

## THE DETERMINANTS OF GREEN PRODUCT PURCHASING ACROSS SOCIO-ECONOMIC GROUPS

Orose Leelakulthanit\*

**Abstract:** *The present overconsumption situation has tended to worsen deteriorating environmental problems. Thus, it is the intention of this study to investigate the factors affecting green product purchases across socio-economic groups. A total of 424 adult shoppers at 54 shopping centers in Thailand were interviewed. The interviewees were aware of green products and were willing to buy these products in their next purchase. The multiple regression results indicated that of the entire sample, the positive determinants of green product purchase were household income, education, and price. In the low-education it was knowledge, while for the high-education group, the positive determinants were household income and price. Regarding the low income group, there were no significant determinants, whereas in the group that exhibited high household income, the positive determinants of green product purchases were education, price, and influence by others.*

**Keywords:** *Determinant, Green purchase, Green product, Socio-economic*

### INTRODUCTION

The materials that we commonly use are being produced, used, and discarded at a fast pace today because of the increasing rate of world consumption. This consumption in turn is due to population growth, economic development, and a rise in our universal standard of living. It is expected that spending on goods and services will increase by \$12 trillion (43%) globally between 2010 and 2020, and specifically during this period, Thailand is expected to grow 25% in consumer spending. Thailand is among the rich discretionary-spending countries, which include Japan, Australia, New Zealand, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, the Czech Republic, and the United Kingdom. Thailand has traditionally been a strong exporter, and its economy has flourished thanks to large amounts of foreign investment and consumer confidence; this, combined with low unemployment rates and a successful auto industry. Today, the spending patterns in Thailand are similar to those of the most developed countries in the world, but these spending patterns have not occurred without consequence: without the purchase of green

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\* NIDA Business School, National Institute of Development Administration, 118 Seri Thai Road, Bangkok, Bangkok 10240, Thailand, E-mail: orose@nida.ac.th

products, Thais and the people of other countries will soon be surrounded by pollution and toxins caused by producing, using and disposing these non-green items. Additionally, the purchase and use of energy-saving products is also called for by the serious shortage of resources and energy, and so it follows that a study that will yield a good understanding of the motivation of Thais in buying green products is warranted. This is perhaps especially true for the group that displays varying household incomes and education, as the individuals in this group tend to be prime candidates for green products.

## **LITERATURE REVIEW**

Basically, the underlying concept of this study comes from the notion of the customer's values. In an economic and business sense, a person's values represent his or her willingness to pay for a good in terms of cash in return for certain product benefits. For example, the customer's value regarding green product purchases may include the functional value of the marketing mix, the emotional value of nature lovers, and the expressive value of self-identity. All of the customer values mentioned hereafter are hypothesized to be positively related to the intention to buy green products, except for the functional value of price, which is assumed to be negatively related to the intention to buy green products.

### **FUNCTIONAL VALUE OF PRICE**

Anderson and Hansen (2004) found that price was the most important attribute regarding American consumers' decisions to purchase wood furniture. Their study also found that typical respondents were willing to sacrifice environmental certification if they were able thus to secure a lower price. Consumers are in general concerned about the environment; however, previous literature indicates that consumers are extremely price sensitive concerning green products and they are often unwilling to pay higher prices for these products (Ottman, 2000). Morgan Polls (2006) found, for example, that a majority of consumers, including New Zealanders, perceived green products as overpriced. D'Souza et al. (2006) further suggest that the probability of purchasing green products decreases as price premium increases. Thus, it is hypothesized that the functional value of price is negatively related to the intention to buy green products.

### **FUNCTIONAL VALUE OF QUALITY**

The product quality dimension includes product packaging, product design, product features, warranties and so forth, and quality as a product attribute has been seen to play an important role in the consumers' purchasing decision process (Gan *et al.*, 2008). The perceived level of quality, that is, the overall evaluative judgment of a product, is a key dimension in product choice (Doorn & Verhoef, 2011). Product quality then, as a result of performance, which includes the absence

of defects and how reliably the product meets the customer's requirements, is a good starting point for the investigation of customer satisfaction and customer loyalty. Therefore, it is assumed here that the functional value of quality is positively related to the consumer's intention to buy green products.

### **FUNCTIONAL VALUE OF PRODUCT AVAILABILITY**

Availability refers to the level of ease or difficulty in obtaining or consuming a specific product. Vermeir and Verbeke (2006) have argued, for example, that many consumers are motivated to purchase green products but this does not necessarily translate into purchasing behavior due to low availability. Mainieri *et al.* (1997) have argued in a similar vein, saying that the reason why consumers' environmental consciousness sometimes lags behind that of the pro-environmentalist is because of inadequate availability and the marketing of environmentally-friendly products. Ismail and Panni (2008) have also confirmed that the availability of green products is necessary for consumers' involvement in pro-social/pro-environmental behavior. Thus, it is hypothesized that the functional value of product availability is positively related to the intention to buy green products.

### **FUNCTIONAL VALUE OF SALES PROMOTIONS**

Consumer promotion in the present context refers to samples, coupons, cash refund offers, prices off, premiums, prizes, patronage rewards, free trials, point of purchase displays, and demonstrations. Marketers have numerous promotional tools at their disposal. For example, Palazon and Delgado-Ballester (2011) observed that the effectiveness of different promotional tools, price discounts, and premiums depends on the level of what they termed "deal proneness." That is, an effective and well-planned promotion can stimulate consumers' buying intentions; however, the success of the promotion is contingent on deal proneness, as a consumer promotional tool coupon can affect the consumers' brand categorization, choice processes, and has an impact on their attitudes and intentions regarding a certain brand (Laroche *et al.*, 2005). Chen *et al.* (1998) have also stated that when offering the same savings with coupons or discount promotions, a coupon promotion is more likely to effect a change in the consumer's purchase intention. Therefore, it is assumed that the functional value of sales promotions is positively related to the intention to buy green products.

### **EMOTIONAL VALUE OF NATURE LOVERS**

According to Chan and Lau (2000), the ecological affect is the degree of emotionality with which the individual considers environmental issues. They found that this affect is an important factor in the Chinese consumers' intention to buy a green product and also regarding their actual green purchase behavior. Ip

(2003) revealed for example that people that have a strong ecological affect will be more likely to purchase eco-friendly insecticide.

Lee (2008) asserted in line with this idea that the green purchasing behavior of adolescent consumers in Hong Kong is more likely to be aroused by emotional factors than by rational thinking. Thus, it can be hypothesized that the emotional values of the nature lover are likely to be positively related to the intention to buy green products.

### **VALUE OF SOCIAL WELL-BEING**

Schwartz's universal value theory (1992) has often been used to explain the motivations underlying consumers' green consumption, and the two values that have been cited in relation to consumption behavior are self-transcendence and self-enhancement. The first value reflects the actions that promote the welfare of others, while the second value is seen in terms of the personal interests of the consumer. In general, human-beings value self-transcendence. Another way to say this is that they are pro-social. It follows that the value of social well-being is hypothesized to be positively related to the intention to buy green products.

### **SELF-EXPRESSIVE VALUE**

A person's self-image is how he or she thinks of himself or herself in different aspects of life; the image of an environmentally-friendly person could thus project a good image of the person to others (Lee, 2008). Sirgy (1982) developed the "self-image/product-image congruity theory," which suggests that consumers will consume certain products or brands if they enhance their self-image. Baker and Ozaki (2008) found that green behaviors are influenced by the pro-environmental self-image. Therefore, it is assumed that a person's self-expressive value is positively related to his or her intention to purchase green products.

### **CORPORATE VALUE OF SOCIAL RESPONSIBILITY**

In his study, Gupta (2002) has provided evidence to support the popular view that when price and quality are seen to be equal, consumers prefer the company that actively engages in corporate social responsibility (CSR) and their consumption-related decisions are affected by this factor. Additionally, Maignan and Ferrell (2004), in a managerial survey, have asserted that there is a direct positive relationship between CSR and consumer loyalty. Further, studies by Bhattacharya and Sen (2001) and Creyer and Ross (1997) have suggested that consumers are willing to actively support companies that are committed to cause-related marketing and environmentally-friendly practices, and that CSR practices have an impact on the consumers intention to make a purchase. Thus, it is hypothesized that the corporate value of social responsibility is positively related to the intention to buy green products.

### **EPISTEMIC VALUE**

Past studies on environmental knowledge have yielded mixed results, indicating that the relationship between environmental knowledge and behavior is tenuous or even non-significant (e.g., Kaiser, Wolfing, and Fuhrer, 1999; Kempton, Boster, and Hartley, 1995), and these studies have mainly examined abstract environmental knowledge (that is, general knowledge about environmental issues/problems such as the problems that the world is now facing). However, Schahn and Holzer (1990) have argued that the concrete level of environmental knowledge (that is, specific solution-oriented behavioral knowledge that can be utilized and acted upon) is a necessary condition for taking the right action to protect the environment. De Young (1989), Gamba and Oskamp (1994), and Schultz, Oskamp, and Mainieri (1995) examined the concrete levels of environmental knowledge and found that the score of environmental supporters was significantly higher regarding knowledge about how to recycle than was the score of non-supporters. Therefore, it is assumed that epistemic value or actionable knowledge about environmental protection is positively related to the intention to buy green products.

### **SELF-EFFICACY VALUE**

Perceived consumer effectiveness (PCE) refers to the consumers' attitudes and responses to environmental appeals, and these include their belief that they can positively influence the outcome to such problems (Straughan and Roberts, 1999). Ajzen and Madden (1986) have stated that the level to which a person feels that he or she has little behavioral control over the performance of a behavior uniquely lessens his or her behavioral intentions and behavior. They asserted that this is so even in situations where the attitudes and/or social norms regarding the action are positive. Additionally, Ellen *et al.* (1991) asserted that PCE should affect intentions and behaviors if the individuals believe that their behavior will (or will not) lead to the desired outcome. It follows that the value of self-efficacy is hypothesized to be positively related to the intention to buy green products.

### **VALUE OF THE INFLUENCE OF OTHERS**

According to Kalafatis *et al.* (1999), the influence of social norms concerns whether a person feels that an action should or should not be performed according to how others view that action. Bandura (1989)'s social cognitive theory suggested that there are bidirectional influences between a person's behavior and the environment; that is, an individual's expectations, beliefs, and cognitive competencies will be modified and developed according to social influences and the physical structures within the environment. Consequently, it can be seen that one's buying behavior and purchase decisions are strongly related to and influenced by his or her social environment, which includes the family, friends, and peer networks. Lee's (2008) finding on social influence as the top predictor of Hong

Kong consumers purchasing behavior coincides with that of Kalafatis et al. (1999) – that social norms exerted the greatest influence on the UK respondents' intention to purchase environmentally-friendly products. Thus, it is assumed that the value of the influence of others is positively related to the intention to buy green products.

## DEMOGRAPHIC CHARACTERISTICS

### Gender

Gender is an important determinant of green purchasing behavior, and many studies have shown significant differences between men and women regarding their environmental attitudes (Brown and Harris, 1992; Tikka et al., 2000). That is, men have more negative attitudes towards the environment compared to women (Eagly, 1987; Tikka et al., 2000), and women are more likely to buy green product because they believe that the product is better for the environment (Mainieri et al., 1997). Therefore, it can be assumed that women are more willing to buy green products than men.

### Age

In many studies, age is one of the main factors that determine green purchase behavior. It has also been found that different age levels encompass different levels of thought about environmental issues. According to Shen and Saijo (2008), for example, young consumers tend to be more concerned about environmental quality than older consumers. This can also be seen in the work of Straughan and Roberts (1999), who segmented college students based upon ecologically-conscious consumer behavior and opined that younger individuals are more likely to be sensitive to environmental issues because young consumers are often those that support action against the worsening of the environment and pay more attention to information about environmental issues than the older generation. As a result, the younger generation is generally more actively engaged in the purchase of green products. Thus, it is hypothesized that age is negatively related to the intention to buy green products.

### Education

Berkowitz and Lutterman (1998), as well as Hustard and Pessmier (1973), identified education level as an important factor regarding the consumers' concern about consumerist/environmental issues. Berkowitz and Lutterman (1998) and Bourgeois and Barnes (1979) agree that environmentally-conscious consumers are better educated and younger. It has also been found that consumerists exhibit higher socio-economic profiles (Hustard and Pessemer, 1973; Kinnear *et al.*, 1974; Bourgeois and Barnes, 1979; Uusitalo and Oksanen (2004). Education is hypothesized then to be positively related to the intention to buy green products.

### **Household Income**

A person's income level has a positive relation with sensitivity to the environment. That is, an individual with a high income will pay more to support environmental sustainability and will purchase eco-friendly products. Income as a predictor of environmental awareness has been seen to be related to affect-ecological contraction, ecological knowledge, and premium prices for eco-friendly products (Straughan and Robert, 1999). Further, income level can indicate the social status and class of a person and this will influence his/her consumption behavior pattern. In general, social class tends to have a positive influence on environmental awareness and commitment (Ling-yee, 1997). Therefore, it is hypothesized that household income is positively related to the intention to buy green products.

## **METHODOLOGY**

### **Sampling**

The questionnaire was first tested with 54 MBA students for a preliminary understanding of the content. Then, in the pretest of the questionnaire, 54 eligible adult shoppers were interviewed. The eligible shoppers were those that were at least 18 years of age, were supposed to be aware of environmentally-friendly products, as well as intended to buy a green product in their next purchase. The questionnaire was revised based on the feedback of the interviewees for its suitability and clarity. Then, the main study was conducted by interviewing 424 eligible shoppers at 54 randomly-selected shopping centers in Bangkok. It turned out that the co-operation rate was 63%, whereas the awareness of green product rate was 93% and the number of those that wanted to buy green products during their next purchase was 96%.

### **Data Analysis**

The hypothesis of the study was that price, quality, product availability, sales promotion, nature lover, social well-being, self-expression, corporate social responsibility, knowledge, self-efficacy, and the influence of others as well as demographic characteristics, including gender, age, education, and household income, are likely to be positively related to the intention to purchase green products. In order to find out whether this hypothesis was true, a multiple regression analysis was conducted. Specifically, the earlier-mentioned independent variables were regressed on the intention to purchase green products, which was taken as the dependent variable. The results of the multiple regression analysis are shown in Table 1.

**Table 1**  
**Results of the Multiple Regression Analysis of the Intention to Purchase Green Products and the Customer Value and Demographic Characteristics of the Whole Sample**

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>	<i>Collinearity Statistics</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			<i>Tolerance</i>	<i>VIF</i>
(Constant)	.292	.530		.550	.583		
price	.095	.041	.113	2.320	.021*	.916	1.092
quality	.014	.050	.015	.274	.784	.764	1.309
availability	.043	.048	.052	.904	.367	.656	1.524
promotion	.053	.037	.081	1.432	.153	.678	1.474
nature lover	-.054	.064	-.051	-.846	.398	.591	1.691
well being	.066	.061	.067	1.095	.274	.589	1.699
env. conservation	.058	.065	.057	.895	.371	.539	1.857
CSR	.035	.054	.038	.642	.521	.624	1.603
knowledge	.100	.071	.084	1.417	.157	.623	1.605
effective	.088	.075	.076	1.172	.242	.523	1.912
influenced	.037	.042	.044	.872	.384	.864	1.157
gender	-.020	.108	-.009	-.186	.852	.960	1.041
age	.000	.005	-.002	-.047	.963	.861	1.161
educgroup	.202	.124	.081	1.626	.105*	.883	1.132
incgroup	.306	.119	.127	2.559	.011*	.884	1.131

$R^2 = .127$   $\bar{R}^2 = .094$   $F_{15,408} = 3.869$   $P = .000$  \* = Significant at  $\alpha \leq .1$

## RESULTS AND DISCUSSION

According to the standardized beta coefficients, as shown in Table 1, the positive determinants of the intention to buy green products of the entire sample were price, education, and household income. It should be noted that household income tended to be the most positively related to the intention to purchase green products, followed by price and education. The determinant of the intention to purchase green products as indicated by the significance of the regression coefficients should better reflect the reality than those accessed by the method of direct questioning of such determinants because it helps to avoid the error of social desirability bias.

Education was found to be a significant factor affecting the adoption of green products. In order to probe further the deeper motivation for buying green products, two other regressions similar to the whole sample were run. One was for the low education group. Another one was for the high education group. In this study, the low education group referred to those with a level of education lower than a bachelor degree, whereas the high education group was those with a level of education of at least a bachelor degree.

The results of the multiple regression of the low education group as shown in Table 2 indicate that the only positive driving force for adopting green products in



**Table 2**  
**Results of the Multiple Regression Analysis of the Intention to Buy Green Products and the Customer Value and Demographic Characteristics of the Low Education Group**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.108	.841		.129	.898		
price	.035	.078	.045	.443	.659	.753	1.328
quality	.083	.093	.100	.897	.372	.614	1.628
availability	.004	.095	.005	.044	.965	.507	1.972
promotion	.048	.074	.080	.647	.519	.495	2.018
nature lover	-.150	.122	-.152	-1.229	.222	.501	1.996
well being	.098	.104	.105	.944	.347	.618	1.618
env. conservation	.095	.125	.100	.759	.449	.441	2.267
CSR	-.041	.102	-.049	-.407	.685	.530	1.887
knowledge	.262	.119	.241	2.210	.029*	.641	1.560
effective	.208	.134	.192	1.556	.123	.502	1.992
influenced	-.045	.086	-.056	-.515	.607	.637	1.569
gender	.159	.212	.070	.746	.457	.869	1.151
age	-.003	.008	-.043	-.432	.667	.784	1.276
incgroup	.089	.215	.039	.413	.681	.846	1.182

R<sup>2</sup> = .206  $\bar{R}^2$  = .100 F<sub>15,103</sub> = 1.933 P = .031 \* = Significant at  $\alpha \leq .05$

the low education group was knowledge. It is noteworthy that in the case of a general lack of knowledge, as indicated by the low level of education, the specific knowledge of how to act in an environmentally-friendly way tends to help consumers think about buying green products.

The results of the multiple regression of the high education group as shown in Table 3 indicate that the strongest positive driving force for adopting green products in this group was household income, followed by price. An earlier result from the entire sample suggested that highly-educated persons tend to be those that want to purchase green products. The results from Table 3 reveal further that education on its own may be not be enough to drive green product purchases; it has to be accompanied by a high household income or the ability to pay for the green products. The high price of green products does not seem to be an obstacle to purchasing. On the contrary, it even signifies the high value added to the products.

Household income was also found to be a significant determinant of the intention to purchase green products. In order to investigate further the underlying motivation to purchase green products for varying household income groups, two other multiple regressions similar to the entire sample were run. One was for the low household income group. Another one was for the high household income group. In this study, the low household income group consisted of the people that had a household income of less than 36,000 Baht per month, whereas the high

**Table 3**  
**Results of the Multiple Regression Analysis of the Intention to Buy Green Products and the Customer Value and Demographic Characteristics for the High Education Group**

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>	<i>Collinearity Statistics</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			<i>Tolerance</i>	<i>VIF</i>
1 (Constant)	.855	.674		1.269	.206		
price	.114	.050	.132	2.273	.024*	.941	1.062
quality	.001	.062	.001	.011	.991	.816	1.226
availability	.057	.057	.067	.996	.320	.695	1.439
promotion	.044	.044	.066	.994	.321	.717	1.395
nature lover	-.008	.077	-.007	-.103	.918	.615	1.626
well being	.052	.077	.052	.682	.496	.543	1.841
env. conservation	.055	.079	.053	.696	.487	.552	1.810
CSR	.085	.065	.092	1.309	.191	.640	1.562
knowledge	.009	.091	.008	.103	.918	.573	1.744
effective	.045	.093	.038	.488	.626	.507	1.974
influenced	.078	.051	.091	1.543	.124	.907	1.103
gender	-.164	.130	-.073	-1.266	.207	.940	1.063
age	.000	.006	-.003	-.051	.959	.822	1.216
incgroup	.393	.147	.153	2.669	.008*	.959	1.043

$R^2 = .115$   $\bar{R}^2 = .070$   $F_{15,280} = 2.596$   $P = .002$  \* = Significant at  $\alpha \leq .05$

household income group was comprised of the persons that had a household income of at least 36,000 Baht per month.

The results of the multiple regression of the low household income group as shown in Table 4 indicate that there were no significant determinants of buying green products. That is to say, without money, nothing can attract the low household income group to buy green products.

The results of the multiple regression of the high household income group as shown in Table 5 indicate that the strongest significant determinant of buying green products in this group was education, followed by price and the influence of others. The results suggest that high household income alone is not likely to be a sufficient driving force for purchasing green products; it has to be facilitated by high education as well. However, the high household income group tends to follow relevant others, whether they be family members or friends, in buying green products. This segment of the market does not have to worry about the price of the green products, which oftentimes is high. They are the ones that have the ability to pay. Price even seems to signify the value-added property of the product.

**Table 4**  
**Results of the Multiple Regression Analysis of the Intention to Buy Green Products and the Customer Value and Demographic Characteristics for the Low Household Income Group**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.296	.875		1.481	.141		
price	.074	.075	.088	.990	.324	.882	1.134
quality	.049	.084	.059	.582	.562	.686	1.457
availability	.131	.093	.160	1.412	.160	.544	1.840
promotion	.080	.069	.124	1.163	.247	.616	1.624
nature lover	-.071	.118	-.072	-.602	.548	.491	2.036
well being	.040	.116	.043	.344	.731	.442	2.262
env. conservation	.088	.124	.090	.713	.477	.435	2.298
CSR	-.007	.101	-.008	-.068	.946	.521	1.918
knowledge	.133	.113	.124	1.182	.240	.641	1.559
effective	.054	.133	.051	.406	.685	.443	2.257
influenced	-.076	.074	-.097	-1.018	.311	.766	1.305
gender	.087	.187	.040	.462	.645	.959	1.043
age	-.011	.009	-.121	-1.230	.221	.718	1.393
educgroup	-.018	.195	-.008	-.091	.928	.857	1.166

$R^2 = .138$   $\bar{R}^2 = .040$   $F_{15,122} = 1.410$   $P = .158$

**Table 5**  
**Results of the Multiple Regression Analysis of the Intention to Buy Green Products and the Customer Value and Demographic Characteristics of the High Household Income Group**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.502	.670		.750	.454		
price	.099	.051	.118	1.933	.054*	.889	1.125
quality	-.030	.065	-.030	-.454	.650	.771	1.297
availability	.014	.058	.017	.239	.811	.658	1.521
promotion	.040	.045	.063	.892	.373	.665	1.504
nature lover	-.039	.079	-.037	-.494	.622	.604	1.657
well being	.069	.074	.069	.937	.350	.617	1.619
env. conservation	.084	.080	.082	1.060	.290	.552	1.810
CSR	.070	.065	.077	1.081	.281	.656	1.525
knowledge	.073	.093	.059	.783	.435	.579	1.729
effective	.099	.093	.083	1.061	.290	.541	1.850
influenced	.091	.053	.105	1.696	.091*	.868	1.151
gender	-.092	.136	-.041	-.678	.498	.929	1.077
age	.002	.006	.023	.361	.718	.844	1.185
educgroup	.340	.167	.121	2.034	.043*	.946	1.057

$R^2 = .128$   $\bar{R}^2 = .081$   $F_{15,261} = 2.737$   $P = .001$  \* = Significant at  $\alpha \leq .1$

## CONCLUSION AND IMPLICATIONS

The determinants of the intention purchase buy green products in Thailand are simply the socioeconomic status of having a high education and high household income. These two variables of economic status go hand in hand. It was clear from the study that people better be both highly educated and have a high household income as a condition for purchasing green products. Likewise, people with a high household income have to be assisted by being highly educated in order to be drawn to green product purchases. The prices of many green products, which are often high, do not seem to impede the purchase of green products for this high socioeconomic segment of the market. It follows that the basic human development of the country in strengthening Thais' education and household income is necessary for solving the deteriorating environment by motivating people to buy green products as well as for the development of the country in general. Additionally, in order to encourage the low education group to purchase green products, it is recommended that specific knowledge of the severity of environmental problems and how to deal with them through the strategies of reducing one's purchases or else buying green products, reusing the products bought and recycling to the greatest extent feasible, should be the lessons learned in the classes of primary and secondary school students. Price turns out to be a surrogate indicator of high value-added products. This means that the higher the price, the higher is the perceived value. The environmentally-friendly property of the product tends to be one of the high perceived values. Additionally, the word-of-mouth of family and friends is likely to function as an influencer on green product purchases for the high household income group as well as high education and high price.

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