Perceptions of Educated Consumers on Environmentally Friendly Products in the East Coast of Peninsular Malaysia

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Abstract

In the last two decades, consumers have been more aware of environmentally friendly products. This is especially true in the rich and developed countries. The wind of change for 'the green products' has exerted pressure on businesses to be more environmentally responsible. Although it is believed that environmentalism in Malaysia and other developing countries is growing but it is at a slower pace. In relations to this, until today, very few empirical studies had been done to measure consumer perceptions toward environmentally friendly products in the Malaysia, particularly, in the East Coast of Peninsular Malaysia. Results of the study of 214 respondents show educated consumers of the area are less aware of such products. The Majority of them are willing to pay a little extra not for all but for some of environmentally friendly products. In general although they have positive perceptions of the benefits of the products but they are neutral when related with negative perceptions of the products. Perhaps this is due to lack of information coupled with less availability of the products in the market. This study is seen to be very vital as it provides valuable insights to the awareness and perceptions to such products in the region. Moreover results of the study will provide a more vivid implications of the existing situation on the

said environmental issue.

Key words: Educated consumers, perception and environmentally friendly products.

Introduction

During the last four decades, the natural environment has undergone major destructive changes: water and air pollution, depletion of natural resources, damage to the ozone layer and loss of mangrove areas. Negative impact on the natural environment is due to the onslaught of development which paid no or little attention of natural environment in the country. One of the major culprits that contributes to such degradation is much related with business organisation. Business organisation is seen as an institution with economic responsibilities to produce goods and services as efficient as possible to ensure consumer are able to buy their products at affordable price. On the other hand, conservation of natural environment is secondary. Such a notion is the root cause of most environmental damage of various business activities. Due to the increase in awareness of the environmental problems due to irresponsible business activities, various stakeholders had demanded that business organisations should be more environmentally responsible. However, notwithstanding with increasing pressure of the stakeholders, business organisations in our country in general are still slow in adopting environmental management in their business strategies. This is understandable as most business organisations hold strongly to their main objective of providing goods and services to their consumers and earn as much profit as possible, and also to continue doing business and expand into new markets. In short, the bottom line for any business is always profit.

In order to respond to increasing demand of public at large on environmental conservation, business organisations could not help but ensure that they still gain the profits or benefits of being environmentally responsible. In other words, success of environmentally friendly business at present and in future, largely depends on sufficient consumer demand for such products. In the industrialise countries, consumers are increasingly becoming concerned about the environment. And this concern is showing up in the marketplace in the kind of products consumers are willing to buy (Buchholz, 1998). Increasing demand of environmentally friendly products in those countries provide opportunities for businesses to produce such kind of products. However, the situation is still very vague in our country and other developing countries. There are some pertinent questions worthy of considerations. Are the consumers aware of environmentally friendly products available in the market? Are they willing to pay extra for environmentally friendly products? How consumers perceive of environmentally friendly products? Answers for all these questions are paramount as they act as litmus test of environmentally sound business in Malaysia.

Objectives of the Study

The objectives of this paper are as follows:

i. To study the level of awareness of edu-

- cated consumers of environmentally products of in the East Coast of Peninsular Malaysia.
- ii. To investigate the willingness of the consumers to pay extra for environmentally friendly products.
- iii. To provide some recommendations to related parties and authorities based on the findings of the study.

Literature Review

Most of the researches undertaken in the last two decades on green consumers, green products and other environmental issues have been taken place in North America and Europe. One such study in the United States in 1990s showed that concerns for the environment and and its impact on the society have increased tremendously. Coddington (1990) reported that 79% of Americans consider themselves environmentalists, 82 % state they have recycled, 83 % state they have changed their shopping habits to help protect the environment, and 67% state they would be willing to pay 5 to 10 % more for environmentally compatible products. In the same year, Hume and Strand (1990) in their report on a Gallup Poll of 1,000 randomly selected U.S adults found that nine out of ten respondents said they would be willing to make a special effort to buy products from companies trying to protect the environment. In 1992, 54% of Americans is said to read the labels first to see if products were environmentally safe, 57 % sought products and packaging made from recycled materials, and 34% said they had boycotted a company that was careless toward the environment (Roper, 1992).

Many other studies done in the U.S. in the late 80's and early 90's have shown that there is a marked increase in environmental concern and awareness of the public from



one decade to another (Kohut& Shriver 1989; Gallup & Newport 1990; Hueber 1991). One writer, Wells (1990), agrees that, "there is a renewed sensitivity toward the environment and toward social consciousness. In contrast to the 1960s and 1970s, when the emphasis went largely to political solutions to environmental and social ills, the current sensitivity focuses on consumer purchase behavior".

Another writer, Dunlap (1987) also reiterated that "between 1977 to and 1986, the percentage of Americans who favored sacrificing economic growth rather than environmental protection grew from 35% to 58%; during the same period, those who favored sacrificing environmental quality rather than economic growth fell from 21% to 15%. According to Vlosky et al (1999), "Opinion polls indicate that US consumers believe that saving the environment is a high priority". And in relations to this also, Donaton and Fitzgerald (1992) mentioned that those who are showing their concern for the environment, 'the green orientation' are growing in number.

Cramer (1991) stresses that almost 90% of US consumers are concerned about the environmental impact of what they buy. On the other hand, Irland (1993) emphasizes that, "consumers do not always base product-purchase decisions on their environmental attitudes, but it is becoming an increasingly important factor. One other writer (Lambert, 1996) goes even further by claiming that, consumers buy "green" not only to help the environment but more important than that, is to improve their lives as a whole.

Comparatively, a recent study by Chan (1999) of the environmental attitudes and behaviour of 549 respondents in Beijing and Guangzhou (China) found that Chinese people's ecological concerns in general are still rather low even though they have expressed exceptionally strong emotional attachment to ecological issues. According to

him this phenomenon is probably attributed to traditional cultural values.

On the other hand, in South Africa, it found out that a study done by Bendixen and Sandler (1994) showed that the majority of the consumers in that part of world have heard a lot about green product. Both the electronic and written media are said to have played a significant role in the communication process of disseminating the knowledge and information on the issue. Moreover customers in that country are willing to pay 10% more for selected green products.

One of the main problems faced by most consumers in their purchasing decision is what is considered as 'green product' and what is not. Furthermore some of the terms closely related to this kind product such as 'natural', 'eco', 'bio' and also 'environment friendly' are not legally protected and they can be abused. So consumers should be very cautious in buying this kind of product. As mentioned by Hopfenbeck (1992), there is a wide range of green products in the market that are currently available to the consumers. The products include:

- i. Organic (bio) food.
- ii. Batteries without mercury
- iii. Nappies: disposable, dioxin free and non-bleached
- iv. Cars: catalytic converter, unleaded petrol and recyclability
- v. Detergents/Washing powder: phosphate free, sulphate free, biodegradable, liquid detergent and refillable packets.
- vi. White goods e.g. refrigerators: water and energy efficiency, insulation foam and refrigerants, CFC free and easily recycled.
- vii. Aerosols: ozone friendly.
- viii. Lighting: energy efficient and long life.
- ix. Paper products: recycle papers

- x Plastic bags: biodegradable
- xi. Personal Hygiene/cosmetics: natural ingredients, special packing and not animal tested.

From the above writings, it can be concluded that there are great concerns and awareness among the general public of the importance of working and living in a quality environment or a 'green environment' and also consuming "green products".

Methodology

This study used a judgemental sampling method. A two-page Malay and English version questionnaires were distributed to educated consumers in the states of Kelantan, Terengganu and Pahang. Those at least hold diploma are considered as educated consumers in the study. They are chosen because of two main reasons. Firstly previous studies elsewhere showed environmentally concern consumers are more highly educated (Van liere and Dunlap, 1980, Mitchell, 1983, Roper, 1990, Leelakulthanit and Wongtada, 1993). Secondly, these consumers are more likely be willing to pay environmentally friendly products at a price premium as previous researches are concerned.

The research questionnaire contained two sections. The first section is a combination of sections on demographic and awareness of environmentally friendly products of the respondents. This section also contained questions related to preference and willingness of respondents to pay extra for such products. On the other hand, second section measures respondents' perception of environmentally friendly products. In this section, 14 items were used to measure the perception of consumers (of the product which cover issues like gimmick, price, usage and others). All their perceptions on friendly products are measured by 5 Likert Scales ranging from 1

as Strongly Disagree to 5 as Strongly Agree. There were 5 perceptions' subscales of these 14 items. Subscale 1 (Green product is a fad) related items: 1, 10, 14. Subscale 2 (Green product for better future, related items:3, 5, 7, 9, Subscale 3 (Green product require extra efforts) related items: 4, 6, 13, subscale 4 (Green product should represent value for money), related items: 2, 11, 12 and subscales 5 (Green product are waste of time) related items: 8, 14. These statements and their subscales were adopted from similar study done by Bendixen and Sandler (1994) in the South Africa.

Data Analysis and Interpretations

Respondents' Profile

There are altogether 214 respondents who gave their feedbacks to the survey. From Table 1, it can be seen that more than 40 per cent of them (43 %) comes from Terengganu, 35 per cent from Kelantan and the rests are from Pahang (22%). More than half (55.7) are male and the rest are female (44.3%). In terms of age, the equal proportion of them between 18 to 30 years old (49.1%) and more than 31 years old (50.1%). That means most of them are adults and middle age consumers who are able to make their own decisions. On the other hand, in the context of education level, consumers with bachelor constitutes more than 40 percent (43.9%) of respondents, this is followed by diploma (28.5%), master (26.6%) and PhD (0.9%). In term of income, 63 per cent of them earned between RM 1.000 to RM4,000 per month. Those who earned more than RM4,000 is only 12 per cent of the samples.

Awareness and sources of information of the product

From Table 2., it clearly depicts that the majority of the respondent are said to be unaware



Table 1
Demographic Profiles of Respondents

	Frequency (N)	Percent (%)
State		
Kelantan	75	35
Terengganu	92	43
Pahang	47	22
Gender		
Male	118	55.7
Female	94	44.3
Age (years)		
18 to 30	105	49.1
30 above	109	50.1
Eduction		
Diploma	61	28.5
First Degree	94	43.9
Master	57	26.6
PhD	2	0.9
Monthly Income		
Less RM 1000	51	25.5
RM 1001 - 2000	41	20.5
RM 2001 - 3000	50	25
RM 3001 - 4000	34	17
Above RM 4000	24	12

Table 2
Awareness of Environmentally Friendly Products

	Frequency	Percent (%)
Have never heard	6	2.8
A little	121	57.1
A lot	85	40.1

Table 3
Source of Information of Environmentally
Friendly Products

	Frequency:	Percent (%)
Television	80	46
Newspaper/Magazine	72	41.4
Supermarket	7	4
School/College/ University	7	4
Others	8	4.6

or know too little of this kind of products (59.9.1%). This phenomenon could be closely related to the next question where the respondents were asked of their sources of information. Table 3 shows that the awareness or unawareness of the consumers of this kind of products is due to the reason that their main source of information come from the media-electronic (Television) and (Newspaper/Magazine) that is 87.4%. Since the message from those media is mostly concentrated on 'recycling', so much so that most consumers are not that aware of the many other aspects of the green or the environmentally friendly product. On the other only 4 per cent of information of such products comes from educational institutions and supermarket. These two organisations play only a minor role in disseminating green products to consumers at large.

Consumer preferences and readiness to pay more

When comparing the preference of the consumers of whether they would prefer green or other products, from Table 4., it shows that half (50 %) of them sometimes give preference, this is followed by whenever there is a choice (23.4 %). The equal percentage is observed for those who always prefer green product (10.7 %) and never given any preference (10.3 %). In general, educated consumers give more preference to environmentally friendly products. When we asked customer willingness to pay an extra 10 per cent to buy environmentally friendly products in the preference of brands at similar quality, nearly 70 per cent of them only prepared to do so for some environmentally friendly products. On the other hand, more than 17 per cent of them answered yes to the question. The same percentage is also observed for those who answered no. The results show educated

consumers in general are selective in paying a premium price for such products.

Table 4
Consumers Preference to Green Product above other Products when Shopping

	Frequency	Percent (%)
Whenever there is a choice	50	23.4
Sometimes	107	50
Always	23	10.7
Never	22	10.3
Unsure	12	5.6

Table 5 Consumer Prepared to Pay an extra 10 per-cent for environmentally Friendly Product

	Frequency	Percent (%)
Yes	37	17.3
Only some products	141	65.9
No	36	16.8

Table 6
Mean Perceptions of Environmentally Friendly
Products

	Mean Deviation	Standard
Green product is a fad	2.763	.747
Green product for better Future	3.822	.675
Green product requires extra efforts	2.928	.492
Green product should represent		
value for money	3.847	.589
Green product is a waste of money	2.75	.707

Strongly disagree
 Disagree
 Agree
 Very Agree

Perception of Environmentally Friendly Products

The means of 5 perception subscales of environmentally friendly products is shown

in table 6. Both means of subscale 2 (Green product for better future) and 4 (Green product should represent value for money) are close to the point of 4. This results show educated consumers in the area show agreement of the statements of the benefits of such products. On the contrary means for the other 3 subscales (Green product is a fad, Green product requires extra efforts and Green product is a waste of money) are close to the point of 3. This clearly shows that although consumers in the area in general are positive about the benefits of the product, but neither agree and disagree with the 3 negative subscales of environmentally friendly products. Perhaps the latter is due to their lack of awareness of the products among consumers coupled with limited availability of green products in Malaysia. Moreover, unlike other countries, Malaysia has yet to introduce 'green or eco labelling' for its environmentally friendly products. Such a labelling or certification from an independent body is paramount as this will boost consumers confidence in making the right decision to buy such a product. At the same time this will also encourage business organisations to be more environmentally sensitive and therefore will differentiate their products with those claiming that they are environmentally friendly but actually they are mere marketing gimmicks.

Conclusion

In conclusion, educated consumers awareness of environmentally friendly product in the East Cost of Peninsular Malaysia is still low. The two main sources of information of such products come from television and newspaper. Majority of the consumers do not always give preference for green products when doing their shopping. In addition, majority of them are not willing to pay more for



all environmentally friendly products but only for some of them. In term of perception, in general the consumers are positive of the benefits of the green products. But in contrast, their perceptions are found to be neutral in relations to the negative sides of the products. Perhaps this is due to their lack of knowledge of such products. It is believed that if the consumers are more aware and knowledgeable of the need to use such a product, this will undoubtedly led to more and more companies manufacturing more environmentally friendly products in the future.

Recommendations

The following are some recommendations of the study:

- 1. Related authorities like Ministry of Domestic Trade and Consumer Affairs and Department of Environment need to educate consumers of environmentally friendly products not only to concentrate at recycling campaign per se.
- Consumer groups in Malaysia must play a more proactive role in promoting environmentally friendly product.
- 3. Business organisations need to investigate what types of environmentally friendly products that consumers are willing to pay at a premium price.
- 4. Business organisations need to educate consumers on environmental products, their attributes and characteristics.
- 5. Malaysian government and related authorities should work closely with the various stakeholders so as to establish an eco-certification and clear advertising guidelines. This will then lead to consumers' confidence in the advertised claims of environmentally friendly products.

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