

Factors Influencing Students' Intention to Purchase Green Products: A Case Study in Universiti Utara Malaysia

Muhammed Abdullah Sharaf^{1*} and Filzah Md Isa²

¹*Othman Yeob Abdullah School of Business, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia*

²*Taylor's University, 47500 Subang Jaya, Selangor, Malaysia*

ABSTRACT

Green marketing is a holistic marketing concept where activities from production to sales are done in a way that is favourable to the environment. The purpose of this study is to examine the influence of price, knowledge, eco-label, and peer pressure on the intention of young Malaysians to buy green products. The results of this study showed that price, and peer pressures have an influence on young consumers' intention to purchase green products, while knowledge, and eco-label have no influence.

Keywords: Eco-label, green purchasing, intention, knowledge, peer pressure, price

INTRODUCTION

The most critical challenge that green marketers face is identifying and specifying the factors influencing consumers to go green.

The influence of the 2009 Climate Change Conference in Copenhagen has seen the government of Malaysia promising to decrease greenhouse gases' emission per Gross Domestic Product to 40% by the year 2020. (Bernama, 2009). In 2010 the New Economic Model sustainability is one of the economic transformation program goals aimed at making the country a green hub (Alias, Masek, Salam, Bakar, & Nawawi, 2014). This study aims to find the factors that can motivate young Malaysians to purchase green products.

Literature Review

Purchase intention refers to individual's intention to purchase a particular brand.

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E-mail addresses:

mu21shi@yahoo.com (Muhammed Abdullah Sharaf),

filzah.mdisa@taylors.edu.my (Filzah Md Isa)

* Corresponding author

Having the intention to purchase a particular product requires comparing it with other similar products available in the market (Teng & Laroche, 2007). Ghosh (1990) found that when a consumer selects a particular product, his final decision relies entirely on his intention (Chen, 2008). Therefore, many marketers believe that one of the best methods to predict consumer behaviour related to purchasing price, is one of the non-product attributes of brand associations.

The literature on green products shows an increase in income usually leads to an increase of the number of people purchasing green products (Lockie, Lyons, Lawrence, & Mummery, 2002; McEachern & McClean, 2002; Storstad & Bjorkhaug, 2003). However, Van-Doorn and Verhoef (2011) contradicted these findings as they found that consumers are less likely to purchase green products if they cost more compared to regular products. Hence the following hypothesis suggests that:

H1: Price has a significant influence on young consumers' decision to green purchasing in Malaysia.

Environmental knowledge can be defined as the ecological knowledge a person has on environmental issues (Conraud-Koellner & Rivas-Tovar, 2009). However, having environmental knowledge does not always lead to favourable actions.

Previous studies stated that people who are environmentally informed tend to engage in positive environmental behaviour (Hines, Hungerford, & Tomera,

1987). Accordingly, Mostafa (2009) stated that there is a significant effect between knowledge and green purchasing intention. Therefore, the second hypothesis is:

H2: Knowledge has a significant influence on young consumers' intention towards green purchasing in Malaysia.

Eco-labels refer to a product's collective overall environmental performance (Giridhar, 1998). According to Rashid (2009), eco-labels are possibly attractive instruments that are used to inform consumers on the environmental significance of purchasing such a product and serving as means to acquiring a special place in the market. Nonetheless, some researchers suggested that eco-labelled products do not always affect consumers' sentiments towards environmental issues (Wessells, Johnston, & Donath, 1999). While the importance of eco-labelling was still being argued about Erskine and Collins (1997) stated that having an effective and workable eco-label scheme that can really enhance environmental concerns is not an easy task in practice. Based on Sammer and Wustenhagen (2006) who analysed the relative importance of EU energy-labelled products on consumer behaviour and found a positive influence the following hypothesis was formulated:

H3: Eco-label has a significant influence on young consumers' intention towards green purchasing in Malaysia.

Peer pressure is the psychological pressure people face when they evaluate their actions with others (Cohan, 2009). It is undeniable that when people are provided with certain information, they find it not satisfying enough in a way that could make them behave in a certain way. The peer pressure is the feeling of guilt created when the individual fails to perform or behave like others. Accordingly, Barua and Islam (2011) stated that peer influence plays a major role in consumers' behaviour; thus for example teenagers seem to have no problem purchasing expensive goods if their peers tend to do so (Grant & Stephen, 2006). Ewing (2001) revealed that social norms significantly motivate environmental friendly behaviour. Lee's (2008) study found that social influence is the main determinant of green purchasing behaviour. Additionally, it was stated that interpersonal communication plays an important role in influencing consumers' green purchasing

behaviour. This is due to the characteristics of social groups where people tend to share the same thinking, desires and habits and can result in supporting eco-friendly behaviour (Zia-ur-Rehman & Dost, 2013). Therefore the last hypothesis can be made:

H4: Social influence has a significant impact on young consumers' intention towards green purchasing in Malaysia.

In order to predict consumer's purchase researchers have applied the TRA and TPB extensively. Summers et al. (2006) used TRA and TPB to predict the intention to purchase luxury products and Shah-Alam and Mohamed-Sayuti (2011) uses TPB to study consumer purchase behaviour for halal food, while Tarkiainen and Sundqvist (2005) used it for organic food.

This study uses Ajzen's (1991) Theory of Planned Behavior as shown in Figure 1.

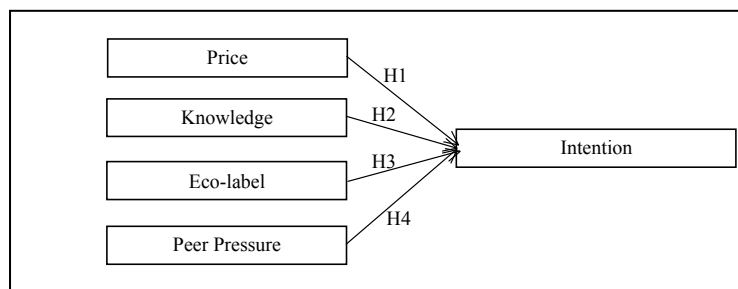


Figure 1. Conceptual framework

METHODS

To obtain a snapshot of views and attitude of respondents the quantitative survey approach was used. It applies a systematic

random sampling technique to allow every member of the population to get an equal chance of being selected for the sample distribution (Hurlburt, 2006). The unit of

analysis in this research are local students from the college of business, college of arts and science and college of law at UUM.

The questions in this research were phrased in the form of statements scored on a five point Likert type scale, ranging from 1 “strongly disagree” to 5 “strongly agree” (Gan, Wee, Ozanne, & Kao, 2008). In this study, questionnaires are divided into two

parts; demographic and those related to the variables. In the first part, the respondents’ demographic profiles were sought, and in the second part consists 24 items are listed to measure the independent variables and dependent variables.

Price as used in this study refers to the amount of money needed to buy a green product.

Table 1
Price items

No.	Items
	Price $\alpha = .88$
1	I would choose environmentally friendly goods and services, campaigns or companies if the price were the same
2	I'm willing to pay more for environmentally friendly products
3	If the price of green products is less expensive, I'm willing to change my lifestyle by purchasing green products
4	I'm willing to pay more for groceries that are produced, processed and packaged in an environmentally friendly way
5	I would be willing to spend extra in order to buy fewer environmentally harmful products.

Knowledge was conceptualized in this study as respondents’ understanding of environmental issues and green product’s impact on the environment.

Table 2
Knowledge items

No.	Items
	Knowledge $\alpha = .78$
1	I know more about green products than the average person
2	I know how to select products that reduce the amount of waste
3	I understand the environmental phrases and symbols on product packages
4	I am very knowledgeable about green products
5	I can give people advice about different brands of green products

Eco-label in this study refers to information found in products packaging.

Table 3
Eco-label items

No.	Items
	Eco-label $\alpha = .70$
1	I consider what is printed on eco-labels to be accurate
2	I easily understand the information on eco-labels
3	I'm satisfied with the information available on the eco-label of the green products
4	I believe in the information on green products
5	I appreciate the package/design of green products

Peer pressure was conceptualized in this study as pressure the respondents face when comparing their actions to their peers.

Table 4
Peer pressure items

No.	Items
	Peer Pressure $\alpha = .73$
1	I am encouraged to buy green products by people who are important to me
2	My friends think that I should purchase green products
3	My family thinks that I should purchase green products
4	I learn a lot about environmental friendly products from my friends
5	I always share information regarding environmental friendly products with my friends and family

Intention to purchase green products was conceptualized in this study as respondents' willingness to buy products that are environmentally friendly.

Table 5
Peer pressure items

No.	Items
	Intention $\alpha = .87$
1	I am willing to buy green products
2	It is very likely that I will buy green products in the future
3	I am willing to continuously buy green products
4	I am willing to pay more when purchasing green products

ANALYSIS

For the purpose of data collection 250 questionnaires were distributed to Malaysian students in Universiti Utara Malaysia. Out of this number, 194 questionnaires were returned, however three of them were excluded due to the large amount of unanswered questions. The total questionnaires made a total of 191 questionnaires, with a response rate of 76.4%.

The majority of respondents are aged between 18 years old and 23 years old and females outnumbered males, 63.4% to 36.6%. Majority of respondents are Malay (94 or 49.2%), followed by Chinese (73 or 38.2%), Indian (17 or 8.9%) and others (7 or 3.7%).

A reliability analysis was run onto the independent variables, the Cronbach's alpha of all the variables is .925, and the Cronbach's alpha for the dependent variable is .836, while the Cronbach's alpha for the independent variables range between .723 and .893. Results of Cronbach alpha are as follows: price (.63), knowledge (.74), eco-label (.75) peer pressure (.65) and intention (.78). The respective Cronbach's alpha values indicates that the reliability of all the variables was good and therefore acceptable.

Descriptive analysis was conducted to determine the mean scores and standard deviations for the construct. Based on the 191 valid cases being analysed the data is presented in Table 6.

Table 6
Descriptive statistics of all principle construct (N = 191)

Construct	Dimension	Mean	Standard Deviation
Independent variables	Price	3.90	.660
	Knowledge	3.20	.700
	Eco-label	3.79	.633
	Peer Pressure	3.88	.802
Dependent variable	Intention	3.98	.648

The mean scores of all the variables are moderate i.e. above 3. The high mean scores for price of 3.90 suggests that this variable should be taken into consideration.

The standard deviation ranged between .633 and .802, reflecting the existence of acceptable variability in the data and answers varied among respondents.

The results of the correlation analysis proved that a significant and positive relationship with all the independent variables exists, namely the price of green products ($r = 0.500$), knowledge of green products ($r=0.307$), eco-label of green products ($r=0.457$), and peer pressure ($r=0.441$) at $p<0.01$ as shown in Table 7.

Table 7
Correlation Analysis

	Intention	Price	Knowledge	Eco-label	Peers
Intention	1				
Price	.500**	1			
Knowledge	.307**	.213**	1		
Eco-label	.457**	.479**	.462**	1	
Peers	.441**	.915**	.131	.382**	1

** Correlation is significant at the 0.01 level (2-tailed).

Regression analyses was conducted to examine the relationship between intention to green consumerism and various potential predictors. As it can be seen from Table 8

price, and peer pressure are significantly correlated with the intention to purchase green products.

Table 8
Hypothesis Summary

Hypothesis	P	
H1: Price has a significant influence on young consumers' intention towards green purchasing in Malaysia	.000	Supported
H2: Knowledge has a significant influence on young consumers' intention towards green purchasing in Malaysia.	.447	Not supported
H3: Eco-label has a significant influence on young consumers' intention towards green purchasing in Malaysia.	.134	Not supported
H4: Peer pressure has a significant influence on young consumers' intention towards green purchasing in Malaysia.	.000	Supported

CONCLUSION

The results of this study shows that price is always an important factor for young consumers in their purchases. Peer pressure is another important factor in determining consumption behaviour. On the other hand, the study found that knowledge and labels had no impact on students' consumption styles, suggesting more work needs to be done in promoting green consumption.

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