation Y). From the results we can see:

T-test and one-way ANOVA: As we know that this analyses going to test hypothesis nine (relationship between all the influence factors and green purchasing behavior in Malaysia among Generation Y). From the results, one social influence and environmental concern factors seemed to be significant in explaining the purchasing behavior among Gen Y (refer Table 2).
From the analyses, this study has fulfilled the research objectives. The factors that could contribute towards green purchasing behaviour play an important role in influencing Gen Y while making their decision. While making and processing the result, there are some differences when compared to previous studies and opinions. This might be occurred due to different sample used as most of previous studies (Punitha Sinnappan, 2011; Azmawani Abd Rahman, 2011).

6. Conclusion

Being a marketers become challenging in this recent days. Basically, they are facing a lot of challenges in convincing the consumers towards purchasing the green product. As we know that green product is not familiar with them at all. It involves an understanding of the route that shifts the environmental factors to green purchasing behaviour. By stress on marketing strategies, the marketers will slowly overcome these matters from day to day basis. Gen Y will become the most important consumers in all over the world now; they are highly engaged in recycling of waste materials such as bottles, plastics and papers. Plus they are consistently provided with information about recycling and its benefits. In the other words, information is highly important to change attitude of Gen Y towards green product purchasing behaviour (Baker and Ozaki, 2008).

Lee (2008) has given a suggestion to show off a message like each of us is responsible to save our earth. From this behaviour, the marketers can create a feel of involvement among Gen Y towards the message and further increases the intention of personal contribution and importance of engaging in particular purchase decision. Expressing some message which related to green conveyed to customers would make them to be socially responsible. Seem like Gen Y become more influence person in Malaysia, marketers should trying to encourage them by focusing on outside activities like campaign, competitions, affairs and other valuable activities recommended. Become consumers, Gen Y also need to understand about the green products are benefiting them and their surroundings, also need to be taught on the importance of each individuals contribution to the environment as through such ways, from here collective effort can be achieved.

As a whole, government’s strategic decision are also influencing consumers towards green purchasing. companies could take advantage of the incentives and policies established by them to better serve their customers according to their needs and wants.

Considering the environmental factors like social influence and environmental concern which show high measure (refer Table 3) of analyses in this study, marketers will be able to create the intention towards the purchasing. Together, other elements such as price, quality, designs and high performance need to be integrated to reach the decision on purchasing.

Acknowledgements

The authors are grateful for research support from Prof Dr Yasuo Hoshino, Aichi University and the University of Tsukuba for helpful comments on this paper.
7. References

Reference to a journal publication:


Soonthonsmai, V., 2007. Environmental or green marketing as global competitive edge: Concept, synthesis and implication. EABR (Business) and ETLC (Teaching) Conference Proceeding. Venice, Italy.


Reference to a web source:

Malaysia Green Forum, 2010. 1Malaysia. Presented at Sri Siantan Conference Hall, 26 April, Putrajaya, Malaysia.


8. Figure and Table

8.1 Figure

2.1 Research Framework

- Social Influence
  - Peer to peer (Lee, 2008)

- Environmental Attitude
  - Purchasing experience (Mostafa,

- Environmental Concern
  - Health issues (Said et al., 2003)

- Eco-label
  - Product Safety (D’Souza et al., 2006)
  - SIRIM (Elham and Wahid, 2010)

- Government’s role
  - Various Policies (Chen and Chai, 2010)
  - Social Advertising (Haron et al., 2005)
    - Campaign (Pavan, 2010)

Figure 1: The Conceptual Framework for this research
Figure 2: Research Design

8.2 Table

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Items</th>
<th>Cronbach’s,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social influence</td>
<td>3</td>
<td>.863</td>
</tr>
<tr>
<td>Environmental attitude</td>
<td>4</td>
<td>.800</td>
</tr>
<tr>
<td>Environmental concern</td>
<td>3</td>
<td>.862</td>
</tr>
<tr>
<td>Eco-label</td>
<td>3</td>
<td>.770</td>
</tr>
<tr>
<td>Government’s role</td>
<td>4</td>
<td>.774</td>
</tr>
</tbody>
</table>

Table 1: Variables and total items used for each variable

<table>
<thead>
<tr>
<th>Factors</th>
<th>F</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social influence</td>
<td>8.357</td>
<td>0.011</td>
</tr>
<tr>
<td>Environmental attitude</td>
<td>5.210</td>
<td>0.000</td>
</tr>
<tr>
<td>Environmental concern</td>
<td>7.452</td>
<td>0.004</td>
</tr>
<tr>
<td>Eco-label</td>
<td>3.041</td>
<td>0.000</td>
</tr>
<tr>
<td>Government’s role</td>
<td>3.500</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 2: Analysis from ANOVA (measuring the factors contribution to green purchasing behaviour among Gen Y)
<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.750</td>
<td>-5.651</td>
<td>0.000</td>
</tr>
<tr>
<td>Social influence</td>
<td>.628</td>
<td>10.120</td>
<td>0.000</td>
</tr>
<tr>
<td>Environmental attitude</td>
<td>.201</td>
<td>4.201</td>
<td>0.000</td>
</tr>
<tr>
<td>Environmental concern</td>
<td>.568</td>
<td>7.005</td>
<td>0.000</td>
</tr>
<tr>
<td>Eco-label</td>
<td>.053</td>
<td>1.200</td>
<td>0.000</td>
</tr>
<tr>
<td>Government’s role</td>
<td>.065</td>
<td>2.460</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 3: Regression coefficients