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Antecedents of Malaysian Consumer's Green Practices

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ABSTRACT

The paper presents critical dimensions namely; attitude, subjective norms, perceived control on the green practices concepts (reducing waste, reuse of materials and recycling. This study aims to explore the antecedents of Malaysian consumer's green practices. Descriptive research design was used in this study and it is quantitative in nature. A total of 315 individuals participated in this study. Data was analyzed by using SPSS software through frequency distributions, mean and standard deviations. Regression analysis was used to test the hypotheses and correlation analysis was run to examine the relationship between tested variables. The result of regression analysis revealed that "Perceived control" and "attitude" were influential factors to practice green concepts (Reduce, Reuse and Recycle). Based on the findings, marketers should give adequate consideration to these factors to attract customers. It is recommended that future research should utilize a larger sample size and enlarge the study scope to include other countries in order to compare green practice concept in those countries.

KEYWORDS: Green Practices, Green Marketing, Green Purchasing Behaviour, Reducing Waste, Theory of Planned Behavior

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1. INTRODUCTION

This Environmental concern and issues are growing fast during recent decades, natural resources are so important in today's life and people use them to satisfy their needs. In such a world where people are becoming more concerned about environment and protecting their lives, there is need for companies to become also more concerned about it (Polonsky, 1994). So in such a conscious marketplace, consumers have understood the impact of their purchasing behaviors, which are strongly associated with environmental problems. Customers who think that environmental issues are important are willing to buy eco-friendly products over alternatives, sometimes even paying more for such products (Laroche, Bergeron, & Barbaro-Forleo, 2001). Individual's behaviour has impact on local and global ecosystem. Anything which affects ecosystem health also may affect the health of its inhabitants. Because of the fact that health of eco system depends on Individual activities and health of the individual depends on health of eco system, these interactions would also lead to alternative behaviours and actions to reduce environmental deterioration (Laustsen, 2007).

Social and political pressure caused the firms to look beyond pollution and waste disposal and try to find other measure for product design and package (Straughan and Roberts, 1999). Also industrialization all over the world caused to increase product differentiation in marketing (Vlosky, Ozanna and Fontenot, 1999). During the years consumers have understood that their purchasing behaviour had effect on environmental problems. They consider ecological issues while they are shopping , they check if the products is wrapped using recycled materials or not and also they try to purchase environmentally friendly products (Laroche et al ,2001). Some of the customers who are aware of these issues nowadays are only demanding environmentally friendly products (Cheah and Phau, 2005).These individuals are actually willing to pay more for environmentally friendly products (Laroche et al ,2001).

These forces to go green are also developing in Asian countries that are facing environmental threats (Lee, 2008). Malaysia is also facing these challenges to ensure sustainable development. National statistics demonstrated that state of some of Malaysian environment is alarming. "Urban air quality, river water quality, deforestation, household wastes and hazardous wastes are some of the examples of environmental issues faced by the nation" (Aini, Fakhru'l-Razi, Laily and Jariah, 2003).Different policies are now implemented in Malaysia by government to ensure sustainable development of the nation. Therefore the markets for eco-friendly products, services and technologies in Malaysia can be a good opportunity for international green marketing. However, green marketing studies in Asian countries are very scant comparing to Western countries (Lee, 2008). This paper therefore attempted to fill the gap by examining antecedents of green practices. This study aimed to identify antecedents of Malaysian consumer's green practices. More specifically, the objectives of this research were: 1- to predict factors affecting green practices (reducing waste, reuse of material and recycling). 2- To examine the relationship among study variables. Subsequently, research questions were: What are the antecedents of green practices (reducing waste, reuse of material and recycling)? How do these factors affect green practices (reducing waste, reuse of material and recycling)?

2. LITERATURE REVIEW

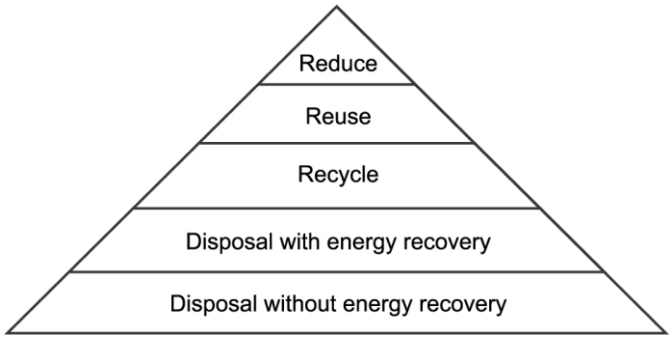
Most of the recent studies show the importance of environmental concern. Based on the studies over the years, customers purchasing behavior has direct effect on environmental problem (Laroche et al., 2001). Other research also indicated the fact of increasing environmental consciousness and also proved that change in behaviour of the customer would increase market share options (D'Souza, Taghian, Lamb, & Peretiatkos, 2006). The more customers recognize the environmental issues, their choices become more environmentally and they are willing to purchase products and services that are eco-friendly (Han, Hsu, & Sheu, 2010). Green practices are also important in industries and can improve image of the industry which in the long-run it will contribute to customer loyalty (Ryu, Han, & Kim, 2008). According to literature there are so many supports for efficacy of the Theory of planned behaviour components to explain behavioural intentions (Armitage & Conner, 2001).

2.1. Green Marketing and Green Practices

Most of the recent studies show the importance of environmental concern. Based on the studies over the years, customers purchasing behavior has direct effect on environmental problem (Laroche et al., 2001). Other research also indicated the fact of increasing environmental consciousness and also proved that change in behaviour of the customer would increase market share options (D'Souza, Taghian, Lamb, & Peretiatkos, 2006). The more customers recognize the environmental issues, their choices become more environmentally and they are willing to purchase products and services that are eco-friendly (Han, Hsu, & Sheu, 2010). Green practices are also important in industries and can improve image of the industry which in the long-run it will contribute to customer loyalty (Ryu, Han, & Kim, 2008). According to literature there are so many supports for efficacy of the Theory of planned behaviour components to explain behavioural intentions (Armitage & Conner, 2001).

Best green practices include 3R, Reduce, Reuse and Recycle. Green practices are becoming a guiding principle for individuals and companies. Sustainable development would definitely depend on the degree to which customers and companies are greened and involved in green activities. Those industries that are very innovative are able to improve their ecological activities and performance (Roarty, 1997). There are some reasons to practice green concepts for companies also: 1) the industry sees green practice as an opportunity, 2) Green practices are useful for increasing competitive advantage and reducing environmental impact , 3)Greening not only reduces the environmental impact, but also improves efficiency and competitive advantage , 4) Some of the companies are following the leader strategy which means they play a role of ecologically conscious competitor and it would encourage other industries to follow the same activities and becoming greener, 5) Green practice will provide good image of the company to the society and customers (Mohan Das Gandhi , Selladurai and Santhi, 2006) . Figure1 shows the waste minimization hierarchy is also known as the greening hierarchy:

Figure1. Waste minimization hierarchy



Waste minimization helps the utilization of resources and reducing the amount of waste. The figure shows that before the final disposal or recycling, industry would extract maximum from the waste stream reduction of waste and extracting maximum from the waste stream (Mohan Das Gandhi et al, 2006). According to Ackerman, 1997, Recycling behaviour goes back to seventies, when families attempted to save paper, cardboard, metals and other materials. Every individual now has positive beliefs about recycling and waste-management system has a high level of convenience (Cited in Meneses and Palacio, 2006).

2.2. Theory of Planned Behaviour

According to Ajzen's 1986 research, theory of planned behaviors (TPB) focuses on the attitude about the behaviors (i.e., values), subjective norms and perceived behavioural control as important factors to behaviors change. TPB assumes that these three factors are independent determinants of behavioural intention. According to him the TPB is a "cognitive model of human behaviors, in which the central focus is the prediction and understanding of clearly defined behaviors". One of the important predictor of behaviors is intention. People usually behave according to their intention. Intention is influenced by attitude, subjective norm, and perception of behavioural control (Cited in Han, Hsu & Sheu, 2010). Based on the theory of planned behaviour model, a high level of perceived behavioural control, favourable attitude and subjective norm would lead to high intention to perform the behaviors (Ajzen, 1991).

2.2.1. Attitude

One of the important components of behavioural intention is attitude. It shows the individual's favorable or unfavourable evaluation of particular behavior. Therefore it indicates person's positive and negative beliefs of the behavior. Usually when outcomes are positively evaluated individual will tend to possess a favorable attitude (Cheng, Lam, & Hsu, 2005). According to Ajzen 1991's research, a person's positive attitude toward a certain behavior has positive effect on the intention to act that particular behaviour (Cited in Han et al, 2010). Another study found that hotel customer's environmental attitudes positively affect their expressed intention (Han et al, 2010). Previous study indicated that attitude has positive relation with recycling activities (Knussen, Yule, MacKenzie & Wells, 2004). One study used the cognitive perceptions and risks/benefit to the environment to divide customers in to four segments. First group called conventional consumers who are not concerned with ecological issues and don't see any risk in the products which have been offered in society. Second group called emerging green consumers which are familiar with benefits of purchasing green product but shop out of convenience. Third group called environmentally green customers who always look for eco-friendly products to justify their purchase based on their environmental beliefs. The final group called price sensitive green consumers who feel responsible for environment but don't like to spend money for green products. They may be willing to spend money for these products if there is a minimum price gap (D'Souza, 2004). Other study found that individuals may buy eco-friendly product due to the idea of self-fulfillment. It makes individuals feel happy about themselves when they are involving with activities like recycling or purchasing eco-friendly products (Fraj and Martinez, 2006).The number of individuals who feel responsibility about environment has been increased. Studies showed that more environmental concern tends to result in more environmentally friendly buying behaviors. These customers who have positive attitudes towards green behaviour will be willing to spend more for environmental issues (Laroche et al, 2001). These findings demonstrated the role of Attitudes in decision- making process and to implement green practices concepts (Manaktola and Jauhari, 2007). With reference to the literature, the following hypotheses are suggested for empirical testing:

H1. Attitude has a positive influence on reducing waste.
H2. Attitude has a positive influence on reuse of material.
H3. Attitude has a positive influence on recycling.

2.2.2. Subjective Norm

Based on the TPB model, subjective norm is the second determinant of behavioral intention. Ajzen, 1991, defined subjective norm as ''the perceived social pressure to perform or not to perform the behaviour" (Cited in Han, Hsu & Sheu, 2010). According to Hee's 2000 research, Subjective norm is the perceived opinion of the important persons in our life who can influence us in making decisions (Cited in Han, Hsu & Sheu, 2010).Cultural values also play an important role in customer's environmentally friendly behaviour. One study examined Chinese consumer purchase habits and stated that the effect of social pressure on purchase intention can explain the effect of subjective norms on purchase intentions (Chan and Lau, 2000). Researchers found that subjective norm has positive relation with recycling activities

(Knussen et al, 2004).One study found that subjective norm has a direct influence on intention to behave a particular act or behaviour (Stavros, Pollard, East & Tsogas, 1999).With reference to the literature, the following hypotheses are suggested for empirical testing:

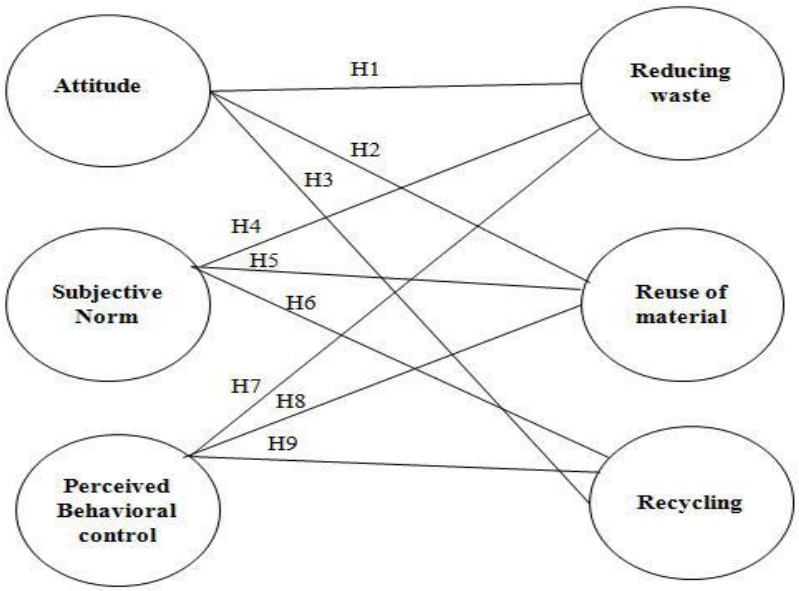
H4. Subjective norm has a positive influence on reducing waste.
H5. Subjective norm has a positive influence on reuse of material.
H6. Subjective norm has a positive influence on recycling.

2.2.3. Perceived Behavioural Control

Based on the TPB model, perceived behavioral control is the third determinant of behavioral intention. Ajzen, 1991, defined perceived behavioral control as ''the perceived ease or difficulty of performing the behavior" (Cited in Han, Hsu & Sheu, 2010). Perceived behavioral control examines the perception of how good an individual can control variables which could help to decide which action should be taken in particular situations. It can also be considered as a function of control beliefs. Perceived behavioral control and behavioral intention, can be used to predict behavioral achievement (Chang, 1998). Other study demonstrated that people's self-confidence in doing their activities has a positive impact on the behaviour. Based on the finding if someone don't have control over a particular behaviour, even though he has positive attitude or subjective norm concerning that act, his behavioral intention will be lower (Baker, Al-Gahtani, & Hubona, 2007). Researchers found that perceived control has positive relation with recycling activities (Knussen et al, 2004).With reference to the literature, the following hypotheses are suggested for empirical testing:

H7. Perceived behavioral control has a positive influence on reducing waste.
H8. Perceived behavioral control has a positive influence on reuse of material.
H9. Perceived behavioral control has a positive influence on recycling.

Figure 2 shows the research model for this study.



3. RESEARCH METHODOLOGY

Descriptive research design is used in this study. The questionnaire in this study is developed from the literature review. The questionnaire is refined for some constructs and pilot-tested to ensure the reliability and validity of the scales. The questionnaire used in this study consists of two sections: The first part of the questionnaire is divided into 6 dimensions which included 21 questions to measure the variables. The first dimension is "attitude" which consisted of 5 questions adapted from Tonglet, Philips and Read (2004). The second dimension is "Subjective Norm" which contains 3 questions and was adapted from Han, Hsu and sheu, (2010). The Third dimension, "green Perceived Control" consists of 4 questions and was adapted from Tonglet et al (2004) study and the last 3 dimensions are "Reducing waste", "Reuse of material" and "Recycling" which each of them consisted of 3 questions respectively adapted from (Han et al., 2009) study. The second part of the questionnaire was made up of 7 questions to measure the respondents' demographic characteristics. A 6 -point Likert scale (with 1 strongly disagree to 6 strongly agree) was used in this study to measure the studied variables.Non-probability sampling method (convenience sampling method) is used in this study. Sample consists of 315 individuals. They asked if they were willing to participate in the study. In this study descriptive statistics was used in order to describe the main features of a collection of data in quantitative terms. SPSS software was used to analyze the data. Data was analyzed by statistical method such as frequencies distribution, mean and standard deviations; reliability test was used to examine the reliability of measurement of variables. Regression analysis was used to test the hypotheses and correlation analysis was run to examine the relationship between tested variables.

4. RESULT AND DISCUSSION

The results of descriptive analysis showed that most of the respondents (56.5% or 178 respondents) were male. Majority of them were students (50.8 % or 160 respondents), the second large population were employed people (49.7% or 151 respondents). Most of the respondents were from UKM students (28.3 % or 89 respondents) and the second largest population corresponds to UPM students (6.7% or 21 respondents) while only a small number (1.9 % or 6 respondents) corresponds to MMU students and the rest only contributed very small percentage. Most of the respondents (52.1 % or 164 respondents) had not attended any environmental talk while only a small number (47.9 % or 151 respondents) had attended kinds of meetings. 48.3% or 152 respondents hold post graduate and 38.4% 121 respondents hold under graduate degree. Only few numbers hold diploma and secondary school. Large number of population (98.4%, 310 respondents) were Malaysian and only few number (1.6% or 5 respondents) were from Indonesia. The average age of the respondents in this study was 32 years old. In order to ensure that variables in this study measure the concept in a consistent manner, the reliability of variables was tested. The reliability alpha was 0.943 for 5 items of attitude, 0.931 for 3 items of subjective norm, 0.837 for 4 items of perceived control, 0.916 for 3 items of reducing waste, 0.930 for 3 items of reuse of material, 0.937 for 3 items of recycling .Therefore the obtained alpha values were acceptable. In order to identify the antecedents of green practices, quantitative measurements were conducted to identify these differences. The result of mean and standard deviation showed that for the dimension "Attitude" the highest mean of 5.39 corresponded to the item 'Green practice is good' which means that the respondents gave the highest response on this item. While items 'Green practice is sensible' received the lowest mean of 5.12 Overall, it shows that social influence tends to affect green practices. In the case of "Subjective norm", the ranges of means for all the items were between 4.34 and 4.26. Item 'People whose opinions I value would prefer that I practice green concepts' was the statement with the highest score. The mean scores for the items under "Perceived control" ranged from 4.55 to 4.30. These values indicated that respondents also relate perceived control to green practice concepts. Item 'I know what items can be Reduced, Reused and Recycled' had the highest mean of 4.55.

In the case of "Reducing waste", the highest mean of 4.95 corresponded to the item 'I will make an effort to reduce usage of paper, water, electricity and plastic bag' which means that the respondents gave the highest response on this item. While items 'I plan to reduce usage of paper, water, electricity and plastic bag' had the lowest mean of 4.92. As regards "Reuse of material", the highest mean of 4.86 corresponds to the item 'I will make an effort to reuse a product/thing if it can be reused' which means that the respondents gave the highest response on this item. While items 'I plan to reuse a product/thing to its optimal' received a score of 4.81. It shows that most of the respondents are agree with reuse of material to protect the environment. Concerning Recycling, the highest mean of 4.77 corresponds to the item 'I am willing to involve in recycling activities' which means that the respondents gave the highest positive response on this item. While items 'I plan to recycle products/things accordingly' had the lowest mean of 4.72. For testing the hypotheses suggested by this study, multiple regression analysis was conducted. Table1 shows the result of the regression analysis. There were three independent variables while reducing waste was the dependent variable.

Table1. Results of regression analyses for reducing waste

	β	Reducing waste SE
Attitude	0.350**	0.058
Subjective norm	- 0.046	0.041
Perceived control	0.441**	0.052
R2	0.466	
Adjusted R2	0.461	
F	90.475	

Notes: Significance at: **p<0.001; n= 315

According to the table, R Square value is 0.466 taking into account all independent variables so we can conclude that only 46 percent of (Adjusted R Square) variances of reducing waste were explained in this model and the F value of 90.475 is significant at the 0.000 level. So it shows that 46 percent of the variance (R-Square) in reducing waste has been significantly explained by three independent variables. The highest number in the beta is 0.441 for "perceived control" dimension, which is significant at the 0.000 level. "Attitude" dimension also reflects a considerable amount of Beta which is 0.350 and is also significant at the 0.000 level. This shows that there is a positive relationship between attitude, perceived control and reducing waste. The item "subjective norm" is not significant because the significant value is greater than 0.05. This result can be used for testing the hypotheses proposed by this study.

Hypothesis1: Attitude has a positive influence on reducing waste.
Attitude has a significant positive impact on reducing waste with a significant value of 0.000.
Hence hypothesis H1 was supported.

Hypothesis4: Subjective norm has a positive influence on reducing waste.
Since the Sig value of 0.334 is more than 0.05 and is not significant, subjective norm does not have a positive impact on reducing waste. Hence hypothesis H4 was not supported.

Hypothesis7: Perceived behavioral control has a positive influence on reducing waste.
Perceived control has a significant positive impact on reducing waste with a significant value of 0.000.
Hence hypothesis H7 was supported.

Table 2 also shows the result of the regression analysis. There were three independent variables while reuse of material was the dependent variable.

Table2. Results of regression analyses for reuse of material

	β	Reuse of material SE
Attitude	0.344**	0.058
Subjective norm	-0.004	0.041
Perceived control	0.412**	0.052
R2	0.449	
Adjusted R2	0.443	
F	84.411	

Notes: Significance at: **p<0.001; n= 315

According to the table, R Square value is 0.449 taking into account all independent variables so we can conclude that only 44.3 percent of (Adjusted R Square) variances of reuse of material were explained in this model and the F value of 84.411 is significant at the 0.000 level. The highest number in the beta is 0.412 for "perceived control" dimension, which is significant at the 0.000 level. "Attitude" dimension also reflects a considerable amount of Beta which is 0.344 and is also significant at the 0.000 level. This shows that there is a positive relationship between attitude, perceived control and reuse of material. The item "subjective norm" is not significant because the significant value is greater than 0.05. This result can be used for testing the hypotheses proposed by this study.

Hypothesis2: Attitude has a positive influence on reuse of material.
Attitude has a significant positive impact on reuse of material with a significant value of 0.000. Hence hypothesis H2 was supported.

Hypothesis5: Subjective norm has a positive influence on reuse of material.
Since the Sig value of 0.931 is more than 0.05 and is not significant, subjective norm does not have a positive impact on reuse of material. Hence hypothesis H5 was not supported.

Hypothesis8: Perceived behavioral control has a positive influence on reuse of material.
Perceived control has a significant positive impact on reuse of material with a significant value of 0.000. Hence hypothesis H8 was supported.

Table 3 also shows the result of the regression analysis. There were three independent variables while recycling was the dependent variable.

Table3. Results of regression analyses for reuse of material

	β	Recycling SE
Attitude	0.292**	0.057
Subjective norm	0.154	0.040
Perceived control	0.407**	0.051
R2	0.506	
Adjusted R2	0.502	

F	106.308	

Notes: Significance at: **p<0.001; n= 315

According to the table, R Square value is 0.506 taking into account all independent variables so we can conclude that only 50.2 percent of (Adjusted R Square) variances of recycling were explained in this model and the F value of 106.308 is significant at the 0.000 level. The highest number in the beta is 0.407 for "perceived control" dimension, which is significant at the 0.000 level. "Attitude" dimension also reflects a considerable amount of Beta which is 0.292 and is also significant at the 0.000 level. "Subjective norm" dimension also reflects a considerable amount of Beta which is 0.154 and is also significant at the 0.001 level. This shows that there is a positive relationship between attitude, subjective norm, perceived control, and reuse of material. This result can be used for testing the hypotheses proposed by this study.

Hypothesis3: Attitude has a positive influence on recycling.
Attitude has a significant positive impact on recycling with a significant value of 0.000. Hence hypothesis H3 was supported.

Hypothesis6: Subjective norm has a positive influence on recycling.
Subjective norm has a significant positive impact on recycling with a significant value of 0.001. Hence hypothesis H5 was supported.

Hypothesis9: Perceived behavioral control has a positive influence on recycling.
Perceived control has a significant positive impact on recycling with a significant value of 0.000. Hence hypothesis H9 was supported.

Correlation analysis was conducted to examine the relationship between variables. Table 4 shows the result of correlation analysis. "Perceived control" was related to the usage of recycling since the correlation coefficient is 0.646** and was significant (0.000). The second variable related to recycling was "Attitude" with a correlation coefficient of 0.590** and was also significant (0.000). "Subjective norm" also correlated with recycling (Correlation coefficients are 0.460**). "Perceived control" was also related to the reuse of material since the correlation coefficient was 0.608** and was significant (0.000). The second variable related to reuse of material was "Attitude" with a correlation coefficient of 0.580** and was also significant (0.000). "Subjective norm" also correlated with reuse of material (Correlation coefficients are 0.325**). "Perceived control" was also related to the reducing waste since the correlation coefficient was 0.622** and was significant (0.000). The second variable related to reducing waste was "Attitude" with a correlation coefficient of 0.586** and was also significant (0.000). "Subjective norm" also correlated with reducing waste (Correlation coefficients are 0.299**). With reference to correlation analysis, factors such as attitude, subjective norm and perceived control were positively related to green practice concept.

Table 4. Correlation Analysis

	1	2	3	4	5	6
Attitude	1.0					
Subjective norm	0.412**	1.0				
Perceived control	0.576**	0.455**	1.0			
Reducing waste	0.586**	0.299**	0.622**	1.0		
Reuse Of material	0.580**	0.325**	0.608**	0.737**	1.0	
Recycling	0.590**	0.460**	0.646**	0.662**	0.720**	1.0

Notes: Significant at: *p<0.05, **p<0.01, n=315

5. CONCLUSIONS

The findings of this study helped to explore the antecedents of Malaysian customer's green practices. This study reflected that Malaysian customers are concerned about green practices.

The results from regression helped to identify antecedents of green practices, and these included "Perceived control" dimension, recognized as the top predictor of reducing waste and reuse of material followed by "Attitude". Concerning recycling, "perceived control" recognized as top predictor, "attitude" and "subjective norm" recognized as second and third predictors.

Results of the hypotheses suggested by this research also indicated that "attitude and perceived behavioural control" have a positive impact on reducing waste and reuse of material. In case of attitude, the result is consistent with that of (Han et al, 2010) and (Laroche et al, 2001) who found that hotel customer's environmental attitudes positively affect their expressed intention and customers who have positive attitudes towards green behaviour will be willing to spend more for environmental issues. In case of perceived behavioural control this result is consistent with that of (Chang, 1998) who found that perceived behavioural control can be used to predict behavioural intention. This result is also consistent with that of (Knussen et al, 2004) who found that perceived control has positive relation with recycling activities. Result of regression analysis also indicated subjective norm has a positive effect on recycling only, not reducing waste and reuse of materials. This result is consistent with that of (Knussen et al, 2004) who found that subjective norm has positive relation with recycling activities and also is consistent with that of (Stavros, Pollard, East &Tsogas, 1999) who found that subjective norm has a direct influence on intention to behave a particular act or behaviour. The sample size selected was small and consisted of 315 individuals from Malaysia.

Therefore, the findings of this study cannot be generalized for general populations. It is recommended that future research should utilize a larger sample size and enlarge the study scope to include other countries in order to compare green practice concept in those countries. Some of the participants in the current study indicated that they failed to practice green concepts such as recycling because the facilities were lacking, therefore it is also necessary to consider people's abilities and opportunities. Further, it is necessary to consider the 'costs' of recycling for the individual.

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REFERENCES:

Ajzen, I (1991), "The theory of planned behavior", Organizational Behavior and Human Decision Processes, *Vol 50*, pp 179-211.

Aini, M.S., Fakhru'l-Razi, A., Laily Hj. P. and Jariah, M. (2003), "Environmental concerns, knowledge and practices gap among Malaysian teachers", International Journal of Sustainability in Higher Educatio*n* , Vol 4, No 4, pp 305-313.

Armitage, C. J., & Conner, M (2001), "Efficacy of the theory of planned behaviour: A meta-analytic review", British Journal of Social Psychology, Vol 40, pp 471–499.

Baker, E. W., Al-Gahtani, S. S., & Hubona, G. S (2007), "The effects of gender and age on new technology implementation in a developing country: testing the theory of planned behavior (TPB)", Information Technology & People, Vol 20, No4, pp 352-374.

Chan, R.Y.K. & Lau, L.B.Y (2000), "Antecedents of green purchases: a survey in China", Journal of Consumer Marketing, Vol 17, No 4, pp 338 – 357.

Chang, M. K (1998), "Predicting unethical behavior: a comparison of the theory of reasoned action and theory of planned behavior", Journal of Business Ethics, Vol 17, pp 1825–1834.

Cheah, I., & Phau, I (2005), "Toward a framework of consumers' willingness to purchase environmentally friendly products: a study of antecedents and moderator", ANZMAC Conference: Social, Not-for-Profit and Political Marketing, pp 39-46.

Cheng, S., Lam, T., & Hsu, C. H. C (2005), "Testing the sufficiency of the theory of planned behaviour: a case of customer dissatisfaction responses in restaurants", International Journal of Hospitality Management, Vol 24, No 4, pp 475–492.

D'Souza,C (2004), "Ecolabel programmes: a stakeholder (consumer) perspective", Corporate Communications: An International Journal , Vol 9, No 3, pp 179-188.

D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006), "Green products and corporate strategy: an empirical investigation", Society and Business Review, Vol 1, pp 144-157.

Fraj. E & Martinez.E (2006), " Environmental values and lifestyles as determining factors of ecological consumer behaviour: an empirical analysis", Journal of Consumer Marketing, Vol 23, No 3, pp133-144.

Han, H., Hsu, L. T., & Sheu, C (2010), "Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities", Journal of tourism management, Vol 31, pp 325-334.

Han.H, Hsu.L.T. Lee .S. & Sheu.C (2010), "Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions", International Journal of Hospitality Management, pp1-12.

Knussena.C, Yulea.F, MacKenzieb.J, Wells.M (2004), "An analysis of intentions to recycle household waste: The roles of past behaviour, perceived habit, and perceived lack of facilities", Journal of Environmental Psychology, Vol 24, pp 237–246.

Laroche, M., Bergeron, J., & Barbaro-Forleo, G (2001), "Targeting consumers who are willing to pay more for environmentally friendly products", Journal of Consumer Marketing, Vol 18(6), 503-520.

Laustsen,G (2007),"Reduce-Recycle-Reuse: guidelines for promoting perioperative waste management", AORN Journal, Vol 85,No4 ,pp 711-728.

Lee, K. (2008), "Opportunities for green marketing: young consumers". Marketing Intelligence & Planning, Vol 26, No 6, pp 573-586.

Manaktola, K., Jauhari, V (2007), "Exploring consumer attitude and behavior towards green practices in the lodging industry in India". International Journal of Contemporary Hospitality Management, 19 (5), 364–377.

Meneses, G. D., Palacio, A.B (2006), "Different kinds of consumer response to the reward recycling technique: similarities at the desired routine level", Asia Pacific Journal of Marketing and Logistics, Vol 18, No1, pp 43 – 60.

Mohan Das Gandhi, N., Selladurai,V. , Santhi, P (2006), "Unsustainable development to sustainable development: a conceptual model, Management of Environmental Quality", An International Journal, Vol 17, No 6, pp 654 – 672.

Polonsky, M.J (1994)," An introduction to greenmarketing". Electronic Green Journal, Vol 1, No 2), retrieved on February 26, 2010, from: http://escholarship.org/uc/item/49n325b7

Roarty,M (1997), "Greening business in a market economy", European Business Review, Vol 97, No 5, pp 244 - 254.

Ryu, K., Han, H., & Kim, T.H (2008), "The relationships among overall quick-casual restaurant image, perceived value, customer satisfaction, and behavioral intentions". International Journal of Hospitality Management, Vol 27, pp 459-469.

Stavros, P., Pollard,M., East,R., Tsogas.M.H (1999), "Green marketing and Ajzen's theory of planned behaviour: a cross market examination" . Journal of Consumer Marketing, Vol 16, No 5, pp 441-460.

Straughan, R.D. and Roberts, J.A (1999), "Environmental segmentation alternatives: a look at green consumer behavior in the new millennium", Journal of Consumer Marketing, Vol 16, No 6, pp 558-75.

Tonglet, M., Phillips, P. S., & Read, A. D (2004), Using the Theory of Planned Behaviour to investigate the determinants of recycling behaviour: a case study from Brixworth, UK. Resources, Conservation and Recycling, Vol 41, No 3, pp 191-214.

Vlosky, R.P., Ozanna, L.K. and Fontenot, R.J (1999), "A conceptual model of US consumer willingness-to-pay for environmentally certified wood products", Journal of Consumer Marketing, Vol 16, No 2, pp 122-36.

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ETHICAL CONSIDERATION

Authenticity of the texts, honesty and fidelity has been observed.

CONFLICT OF INTEREST

Author/s confirmed no conflict of interest.