

Going Green: Survey of Perceptions and Intentions Among Malaysian Consumers

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Abstract

The movement of going green is getting more popular since consumers are increasingly aware about environmental issues and are starting to alter their purchasing behavior to a more environmentally friendly way. Thus, the objective of this study is to investigate Malaysian consumers' perceptions and intentions towards going green. Descriptive statistics, independent t-test analysis and a binary logistic model were used to analyze the data. The results show that socio-demographic variables such as education levels and age have a significant effect on consumers' perceptions as well as their attitude towards going green and becoming environmentally friendly. The results also show that subjective norms (environmentalists and the green society) are important determinants of consumers' intention to go green.

Key words: Binary logistic model; Consumer perception; Going green; Intentions; Malaysia

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INTRODUCTION

Recognizing the seriousness of environmental problems, consumers' concerns about environmental degradation have been steadily increasing for the past few decades. Environmental problems are caused by the excessive use of energy and non-renewable natural resources, copious supplies of food and food products, environmentally unfriendly production processes, the emission of green gases, water and air pollution, climate change and the environmental disasters. Therefore, protecting the environment has become a major issue in society (Krause, 1993; Easterling *et al.*, 1996). Environmentalism has become important in the marketplace as consumers are recognizing the importance of people to protect the environment (Brown, 1996). Hence, increasing the awareness of the seriousness of environmental problems has led to an increasing number of individuals to perform environmentally friendly behavior (Kalafatis *et al.*, 1999). These types of consumers have strong environmentally friendly attitudes and look for opportunities to behave in an environmentally friendly way and often express environmental concerns over environmental issues such as pollution, the ozone layer, green house gases, excessive use of chemical fertilizers and insecticides in agriculture, land conservation and other issues related to the environment (Mandese, 1991). Roberts (1996) indicated that environmentally conscious consumers and consumers who believe specific ecological activities can tackle environmental issues are more likely to perform green consumer behavior.

The perceived importance of the environment is the primary indicator of attitudes toward environmentally compatible behavior which is related to the degree to which consumers express their consciousness of environmental issues (Amyx *et al.*, 1994; Larocche *et al.*, 2001). According to McCarty and Shrum (1994), consumers' attitudes towards the environment contain several dimensions which can be listed as follows;

1) Perceived severity of environmental problems - Consumers realize that natural resources are limited; 2) Inconvenience of being environmentally friendly - Consumers realize that activities such as recycling are not much trouble; 3) Importance of being environmentally friendly - Consumers realize that taking positive action in favor of the environment will reduce pollution and maintain natural resources; and 4) Perceived level of corporate responsibility to be eco - friendly - Consumers believe that business firms and the food industry should be concerned about the environment and try to be ecologically responsible. Therefore, these groups of consumers can help support the green movement by performing green behavior.

On the other hand, Simmons Experian Research Services (2007) divided consumers into four segments according to their environment attitude. These segments are 1) Behavioral Greens: This group of consumers thinks and acts green, they hold negative attitudes toward products that pollute the environment; 2) Think Greens: This group of consumers thinks green but does not necessarily act green; 3) Potential Greens: This group of consumers neither behaves nor thinks along particularly environmentally conscious lines and remains on the fence about key green issues; and 4) True Browns: This group of consumers is not environmentally conscious and may have negative attitudes about the green movement. Therefore, there are different dimensions or classifications of consumers with regards to going green. Some consumers could not care less about the environment and some are really concerned about the environment and what is being left for the future generation. The question is; do Malaysian consumers care about environmental issues and do they care about the future generation? Will Malaysians be ready to go green by 2020 as the nation moves towards its goal of becoming a developed nation? This study aims to explore Malaysian consumers' perceptions and intentions toward going green.

(1) Environmental Issues in Malaysia

Malaysia was one of the first countries in South-East Asia to realize the importance of environmental protection for future generations. Malaysia has realized that investing locally or exporting products which give emphasis to environmental protection has become increasingly important which can help the country to compete internationally while maintaining a "green image".

In Malaysia, a key issue concerning environmental sustainability is deforestation. Deforestation threatens the flora and fauna in Malaysia, especially near the Kelau Dam, Bukit Cherakah, Ulu Padas, Pulai River, Sungai Mas and the Hulu Terengganu Hydroelectric project (The Green Story, 2011). Deforestation is taking place in Malaysia due to several reasons which include housing development, timber and oil palm plantations, and the construction of roads and dams. Industrial development

and rapid urbanization are also responsible for major environmental problems due to the disposal of hazardous and communal waste, and the pollution of air, water and traffic (Market Watch, 2010). These environmental issues not only threaten national economies by impairing their competitiveness in world markets, but also discourage tourism and hinder industrial development (EnviroAsia, 2011). According to the EU - Asia Sustainable Waste Management Cycle Reports (2009), Malaysia produces an average of 0.80 kg of waste per capita each day which translates to 17,000 tons of domestic waste per day and is expected to increase to 30,000 tons per day by the year 2020. The report also shows that the overall waste composition in Malaysia is about 64% domestic or municipal waste, 25% industrial waste, 8% commercial waste, and 3% construction waste. Therefore, the government aims to increase the recycling quota from 5% to 22% by 2020 and continues to promote the 3Rs (reduce, reuse and recycle) to its citizens to help confront environmental problems. The environmental issues led to the development of the National Strategic Plan for Solid Waste Management (NSPSWM) in 2005. This plan aims to ensure the reduction, reuse and recycling of solid waste as well as the use of environmentally friendly facilities and technologies (Ninth Malaysia Plan, 2006-2010).

As in other parts of the world, air pollution in Malaysia has emerged as a serious environmental issue due to rapid economic development, higher mobility and urbanization. The major sources of pollution are from traffic which contributes 49% to the overall pollution while power plants, industrial branches using fossil burning and the uncontrolled burning of communal and industrial waste contributes are responsible for the remainder of the pollution (Market Watch, 2010). Air pollution remains a severe problem especially in industrial zones like Selangor, Johor and some parts of Sarawak. In the Ninth Malaysia Plan (2006-2010), the government aimed to improve the air quality by promoting the use of cleaner technologies and by limiting the emissions of hazardous gases.

In 2009, the Department of the Environment (DOE) discovered 20,702 water pollution occurrences. This includes the manufacturing industry (47.15%), sewage treatment plants (46.74%), animal farms (3.72%) and agro-based industries (2.39%). The Malaysian government has realized the importance of the situation and has reacted by continuously increasing the budget for water preparation. According to official estimates, by 2050, RM 52 billion will be needed to be invested in the water sector where RM 21.14 billion is expected to be spent by 2011 (Danish Water services, 2010).

In combating environmental issues, the Ministry of Energy, Green Technology and Water (KeTTHA) was established in April 2009 by the Prime Minister of Malaysia, Dato 'Sri Mohd Najib bin Tun Abdul Razak to formulate policies and establish the legal framework and effective regulation, set the direction for the energy

industry, green technologies and the water industry in line with national development goals and develop an efficient management system and an effective monitoring mechanism (Ministry of Energy, Green Technology and Water, 2009). This ministry promotes green technology and eco-friendly products and services to help to 'green' the economy. They give seminars to encourage people to perform green behavior such as recycling. They also encourage and motivate people by using the television, radio and brochures. The Ministry of Energy, Green Technology and Water is implementing green procurement policies for government agencies too. All new government buildings are to have green technological innovations such as low energy lighting efficiencies and water walls run by solar panels to provide natural internal building cooling. The government has made green technology the key driver of making Malaysia a model for sustainable economic development.

(1) Role of the Government and NGOs

In 2011, the government started a no plastic bag day on every Saturday. All the hypermarkets, supermarkets and petrol stations practice a no plastic bag day and RM 0.20 will be charged for each plastic bag if the consumers want the shopping plastic bags. The collected fee that is charged to the consumers is channeled into a fund which is used to conduct environmental preservation and protection related programmes as well as activities for consumers and communities (New Straits Times, 2011). The objective of the campaign is to support government efforts to preserve the environment and to slowdown the depletion resources while instilling environmentally friendly values among the public and businesses (Dharmender, 2011). In October 2010, the government announced that it would grant full excise duty exemptions on Hybrid cars (Eugene, 2011). Hybrid cars can help to improve the environment because oil is a limited resource that not only has to be refined from the environment but also creates carbon emissions when burned. Furthermore, a hybrid vehicle can help take the pressure off current oil sources by causing the fuel to last longer and reduce the need to find new sources of oil in nature (Chris, 2011).

On 2nd September 2008, Canon's marketing strategy in Malaysia went green. Canon organized an activity where they called for participants from the public to send in photos and Canon promised to plant a tree in Kota Damansara Park for every photo they received. Their ultimate objective was to plant 2,500 saplings in Padang Kota Damansara. The campaign successfully attracted over 1,000 participants to join in the tree planting which was held on 19th October 2008. Canon's green aim was to create more awareness about the importance of environmental conservation. This campaign by Canon's is also to show that Corporate Social Responsibility environmental campaigns can benefit the environment, society and inspire future generations to play their part as

socially-responsible citizens (The Green Story, 2011).

In 2011, Metrojaya department stores launched their go green campaign which is a contest where the stores highlight their products which are environmentally friendly. Another part of the campaign is that customers who purchase items worth more than RM100 in any of the seven Metrojaya outlets have the chance of winning a green technology Lithium-Ion powered motorbike which is sponsored by Eclimo (Robertson, 2011).

Similarly Carrefour and Unilever also launched a go green campaign which lasted from 20 May 2011 until 2 June 2011. Consumers who spend RM30 and above in Carrefour on Unilever products in a single shopping outing can participate in a simple game to redeem a premium gift and make a "green" pledge. Unilever Malaysia will donate RM1.00 to the environmental organization, Treat Every Environment Special (TrEES) for each gift redemption (The Green Story, 2011).

The above examples are some of the activities being carried out by NGO's which are supported by the Malaysian government. Although green consumers are steadily increasing throughout the world, the concept of what is green is still very new in Malaysia even though many green movements and campaigns have been carried out by the government and NGOs.

The concept of green food also is still at its developing and infancy stage in Malaysia. Golnaz *et al.* (2011) discussed the relationship between consumers' characteristic and intention to purchase green produced food with a bivariate correlation. The result indicates that consumers' purchasing intention attributes positively to their awareness, good knowledge and fine perception of green produced food. In Malaysia, there is very little knowledge about Malaysian consumers' perceptions towards going green, what their perceptions are on these green movements and campaigns, and their intention to go green. Thus, the objective of the study is to investigate Malaysian consumers' perception and intention towards going green after knowing more about the seriousness of environmental issues and the existence of green movements and campaigns that have already been organized and disseminated via electronic media, newspapers, billboards and even local school syllabuses and projects.

1. MATERIAL AND METHODS

1.1 Sample and Questionnaire

Simple random sampling was used in this study and 1355 respondents were interviewed by using a structured questionnaire to test the consumers' perception and intention to go green. This study used data collected from a survey which was conducted from September 2010 until March 2011 in the eleven states of Peninsular Malaysia, which are Johor, Kedah, Kelantan, Melaka, Negeri

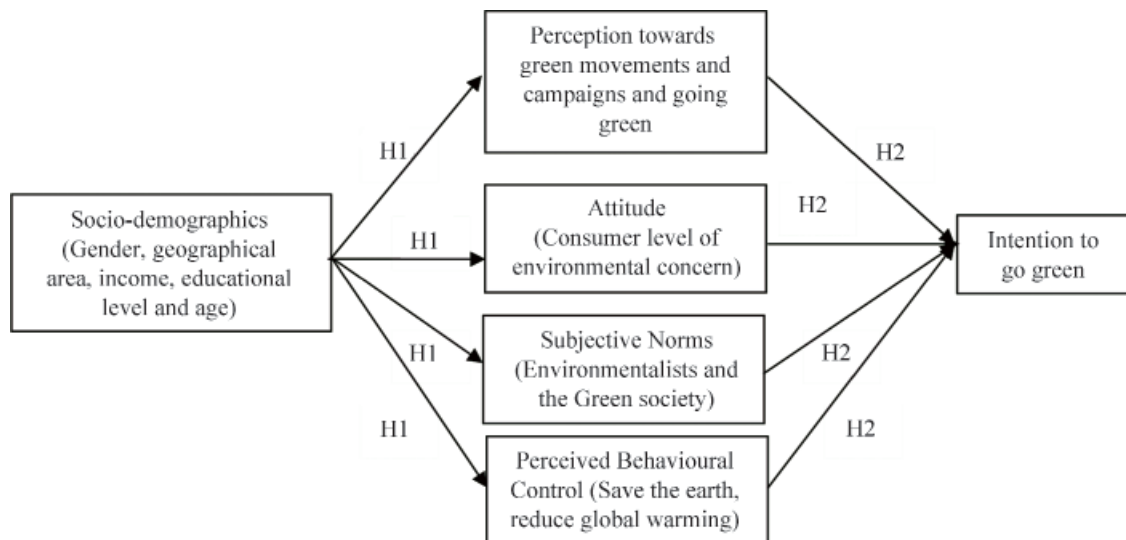
Sembilan, Pahang, Perak, Perlis, Pulau Pinang, Selangor and Terengganu. There are also two federal territories in Peninsular Malaysia, which are Kuala Lumpur and Putrajaya. Around 100 to 130 respondents were interviewed from each state to find out their perceptions and intention to go green in. A pilot study was carried out beforehand where 200 respondents were interviewed by using the planned structured questionnaire to ensure the questionnaire was easily understood by the respondents. Supermarkets such as MyDin, Jusco, Tesco, Tesco Extra, Giant and Carrefour were chosen from each state. The study assumes that supermarkets are the most appropriate place to collect consumer data because consumers from all walks of life shop at supermarkets.

The questionnaire was divided into three sections and was measured by a seven point Likert scale and open ended questions. Section A looks at the consumers' awareness and knowledge about the green concept and is measured by open-ended questions. Section B is divided into four parts. The first part asks questions about the perception and attitude of the consumers towards green foods. Second part consists of questions concerned about particular attitudes or consequences which society (family, friends and colleagues) has towards the consumers' performance or behavior. Part three is interested in finding

out the consumers' perceived behavior control which refers to factors which make the consumers' behavior easier or more difficult to perform. Part four measures the consumers' intention to purchase green foods as one of the indicators for going green. Section C asks for socio-demographic information about the consumers such as gender, ethnic group, state of origin, area, marital status, age, household size, education level, income and lifestyle.

1.2 Conceptual Framework

The Theory of Planned Behavior (TPB) is used as the conceptual framework which can explain the consumers' behavior towards going green. TPB postulates that intention is influenced by three independent variables; these variables are attitude, subjective norms and perceived behavioral control (Ajzen, 2002). The intention of consumers' to go green is made up of their perception about green movements and campaigns as well as the advantage of going green. Consumers' attitudes towards the environment may also influence consumers' behavior through external factors such as socio demographic profiles like gender, geographical area, income, education level and age. All these factors will increase the consumer's intention to go green and lead him or her to perform a positive intention towards going green.



Source: Ajzen (2002) Theory of Planned Behaviour

Figure 1
Conceptual Framework of TPB Applied to Consumers' Intention to Go Green

1.3 Research hypotheses

Consumers' perceptions and intentions to go green are different from country to country. Based on previous studies, the following hypotheses concerned with consumers' perceptions towards the green movement and their intention to go green, which were highlighted in figure 1 were proposed.

Hypothesis 1: There is no significant relationship

between socio-demographic factors such as gender, geographical area, age, education level and income, and consumers' perception towards the green movement, green campaigns, going green and consumers' attitude towards the environment.

Hypothesis 2: There is no significant relationship between socio-demographic factors such as gender, geographical area, age, education level and income, and

consumers' subjective norms which affect their intention to go green.

1.4 Method of Analysis

To accomplish the objectives of this study, descriptive statistics, t-test analysis and binary logistic analysis were used to analyze the information gathered from the questionnaires. Descriptive analysis was used to summarize the socio-demographic data. Independent t-tests were used to compare the mean values between two unrelated groups on the same continuous and dependent variables.

A binary logistic model was used to determine the extent to which socio demographic characteristics and subjective norms affect consumers' intention to go green. All the explanatory variables in this model had the value of 0 or 1 (Table 1). The dependent variable, Y represented a consumer's 'intention to go green' which were split into two categories, namely 'Consumers intend to go green if it helps to tackle environmental issues, save the planet and prevent global warming' coded as one and otherwise was coded as zero. The variable, χ_i represents the socio-demographic variables and subjective norms which influence consumers' awareness. In this regression model, the vectors, χ_i consisted of the following variables: gender, age, geographical area, education level, income, environmentalists, the green society and the green movement. Specifically, the binary logistic model can be stated as below:

$$\ln \frac{\pi}{1 - \pi} = \beta_0 + \beta_1 \chi_{\text{environmentalists}} + \beta_2 \chi_{\text{green society and movement}} + \beta_3 \chi_{\text{gender}} + \beta_4 \chi_{\text{education level}} + \beta_5 \chi_{\text{income}} + \beta_6 \chi_{\text{age}} + \beta_7 \chi_{\text{geographical area}} + e_i$$

Table 1
Explanatory Variables to Measure the Consumers' Intention to Go Green

Explanatory Variables	Coding Systems
Gender	0. Male 1. Female
Income	0. Below 3000 1. Above 3001
Education level	0. Diploma and below 1. Bachelor and above
Age	0. Below 35 1. Above 36
Geographical area	0. Rural 1. Urban
Environmentalists	0. I am not an environmentalist 1. I am an environmentalist
Green society and movement	0. I do not support the green society and green movement 1. I support the green society and green movement

2. RESULTS AND DISCUSSION

2.1 Socio-Demographic Profile of Respondents

Descriptive analysis was used in this study to describe the

population and the result of the socio demographic profiles of the respondents. Data values such as demographic profiles which include age, income level, education level, gender, race, geographical area and marital status were analyzed using descriptive analysis. By using descriptive analysis, the frequency distribution can show clearly how the data values can affect the variables in this study.

Table 2 shows the demographic profile of the respondents in the study. Most of the respondents were female 728 (53.7%) and only 46.3% were male. In this study, the majority of the respondents were Malay (57.1%), followed by Chinese (30.6%) and Indian (12.3%). The percentage of respondents from urban areas was 72.0% while those living in rural areas made up 28.0% of the sample. More than half of the respondents were married (60.7%) and 39.3% of respondents were single. The largest age group was the 26-40 years category (45.8%) while only 5.9% of the respondents were above 60 years old. Moreover, 71.3% of the respondents had gone through tertiary education, only a small amount of the respondents had received secondary education (15.6%) and 13.1% had graduated with a higher tertiary award. About 42.4% of the respondents had income between RM3,001- RM4,500 per month, a smaller percentage of the respondents (6.4%) had incomes above RM6,001, while 9.3% of respondents had an income of RM 1,500 and below.

Table 2
Demographic Profile of the Respondents (n=1355)

Characteristic	Percentage	Characteristic	Percentage
Gender		Education level	
Male	46.3	Secondary	15.6
Female	53.7	Tertiary	71.3
Race		Higher tertiary	13.1
Malay	57.1	Income	
Chinese	30.6	Below 1500	9.3
Indian	12.3	1501-3000	34.5
Area		3001-4500	42.4
Urban	72.0	4501-6000	7.3
Rural	28.0	Above 6001	6.4
Marital Status		Age	
Single	39.3	Below 25	16.7
Married	60.7	26-40	45.8
		41-60	31.7
		Above 60	5.9

2.2 Consumers' Perception Towards Going Green

The relationship between consumers' perceptions and attitudes towards going green was also measured by asking five questions about consumers' past purchasing behavior, attitudes towards the green process and their perceptions towards going green (Table 3). The result indicates that the majority of the respondents (52.3%) were aware about the green concept in Malaysia. Approximately, 37.7% of the respondents had bought green products in the past. Moreover, 94% of the respondents believed that the green process could promise a better future for the

planet. However, 85.2% of the respondents thought that going green was costly. The results in Table 3 show that most Malaysians are aware of and do understand what the green concept is all about. Given the background of the respondents and the green campaign that has been carried out, it is expected that the respondents will have a positive response towards going green. Nevertheless, being aware of and knowing what the green concept is all about is not enough in measuring respondent's positive attitudes towards going green. Thus, further analysis needs to be done in identifying the segments of the respondents that are really willing to go green.

Table 3
Consumers' Perception Towards Going Green
(n=1355)

	Percentage (%)
Have you heard about the green concept?	
Yes	52.3
No	47.7
Have you ever bought green products? (Example: Organic vegetables, organic meat, green foods and etc.)	
Yes	37.7
No	62.3
Can the green process provide a better future for the planet?	
Yes	94.0
No	6.0
Going green is costly.	
Yes	85.2
No	14.8

2.3 T-Test Analysis

The results of the t-test indicate that some of the selected socio-demographic variables have a significant relationship with consumers' perceptions and attitudes towards going green, the influence of green movement in Malaysia and consumers' level of environmental concern (Table 4). The socio-demographic variables which were chosen in this study include gender (male or female), geographical area (urban or rural), age (categorized into less than 30 years old and more than 30 years old), education level (diploma and below or above bachelor level) and income (less than RM 3000 or more than RM 3001).

The information presented in Table 4 shows the t-test analysis which was used to test the socio-demographic characteristics and consumers' level of environmental concern. The consumers were asked whether doing something positive for the environment is desirable or undesirable. From the results, it showed that gender, geographical area, income and education level were significantly different with the consumers' level of environmental concern. It shows that females have higher environmental concern than males ($p < 0.01$) and respondents who live in urban areas were more

concerned about environmental issues than respondents that come from rural areas ($p < 0.05$). In terms of income, respondents who have a higher income (above RM 3001) and a higher education level (above bachelor level) have higher environmental concern ($p < 0.01$).

Table 4 also indicated that the t-test results which were used to test whether there is a significant relationship in the mean of selected socio-demographic characteristics and consumers' perceptions towards the green movement green campaigns. Respondents were asked whether the green movement and green campaigns make them more aware of the green concept. The results showed that significant interaction was found between income, education level, age and perceptions of the green movement and green campaigns. Furthermore, the results show that consumers who have a higher education level (Bachelor and above) agree that the green movement makes them more aware about the green concept than the respondents who have an education level which is lower than a bachelor degree ($p < 0.01$). In addition, respondents who have higher income (RM 3001 and above) agree that the green movement and green campaigns can help them to gain more information on the topic and make them more aware about the green concept ($p < 0.10$). In terms of age, older respondents (above 31 years old) have a more positive perception towards the green movement and green campaigns where it makes them more aware of the green concept and promotes the idea of going green ($p < 0.01$). In this case there is no significant difference between both male and females and those living in urban or rural areas with regards to their awareness about the green concept.

The respondents were asked about their perceptions about whether going green can reduce global warming by using renewable energy sources. In Table 4, the result for gender indicates that the group means are statistically significant as the value was 0.001 which was well within the area of significance. This indicates that females have a more positive perception about going green than males. Moreover, the result shows that there is a significant difference between geographical area and consumers' perceptions towards going green. Respondents living in urban areas have a more positive perception than respondents living in rural areas. The group mean for education level was statistically significant (0.038). What is more, the mean for those with a higher education level (above Bachelor level) was higher than the lower education level (diploma or below). This indicates that consumers who have a higher education level are more informed and have a more positive perception than other consumers concerning the idea that going green can tackle global warming.

Table 4
Independent Sample t-Test

Socio-demographic variable	Independent variable		Mean	Standard deviation	t	Significant
Gender	Level of environmental concern	Male	4.15	0.906	-3.135	0.002***
		Female	4.30	0.758		
	Perceptions towards the green movement and green campaigns	Male	5.13	1.416	-1.526	0.131
		Female	5.24	1.254		
	Knowledge towards going green	Male	5.47	0.050	-3.303	0.001***
Geographical area		Female	5.68	0.041		
	Level of environmental concern	Urban	4.26	0.792	2.196	0.028**
		Rural	4.15	0.924		
	Perceptions towards the green movement and green campaigns	Urban	5.22	1.330	1.441	0.150
		Rural	5.11	1.336		
Income	Knowledge towards going green	Urban	5.65	1.132	2.911	0.004***
		Rural	5.43	1.292		
	Level of environmental concern	Below 3000	4.16	0.891	-2.622	0.009***
		Above 3001	4.28	0.780		
	Perceptions towards the green movement and green campaigns	Below 3000	5.12	1.356	-1.808	0.071*
Education level		Above 3001	5.25	1.312		
	Knowledge towards going green	Below 3000	5.53	1.189	-1.623	0.105
		Above 3001	5.63	1.176		
	Level of environmental concern	Below Diploma	4.06	0.944	-5.922	0.000***
		Above Bachelor	4.35	0.723		
Age	Perceptions towards the green movement and green campaigns	Below Diploma	5.07	1.368	-2.778	0.006***
		Above Bachelor	5.28	1.301		
	Knowledge towards going green	Below Diploma	5.51	1.169	-2.075	0.038**
		Above Bachelor	5.64	1.189		
	Level of environmental concern	Below 30	4.26	0.771	1.155	0.248
Age		Above 31	4.21	0.868		
	Perceptions towards the green movement and green campaigns	Below 30	5.11	1.262	-1.715	0.087*
		Above 31	5.24	1.373		
	Knowledge towards going green	Below 30	5.59	1.111	0.174	0.862
		Above 31	5.58	1.246		

***Statistically significant at the 0.01 level, **at the 0.05 level and *at the 0.10 level

2.4 Binary Logistic Model

In order to determine the extent to which selected socio-demographic characteristics influence the consumers' intention to go green, the binary logistic model was used. The estimated parameters and statistical significance levels are presented in Table 5. The dependent variable had two categories which are "respondents' intend to go green if it helps to tackle environmental issues, save our planet and prevents global warming", coded as one and otherwise was coded as zero. The result of this study found that out of the eight selected variables, five variables were positive and statistically significant. Thus, some socio-demographic factors and subjective norms were found to be relevant in determining consumers' intention to go green.

Based on the factors which had statistically significant

coefficients, education level and age were the only socio-demographic characteristics which had positive signs (Table 5). The results show that respondents who have at least a bachelor degree have a 1.960 times higher intention to go green than respondents who have education level below a bachelor degree. Similarly, the level of intention to go green for older respondents (above 35) is 1.256 times more than younger respondents (below 35). Furthermore, the subjective norms factor, such as environmentalists, the green society and green movements is an important determinant for consumers' intention to go green and the effect is positive. Respondents who consider themselves to be environmentalists or supporters of promoting a green society and green movements were estimated to have a 2.175 and 1.699 times higher intention to go green than other respondents, respectively.

Table 5
Estimated Logit Model for Consumers' Intention to Go Green

Variables	Estimated Coefficient	Standard Error	Significant Level	Exp(B)
Gender	0.155	0.118	0.187	1.168
Geographical area	-0.032	0.131	0.806	0.968
Education level	0.673	0.161	0.000***	1.960
Income	0.059	0.159	0.710	1.061
Age	0.228	0.120	0.057*	1.256
Green society and movement	0.530	0.135	0.000***	1.699
Environmentalism	0.777	0.137	0.000***	2.175
Constant	-2.137	0.375	0.000	0.118
-2 Log Likelihood	1678.086	Nagelkerke R Square		0.125
Cox and Snell R Square	0.092	Hosmer and Lemeshow Test		0.937

***Statistically significant at the 0.01 level, **at the 0.05 level and *at the 0.10 level

From the above discussion we noticed that the respondents who considered themselves as environmentalists and supporters of a green society and green movements seemed to respond positively toward going green. This finding is plausible because, as their label implies, they are the target group that the government should encourage to set up NGOs or join NGOs which promote and campaign for society to go green. Of course, education is very important in understanding the green concept and going green. Therefore, emphasis should be given to secondary school education in improving citizens' understanding of the concept so they are more aware of environmental issues which will have an effect on the future generation.

CONCLUSION

The Theory of Planned Behavior (TPB) was used in this study to investigate the respondents' perception and intention to go green in Malaysia. Although the green concept and green movement has been spreading worldwide over the last 3 decades, most Malaysians are still fairly unfamiliar in understanding the green concept even though green campaigns have been carried out in the country for the last decade. This study shows that the intention of Malaysians to go green is determined by them having a positive perception towards the subjective norms of the green movement and the green society. At the same time, perceived behavior control (going green can save the planet and reduce global warming) also plays an important role in creating awareness and concern about going green.

The results of this study indicate that the majority of the respondents are aware of the green concept in Malaysia but only a minority of them has purchased green products in the past. Consumers in Malaysia believe that going green is costly but they also understand the green process can save the planet. The educational level of the respondents was an important determinate for the consumers' level of environmental concern as well as their perception and intention to go green. Socio-demographic variables such as education level and age have a strong relationship with the respondents' intention to go green while the green society and environmentalists

are important subjective norms which influence the respondents' intention to go green.

The findings of this study are useful in helping the government and NGOs to assess the market potential for going green. Although the number of green consumers is steadily increasing, there is still a large group of consumers who does not fully understand the advantage of going green. Therefore, the Malaysian government and related institutions should try to make consumers more aware of the environmental issues in Malaysia as well as helping consumers to understand the advantage of going green. One way of promoting these goals is by the government enforcing the use of a recognized environmentally friendly logo on all products as this may increase consumers' awareness about going green. Furthermore, the government and NGOs should organize more green campaigns to create more public awareness towards the importance of protecting the environment which can help increase consumers' intention to go green. In addition to this, the government should make use of education institutions as an important medium for introducing the green environment by informing younger generations of the advantage of going green and how it can tackle environmental issues in Malaysia. NGOs could also launch promotions and campaigns to attract the consumers to go green. Mass media such as newspapers, the radio, television, the internet and magazines can be a useful tool to improve consumers' awareness and perception towards going green as well as increasing their intention to go green.

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