

## **CHAPTER 5**

### **CONCLUSION**

This chapter firstly and essentially presents the overview of the study, the major findings of the research and as well as its contributions of the study for the marketers in making decision on environmentally friendly products marketing strategies. The last section examines the limitations of the study and suggests some recommendations for future studies.

#### **5.1 Overview of the Study**

The objectives of this study are to determine the cultural differences among Malaysian consumers, namely Malay, Chinese and Indian ethnic groups in terms of their environmental knowledge, attitudes and behaviours, and to suggest marketing strategies that arise from an improved understanding of each ethnic group. This is important because with sufficient information, many green marketers would be able to formulate and execute effective green marketing communication to these three main ethnic groups in Malaysia.

Previous studies conducted in Western countries found that individuals who are highly knowledgeable about environmental issues are more willing to pay a premium price for green products. As for consumer environmental attitudes, the two most profound constructs that were found to influence

consumer environmentally friendly behaviours are the importance of being environmentally friendly and inconvenience of being environmentally friendly. In terms of environmental behaviours, consumers concerned about environmental issues when making a purchase are more likely to pay more for environmentally friendly products.

In addition, Canadian studies have found cultural differences among French-Canadian and English-Canadian in term of their environmental knowledge, attitudes and behaviours. However, this cultural differences role on consumers' environmental knowledge, attitudes and behaviours has rarely been examined simultaneously in Malaysia. Looking at the unique racial composition in Malaysia, consisting of Malay, Chinese and Indian, allows for a novel examination of the role of ethnicity in influencing environmentally friendly products consumption decision making.

In this exploratory study, 300 respondents: Malays, n=150 (50 per cent); Chinese, n=100 (33.3 per cent) and Indians, n=50 (16.7 per cent) from Klang Valley have been analyzed through an instrument of eight-page self-administered questionnaire. The respondents were required to complete the questionnaire in 15 minutes and return it back on the spot. In general, the respondents were predominantly females, under the age group of 20 to 29 years old with education level mostly above SPM. In terms of monthly household income, more than half of the respondents were reported having income above RM2999.

## 5.2 Major Research Findings

Basically, the respondents performed well on the basic or general environmental knowledge such as the recycling symbol and items identification. However, when asked about various scientific environmental terms (e.g., greenhouse gas) the majority of respondents did not perform favourably. This indicates that respondents possessed only low level of complex environmental knowledge, which may not encourage them to be more actively engaged in environmental activities.

Hypothesis 1 states that Chinese would be more knowledgeable about environmental issues than Malays or Indians. Our findings support Hypothesis 1 that Chinese are actually more knowledgeable on environmental issues than Malays or Indians. This result is consistent with an earlier study in which Othman et al. (2004) reported that the Chinese were more proficient in terms of environmental knowledge. This result is contradicted with Haron et al. (2005) study which reported no significant differences on environmental knowledge among the three ethnic groups.

In Hypothesis 2, we initially predicted that Chinese would display strong pro-environmental attitudes than Malays or Indians. This hypothesis was partially supported. Our results clearly reported Chinese perceived that environmental problems were more severe, this finding is partly corroborating with Chan (2001) study. Despite the Chinese traditional culture, Malaysian Chinese have infused and are exposed to multi-ethnic cultural values, thus the finding might be different

with the previous study conducted on China Chinese (Chan, 2001). On the other hand, Indians who obtained the lowest mean score in the “inconvenience of being environmentally friendly” construct are likely to engage in environmentally friendly behaviours such as recycling that require their personal sacrifices (e.g., time). This finding would be consistent with Othman et al. (2004) study, Indians were reported most committed to verbally in environmental matters.

On the other hand, contrasting findings appeared with respect to behaviours. Hypothesis 3 states “Malays would engage in more environmental friendly behaviours than Chinese or Indians”. Surprisingly, the results showed that Malays are buying more environmental harmful products than other ethnic groups. This surprising result might be due to the nature of Malay consumers are incompetent in handling product and market information, resulting in information overload and confusion especially dealing with complex environmental knowledge (Kamaruddin and Kamaruddin, 2009). On one hand, Chinese are reported to be the one who are more willing to pay more for environmental friendly behaviour products. One plausible explanation for this finding may come from the view that the Chinese tend to have higher environmental knowledge than other ethnic groups and this knowledge has been translated into actual consumption behaviours. Hence, Hypothesis 3 is not supported and our results contradict with the study by Quah and Tan (2010) which found the Malays were more likely to acquire green products compared to Chinese and Indians.

The impact of respondents' environmental knowledge, attitudes and behaviours is further borne out by the results of the correlation analyses and multiple regressions. Specifically, the study showed that there is a positive and significant relationship between consumers' willingness to pay more for environmental friendly products and consumers' environmental knowledge. Thus, individuals who were highly knowledgeable about environmental issues were more willing to pay a premium price for green products.

Similar positive relationship is found between consumers' willingness to pay more for environmental products and consumers' attitudes constructs: "severity of environmental problems" and "inconvenience of being environmental friendly" but not "level of responsibility of corporations". The findings in this study are consistent with earlier research that reported attitudes are the most consistent explanatory factor in predicting consumers' willingness to pay more environmental friendly products (McCarty and Shrum, 1994; Chan, 1996; Laroche et al., 2001; Tsen et al., 2006).

The results of this research also revealed that "recycling" and "considering environmental issues when making a purchase" are positively related to the consumers' willingness to pay more for environmental friendly products. These results are consistent with the findings of Tsen et al. (2006) proved that consumers who try to protect the environment by recycling and display high consciousness on environmental issues are in fact more willing to pay for environmentally friendly products.

From the multiple regression analysis, it indicates that the seven independent variables, namely “environmental knowledge”, “severity of environmental problems”, “level of responsibility of corporations”, “inconvenience of being environmentally friendly”, “recycling”, “considering environmental issues when making a purchase”, and “buying/ using environmentally harmful products” were simultaneously significant to the dependent variable (Willingness to pay more for environmental friendly products). These seven variables explained or contributed 4.9 percent to the dimension of willingness to pay more for environmental friendly products. This low degree of explanation rate indicates that there are other factors which were not studied in this research, take into account in explaining consumers’ willingness to pay more for environmental friendly products. For instance, according to Haron et al. (2005) study, the three variables, namely “participation in the environmental activities” and “two variables representing educational level” only represented 4.15 percent of the variance in respondents’ environmental knowledge. On the other hand, Tan and Lau (2010) study reported “personal norm”, “government’s role” and “environmental protection” explained 19.6 percent to the dimension of the attitude towards green product. Therefore, obviously, more factors needed to be considered for next stage or future study in explaining consumers’ willingness to pay more for environmentally friendly products.

### **5.3 Contributions of the Study**

The results of this study provide practical contribution to the understanding of the green profile of diverse ethnicity among Malaysian consumers. A discussion about the cultural impact of consumers' environmental knowledge, attitudes and behaviours follows.

Malays and Indians are found to be less knowledgeable on environmental issues than their Chinese counterparts. There seems to be a need to educate them to become aware of environmental issues. As observed, some firms and even governmental sectors have done an excellent job at marketing their ecologically friendly contributions. For instance, the Earth Hour global event (held on the last Saturday of March annually) has received tremendous attention from the urbanites and drawn many private corporations and government sectors to participate in it. Notwithstanding, this event might be a passing fad but it could be a stepping stone to elucidate consumers' interest to embrace sustainable consumption lifestyle. Thus, marketers could make use of this opportunity to better educate their consumers who may not know well on the environmental issues and the importance to be environmentally concerned.

In addition, Malay consumers are quite incompetent in handling product and market information, thus resulting in information overload and confusion (Kamaruddin and Kamaruddin, 2009). It is strongly recommended that "green communication message" to this target segment should be direct and easy to be understood. On top of that, it would also be helpful for product descriptions or

promotion materials to be in various ethnic languages such as Bahasa Malaysia, Chinese and Tamil, apart from English in order to better reach each ethnic group.

As the Chinese have demonstrated relatively high levels of environmental knowledge and concern regarding severity of environmental problems, marketers should realize that they need to be careful and accurate in exaggerating an environmental claim on their goods. According to Yau (1988), the Chinese tend to be risk averse and will conduct extensive information acquisition to decrease making a mistake in purchasing of wrong interpreted items. This act is carried so as to avoid loss of “face” / “public reputation” to the Chinese consumers. Based on these valuable data, green marketers should advertise their products rigorously so as to instill the perception of their brands as reputable and trustworthy brands among the Chinese consumers. Specifically, advertising should be on information appeal with potential benefits highlight in it to target this green Chinese segment. Moreover, advertising campaigns that portray how every individual (as a hero) could make a difference in combating environmental ills would be more likely to facilitate the desired behavioural change on them (Laroche et al., 2001).

Although the magnitude of correlation between knowledge and willingness to pay more for environmental friendly products was weak, it does indicate that knowledge is an important element in encouraging the right and responsible environmental behaviour from the public. Hence, it is strongly recommended that formal consumer education especially on “sustainable environmental

consumption” should be introduced in secondary schools as a way in developing environmentally knowledgeable, responsible and efficient consumers. For certain target groups, sponsorship of community information sessions by the local, state and/or federal government agencies may be the best strategy (Haron et al., 2005).

Green marketers are encouraged to know well the “green” profile of each ethnic group in order to develop strategies specifically targeted to them effectively. For instance, Malays were found to perceive high levels of “inconvenience of being environmentally friendly” and this “inconvenience of being environmental friendly” construct has been found negatively correlated with “recycling” and “willingness to pay more for environmentally friendly products” of the respondents. In other words, Malay consumers would be unlikely to purchase environmentally friendly products if the buying process in getting green products causes much hassle and inconvenient to them. This should highlight to green marketers, to increase their green products availability at the most convenient locations to their target segment. As for policy makers, who wanted to increase the recycling act of this segment, there is a need to increase the recycling spots at various locations such as mosque, community hall, school, office, residential, hospital, market and park. Currently, most of the green products and or recycling spots are only found in major shopping complexes or upscale residential areas. Thus, most consumers perceive that behaved in environmental ways is inconvenient to them and this may hinder future consumer purchase outcomes.

As for Indian consumers, they perceive behaved in an environmentally compatible fashion is not inconvenient to them. According to McCarty and Shrum (1994), recycling may consume too of much time, and only individuals who perceived recycling is not inconvenient would adopt it. Thus, Indian consumers might be more likely to adopt recycling behaviour. It is advisable for green marketers to produce goods that could be recycled to attract this group.

An important finding of this research is that consumers who consider environmental issues when making a purchase are more likely to pay more for environmentally friendly products. Therefore, businesses who seriously consider environmental issues may create a sustainable competitive advantage. For instance, Green plan 2018- an environmental action plan by Panasonic with the aims to become the Number One Green Innovation Company in the Electronic Industry by 2018. In this plan, Panasonic has launched their superior green products that help consumers to save money and the environment. At the mean time, they intend to double their number of drop-off locations in its recycling program and to reduce by 45 percent the greenhouse gas emissions at its headquarters operations. Based on this study, an important segment of customers would be willing to pay more for such environmentally friendly products from this company.

Alongside the foregoing discussion, Malaysian consumers' poor rate of environmental behaviours adoptions warrants further discussion. One likely consequence of this is the lack of confidence on the environmentally friendly

products that perceived as inferior of quality (Adler, 2006) and more expensive than traditional non-green products. Therefore, green marketers could view this as an opportunity to convert or persuade some of the undecided to move firmly into willing segment. For instance, an optimal strategy would probably require altering beliefs about referent expectations, the identification or creation of opinion leaders, the stimulation of word-of-mouth communications (especially using social networks effect), and greater emphasis on referent power of advertisement (Laroche et al., 1996).

In view of the growing “green” trend of higher environmental awareness among Asian countries, environmentally related products and services pose greater opportunities and will certainly give the green companies an edge in the industry. According to this study, Malay, Chinese and Indian consumers have different results in term of their environmental knowledge, attitudes and behaviours. Chinese exhibit high level of environmental knowledge, display strong affection to the environmental issues and express willingness to pay more for green products, Indians perceive being environmentally friendly is not inconvenient, and Malays were likely to buy environmentally harmful products. Hence, the closer and better move to understand different ethnic group needs and what elucidate their interests to purchase for environmentally friendly products, the more able the marketers would be to develop strategies specially targeted at them.

#### **5.4 Limitations of the Study**

Firstly, the study was only limited to the residents of Klang Valley (high degree of urbanization) and it was unlikely the present sample be able to fully capture the regional differences especially on the rural areas of the country.

Secondly, this research relied on respondents' self-reported answers to measure their environmental behaviours namely "recycling", "buying / using environmental harming products", "considering ecological issues when making a purchase" and "willingness to pay more for environmental friendly products". Nevertheless, the expression on these behaviours (verbally) might not be able to reflect respondents' actual environmental actions.

Thirdly, the constructs chosen for this study might not be adequate to determine respondents' perception on environmental knowledge, attitude and behaviours.

Finally, respondents' bias and errors could not be avoided in this study. Even though clear instructions in both English and Bahasa Malaysia languages were provided, there is no instrument to ensure that all respondents truly understood the questions in the survey.

#### **5.5 Suggestions for Future Research**

Here are some suggestions and recommendations for future researches.

Firstly, the next stage or future researches might need to cover all states of Malaysia to have a better understanding the whole context and more representative findings could be obtained.

Secondly, it is suggested to future researches to conduct a similar study in controlled-experiment setting that could measure more accurate respondents' actual and practical environmental behaviours. For instance, respondents might require to show number of environmentally friendly items they have bought within certain period of time under the study (Chan, 2001). Subsequently, with the employment of a more realistic indicator would produce more reliable findings (Laroche et al., 2002).

In terms of the determinants for willingness to pay, future research might look into the issue of whether additional variables related to firms and their products, such as brand image, prices, advertisement programmes, green label, green packaging, green values and quality, would influence consumers' willingness to pay for environmental friendly products. In addition, future research should consider including the areas of green purchasing intention and green buying commitment.

This research is conducted on general green products. Would the results apply to specific green products? To answer this question, future researchers could study the cultural-factor that influence consumers' willingness to pay more for environmentally friendly products in a specific product (e.g. electrical and/ or

electronic products) or in industry (e.g. cosmetics), or in another region (e.g. United States).

As a result, the study suggests many directions for future research. It is hoped that this research provides a better understanding of the ethnicity and environmentally related consumer behaviours. The concept of market segmentation by ethnicity provides interesting potential for future study because ethnicity is a unique phenomenon believed to be composed of and influenced by various demographic and psychographic traits (Mokhlis, 2009). Hence, the research findings suggest that the study of these factors holds a considerable promise for a greater insight into adaptation or standardization of international marketing strategies to better meet the green needs of these communities. At the mean time, it can provide to the government and non-government organizations with some useful insights into improving the communication effectiveness of their environmental education campaigns and programmes. Notably, there is much to be learned about ecologically conscious consumer and the potential for future research appears promising.