

GREEN MARKETING AND ITS RELATIONSHIP TO THE PURCHASE DECISION: AN EMPIRICAL STUDY ON STUDENTS FROM KING ABDUL AZIZ UNIVERSITY IN JEDDAH

Ghada Mohiuddin Hello,

Department of Business Administration -
Faculty of Economics and Management -
King Abdul Aziz University, Saudi Arabia.

Naill Mohammad Al Momani,

Department of Business Administration -
Faculty of Economics and Management -
King Abdul Aziz University, Saudi Arabia.

ABSTRACT

Environmental crisis that our world faces, are the motive to many countries, institutions and individuals to support and innovate policies and programs which protect the environment, preserve and sustain it. Bad marketing practices are one of these crises that harmed the environment from one side and the customer in another side. In response to these considerations, green marketing appeared in the beginning of nineties decade of the last century as a solution to this crisis.

This research aims was informing consumers about green marketing, evaluating their environmental awareness, identifying factors affecting when making a purchase decision, and eliciting useful recommendations and proposals.

Students of King AbdulAziz University at Jeddah were considered to determine if they considered green marketing when they made purchases. Of the 383 surveyed students, 46.6% became aware of green marketing through the distributed survey while 15.6% heard about it through television and 15.6% through internet. When asked about the extent of awareness of green marketing (not aware, low awareness, medium awareness or high awareness), 40.7% replied that they have low awareness. Statistical tests showed that there was correlation between gender and level of study of consumer and green marketing awareness. It also showed that there was no correlation between age and income and green marketing awareness. The respondents had positive trend toward buying green products, the pollution of the environment and Rationalization of consumption. This implies businesses can use green marketing to promote their products. It also implies a bright future for green marketing if there were efforts to increase awareness.

Keywords: Green marketing, environmental consumer behavior, environment purchase decision.

GENERAL FRAMEWORK FOR THE RESEARCH: RESEARCH PROBLEM:

With the spread of globalization and the emergence of consumer protection associations and environmental awareness, organizations have sought to improve the marketing mix for their products and re-design of the product in line with the needs and desires of customers, through product development, the search for alternative materials and safe during the manufacturing process and the ability to recycle products after use in order to preserve the environment (Smadi, 2006).

In spite of these developments regarding environmental awareness regionally and globally, but we note that most people continue on the consumption patterns of non-environmentally friendly that could have negative consequences caused by the inefficiency of manufacturing operations, such as buying some of the electrical and electronic appliances, which comes out electromagnetic radiation harmful to human health.

Hence this study to measure consumer awareness of the concept of green marketing, and find out the extent of the impact of this concept on the consumer when making a purchase decision.

Research Hypotheses:

1. There is no statistically significant relationship between the concept of green marketing when the consumer making a purchase.
2. There is no statistically significant relationship between the concept of green marketing and consumer genus.
3. There is no statistically significant relationship between the concept of green marketing and the age of the consumer.
4. There is no statistically significant relationship between the concept of green marketing and qualification of the consumer.
5. There is no statistically significant relationship between the concept of green marketing and consumer income.

RESEARCH OBJECTIVES:

- 1.To define consumer green marketing.
- 2.To evaluate environmental awareness among consumers when making a purchase decision process.
- 3.To identify the most important factors influencing the decision to buy green products.

THE IMPORTANCE OF RESEARCH:

1. This research to shed light on an important concept in the new science of marketing is the concept of green marketing, which aims to protect the environment from pollution and consumers from fraud and deception.
2. This research try to identify the factors affecting the purchase decision of the consumer benefit organizations in the design of an appropriate marketing mix.
3. This research will reveal consumer research studies and a lot of the previous practices that are harmful to consumers, prompting increased interest in this kind of studies and research.
4. This research work in the field of environmental protection and natural resources with the concerted efforts of the Government of the Kingdom of Saudi Arabia direction of the environment.

RESEARCH BOUNDARIES:

1. Spatial boundaries: the study was restricted to students of King Abdul Aziz University in Jeddah branch of Sulaymaniyah.
2. Time boundaries: This research has been prepared within the framework of two consecutive semesters of the academic year 2012\2013.

3. Border Objectivity: The scope of this study is focused primarily on green marketing and knowledge of the factors affecting the purchase decision of the consumer, "students at the University of King Abdul Aziz."

THE THEORETICAL FRAMEWORK:

RESEARCH TERMS:

Green Marketing: Is the administrative process and the college, **which is** responsible for identifying and anticipate and satisfy the needs of consumers and society in a manner profitable and lead to the preservation of the environment in a true picture as well as to keep a permanent resource for future generations. This concept refers to the two-dimensional two grounds, **namely:** preservation of the environment, and the rational use of resources (Omar 0.2007).

Green consumer: a customer or a consumer with deep environmental awareness, which deals mainly based on the values that he believes in and that you pay to avoid buying any products from company with questionable environmental orientation and not only non-consumption of goods harmful to the environment "(Bakri 0.2006).

Product green "eco-friendly goods" or "green goods", it is a product that uses environmentally friendly materials which can be degradable or recycled with the need to follow it through the stages of its life cycle to ensure that it remains within the environmental commitment (Bakri 0.2007).

GREEN MARKETING MIX:

The traditional marketing concept was centered mainly on increasing profits and focus on customer needs without taking into account environmental considerations and the amounts of loss that products or services could produce to our environment. The green marketing focuses mainly on the use of environmental concepts through all stages of decision-making in the organization as a whole. Unlike traditional marketing, social responsibility and environmental orientation plays an essential role in the concept of green marketing, taking into account the growth in profits (Bakri 2006.256).Thus, the green marketing mix has expanded to include new dimensions to fit in with this concept and as follows (Peattie, 1992:105):

THE EXTERNAL GREEN 7P'S:

The exterior of the marketing mix consists of a set of political and social variables that must be taken into account by companies that adopt green marketing. These variables include:

Paying Customers: Who are the customers "greens" in a given society and what are the green products they want.

Providers: What is the degree of environmental orientation has two processors offer (raw materials, energy, equipment, machines, equipment) ?

Politician: Is it possible to influence the decisions of government to pass legislation in line with the environmental trend? Or providing new standards?

Pressure group: Who are these groups and how they should be adapted to the company's operations with having environmental trends?

Problems: Is the company has been linked to any problem related to the environment or social responsibility previously?

Predictions: What are the environmental problems that may be facing the company in the future? Could the research and development that offers solutions to these problems?

Partners: Is that any of the existing partners have been linked to environmental or social problems previously?

THE INTERNAL GREEN 8P'S WHICH INCLUDE THE FOLLOWING VARIABLES:

Product: The mean green products, as the company to be responsive to customer sensitivity towards environmental and health issues relating to the product and processes required to produce it, as well as the need for follow-up during the various stages of products life.

Cottmam, 1993 pointed out to the need to provide simplicity in green products offered to customers to facilitate the use of them.

Price: The green products carry a price Add this may be because of the cost associated with the production process, especially cost of research and development where the increase due to the constant search for new raw materials are harmless or new energy sources.

Place: Distributors and retailers may, benefit greatly from the application of the entrance of green marketing, by strengthening links with the manufacturer and customers because of the continuing relationship with the parties through the distribution system, two-way instead of the traditional system with a one-way. This means that consumers will be able to re- use materials such as cans, plastic, paper bags.

Promotion: is a key element in the green marketing mix and through the movement of the company or its image orientations to customers with its mission of marketing for the products or services they offer. In the area of green marketing may take several forms, such as advertising, public relations, and environmental posters.

Providing Information: The company that monitors the internal and external issues related to environmental performance.

Processes: Reduction of energy used , and reduce damage and loss and pollution prevention.

Policies: Implement policies to stimulate the private company and the monitoring and evaluation of environmental performance and to modify the overall strategy of the company, to conform to environmental vision.

People: Employ the knowledge, abilities and skills possessed by individuals to apply environmental policy and innovation in the components of the product and to modify it in line with the environmental characteristics.

The elements of the green marketing mix, whether internal or external focus on the use of the concept of environmental and social responsibility through all stages of decision-making. It can determine the differences between the green marketing mix between and traditional marketing mix.

GREEN CONSUMER BEHAVIO:

According to Bakri and Al-Nouri (2007) green consumer behavior known as " a set of behaviors that drive the individual towards a preference for the product with environmental characteristics from the other, stemming from a combination of variables, particularly the ideas and opinions held by those individuals that are motivated towards that behavior."

There are differences among reserachers in idetntfying factors that influencing consumer behavior in some aspects, but they agree on a number of these factors. The factors or personal effects (such as education, gender, income, job, etc.) and the most important factors influencing consumer behavior are:

Age: The individuals will change the goods and services that they purchased in their lives, taste in food or clothing or furniture and others are directly related to age. (Kottel & Armstrong, 1999: 14). Age is factor reduced to a set of internal factors and personal to the individual, because the stage of life experienced by everyone to give it the characteristics and habits of behavior in buying different from other stages. For instance, the young adolescent bying behavior differs from the older ones .

As for green marketing (Skiziniskey: 2000) see that young people are more potential customers for green products, because they were brought up to respect nature and not wasteful use of energy, but this does not negate the possibility of orientation towards the older age category of these products .

Gender: men, women, boys and girls have different needs and they are using different products (Keegan, et al 1995). Researchers are divided when they study of the effect of sex in the green

consumer behavior; however, evidence showed that women by virtue of the composition of the psychological, emotional and family responsibilities are more environmentally responsible.

Income: Per capita income or economic status is one of the factors influencing the selection of the product. The income of the most controversial factors in the field of marketing in general.

In the area of green marketing, income represents relative importance because green products most often are of the highest prices.

Education: All societies consist of groups with different educational levels ranging from uneducated to people with learning primary, intermediate, and access to the university with graduate degrees. For example, people with advanced education may be interested in buying more green products more than others, degree is not the main influence, but what you learn through the individual receiving the certificate is the foundation.

Many of the organizations realized that green marketing is an opportunity market that may give the organization a competitive advantage and perhaps sustainable one, especially with the growing environmental concerns with customers. One advantage of this approach is that the formal and informal strategic bodies promoting environmental trends naturally and continuously through various media, and therefore this will be the profitable trend, especially in the long term for organizations that adopt green marketing approach. (Smadi , 2007 : 7) .

Nouri, 2004 conducted a study to analyse consumer behavior in accordance with the green marketing perspective. The study provided a set of conclusions and recommendations stressed the importance of the subject of green marketing as an input marketing talk which is aimed at protecting the environment and natural resources and the need to study the subject in depth in order to achieve the possibility of the application of this approach in the local environment.

In another study, Abdul Wahid et al., 2011 investigated green marketing tools' effect on consumers' purchase behavior in Penang, Malaysia. The study relied on data collection questionnaire carried out on a sample size of 250 Chinese, Malaysian, Indian and other nationalities, which represents the population of the city of Penang. In this study, he found that there is a positive relationship between consumer confidence in the brand environment and the behavior of the actual purchasing. This study provided guidance to assist for the government to formulate green policies.

Suplico, 2009 conducted a study to understand the impact of green marketing on the student's purchase behavior. The study focused on students enrolled in marketing class in the private university in Manila - Philippines. Research community where an estimated 239 students and adopted the study sample size of 216 students. The results were:

- That 48.61% of the students identified the green marketing through television and 37.04% of them recognized it through magazines.
- The students aware of the average expansion of the scope of green marketing. This means that they are aware of and buy environmentally friendly products.
- Statistical tests showed that there was no relationship between sex and income and the main areas of study and between the extent of awareness about green marketing.

The sample agreed to buy the non-toxic and recyclable products, reuse and refill and analysis uncontaminated free of animal testing of ozone-friendly energy-efficient and least household waste.

This means that enables companies to use green marketing to promote their products which also a bright future for green marketing.

RESEARCH DESIGN:

The research depends on the descriptive approach based on the interpretation of the problem or phenomenon, and analysis of data, measured and interpreted. The research community in the college students in Saudi Arabia and that number reached 25 universities. However, due to the large research community under the restrictions of time, effort and money, "triangle-cost" will be limited to the study on students of King Abdulaziz University branch of Sulaymaniyah, located in the province of Jeddah - Saudi Arabia, because it is the fourth largest university in the Middle East with a total number of students more than 120,000 students.

Since all members of the research community are limited and known, the researcher will select the method of random sampling. As the members of the research community are distinct and homogenous due to differences in the number of students at each level of study "Diploma, Bachelor, Graduate," it will choose the type of stratified sample. As the research community and the limited number is 127 872 students, the researcher will adopt the use of statistical tables for the sample sizes required at 95% confidence level, and the sample size required when the error level of 5% will be 383 students.

Data were collected for this study through a list of the questionnaire given that the questionnaire is a convenient tool for this kind of study because it hides personal participants in the study, resulting in the given complete freedom to answer.

Questionnaire was developed based on the closed statement method which has also been applied in similar study (Suplico, 2009), with some variations to suit the Saudi Arabia environment and some additions by the objectives and hypotheses of the study to set the researcher examined. The questionnaire consists of two main parts :

Part I: Questions to measure the personal data of the study sample, such as sex, marital status, monthly income, age, grade, college, monthly income , describe the degree of awareness of green marketing, ways of hearing about shopping green.

Part II: Questions to measure the green marketing trend and the investigator behavior, and consists of three axes: the eco-friendly products, and the effects of environmental pollution, and the rationalization of consumption.

To check the credibility of the list of the questionnaire before it is used in the collection of data on this study, was presented to the counselors in the graduate unit, has also been presented to the five academics in different sections of the King Abdul Aziz University, "Department of Business Administration, Department of Arabic, Statistics Department". Good feedback has been received from all the academics and counselors which have been introduced to increase the credibility of the survey. In terms of the reliability of the study "Kronbak Alpha" factor has been calculated for the study factors.

The researcher used the descriptive statistical technique represented in the calculation of redundancy and percentages for some variables in addition to the arithmetic mean. And tused Pearson coefficient test of correlation rank (Pearson product-moment correlation coefficient) and Eta coeficent.

RESULTS AND ANALYSIS:

In our reserach, we found that individuals' awareness of green marketing is realtivly low with 40.7% of the study sample. Also, 46.6% of them had heard about green marketing through the questionnaire which has been distributed to them. While 48.61% of the students in Suplico (2009) study identified green marketing through television and 37.04% of them recognized it through magazines. Table (1); below show the distribution of our sample according to their source of information about green marketing.

Table 2: Distribution of the sample according to methods of hearing about green marketing.

Methods	Number	% of Participants
This questionair	380	46.6
Television	127	15.6
Internet	127	15.6
Lectures	54	6.6
Newspapers	35	4.3
Radio	34	4.2
Daily news	33	4
Books	26	3.2

Students of King Abdulaziz University ave positive trend toward buying green products (This result agreed with the Suplico, 2009 study), and positive trend of knowing about pollution of the environment, and about the rationalization of consumption. This means that for students of King Abdulaziz University positive trend toward green marketing. Making buying decision is mainly

affected by different factors. In our study, we found that purchases are considered according to product needs 78.3%, 69.7% price, 67% personal preferences, and personal budget 63.1%.

HYPOTHESIS TEST:

Hypothesis One: There is no statistically significant relationship between sex and green marketing consumer.

Eta coefficient was used to verify the existence of a relationship between green marketing and sex. Results are shown in Table (2) below:

Table (2): The correlation coefficient between green marketing and Sex

	Correlation Coefficient	Significance Level	Statistical Significance
The relationship between the decision to buy green products and gender	0.450	0.000	Significant at 0.05 level
The relationship between the effects of environmental pollution and gender	0.230	0.001	Significant at 0.05 level
The relationship between consumption rationalization and sex	0.234	0.002	Significant at 0.05 level
The relationship between green marketing as a whole, and gender	0.286	0.021	Significant at 0.05 level

From Table (2), above we concluded that there is a relationship between the decision to buy green products and sex in favor of males, where the value of the correlation coefficient Eta (0.450) and the level of significance (0.000) which is the significant value at the level (0.05). Also, we noticed an existence of a relationship between the effects of environmental pollution and in favor of the male sex, where the value of the correlation coefficient Eta (0.230) and the level of significance (0.001) which is the significant value at the level (0.05). There is a relationship between the rationalization of consumption and sex in favor of males, where the value of the correlation coefficient Eta (0.234) and the level of significance (0.002) which is the significant value at the level (0.05). Finally, we found that there is an existence of a relationship between green marketing as a whole and for the benefit of the male sex, where the value of the correlation coefficient ETA (0.286) and the level of significance (0.021) which is the significant value at the level (0.05).

Thus, the sub hypothesis has been denied which states that there is no statistically significant relationship between the concept of green marketing, and the sex of the consumer. And prove the existence of a relationship between green marketing and consumer sex (male). This is contrary to the result of the study (Suplico, 2009), which found that there was no relationship between green marketing and consumer gender.

Hypothesis Two: There is no statistically significant relationship between green marketing variable Age

Table (3) shows correlation coefficient between green marketing and age. In this table there is presence of a weak inverse relationship between the decision to purchase green products and age where the value of the Pearson correlation coefficient (- 0.120) and the level of significance (0.019) which is the statistical significant value at the level (0.05). Also, there is no relationship between the effects of environmental pollution and age where the value of the Pearson correlation coefficient (0.012) and the level of significance (0.817), a value that is not significant. There is a lack of a relationship between the rationalization of consumption and age where the value of the Pearson correlation coefficient (-0.015) and the level of significance (0.765), a value that is not significant. Finally, there is no relationship between green marketing as a whole and age where the value of the Pearson correlation coefficient (- 0.074) and the level of significance (0.149).

And thereby prove the hypothesis that there is no statistically significant relationship between the concept of green marketing and the age of the consumer. This is consistent with the result of the study (Suplico, 2009), which found that there was no relationship between green marketing and the age of the consumer.

Table 3: Correlation coefficient between green marketing and age

	Correlation Coefficient	Significance Level	Statistical Significance
The relationship between the decision to buy green products and age	0.012	0.019	Significant at 0.05 level
The relationship between the effects of environmental pollution and age	0.012	0.817	Not Significant
The relationship between consumption rationalization and age	0.015	0.765	Not Significant
The relationship between green marketing as a whole, and age	0.074	0.149	Not Significant

Hypothesis Three: There is no statistically significant relationship between green marketing variable and education level

There is a presence of a weak inverse relationship between the decision to purchase green products and educational level as shown in Table (4), where the value of the Pearson correlation coefficient (- 0.199) and the level of significance (0.000) which is significant value of at the level (0.05). Also, there is existence of a strong positive relationship between the effects of environmental pollution and educational level, where the value of the Pearson correlation coefficient (0.845) and the level of significance (0.000) which is significant value of at the level (0.05). Moreover, there is existence of a positive relationship between the consumption rationalization and educational level, where the value of the Pearson correlation coefficient (0.428) and the level of significance (0.000) which is significant value of at the level (0.05). Finally, there is existence of a strong positive relationship between green marketing as a whole and the educational level, where the value of the Pearson correlation coefficient (0.791) and the level of significance (0.000) which is significant value of at the level (0.05).

Thus, the hypothesis has been rejected, which states that there is no statistically significant relationship between the concept of green marketing and the educational level of the consumer. And prove the existence of a strong positive relationship between green marketing and the educational level of the consumer. This result is not consistent with the result of the study (Suplico, 2009), which found that there was no relationship between green marketing and the educational level to the consumer.

Table 4: Correlation coefficient between green marketing and education level

	Correlation Coefficient	Significance Level	Statistical Significance
The relationship between the decision to buy green products and education	-0.199	0.000	Significant at 0.05 level
The relationship between the effects of environmental pollution and education	0.845	0.000	Significant at 0.05 level
The relationship between consumption rationalization and education	0.428	0.000	Significant at 0.05 level
The relationship between green marketing as a whole, and education	0.791	0.000	Significant at 0.05 level

Hypothesis four: There is no statistically significant relationship between green marketing variable and income

As shown in Table (5), there is a lack of a relationship between the decision to buy green products and

income as the value of the Pearson correlation coefficient (- 0.053) and the level of significance (0.305), a value that is not significant at the level of (0.05). Also, there is no relationship between the effects of environmental pollution and income as the value of the Pearson correlation coefficient (0.022) and the level of significance (0.670), a value that is not significant at the level of (0.05). Additionally, there is no relationship between the rationalization of consumption and income, where the value of the Pearson correlation coefficient (-0.001) and the level of significance (0.987), a value that is not significant at the level of (0.05). There is no relationship between green marketing as a whole and where the value of the income Pearson correlation coefficient (-0.024) and the level of significance (0.643), a value that is not significant at the level of (0.05). In that way prove the hypothesis that sub-states that there is no statistically significant relationship between the concept of green marketing and consumer income. This result is consistent with the result of the study (Suplico, 2009), which also found that there was no relationship between green marketing and consumer income.

Table 5: Correlation coefficient between green marketing and income

	Correlation Coefficient	Significance Level	Statistical Significance
The relationship between the decision to buy green products and education	- 0.053	0.305	Not Significant
The relationship between the effects of environmental pollution and education	0.022	0.670	Not Significant
The relationship between consumption rationalization and education	-0.001	0.987	Not Significant
The relationship between green marketing as a whole, and education	-0.024	0.643	Not Significant

CONCLUSION:

The term of green marketing is a relatively new concept of which is unknown to many, but that its application on the ground is applied fairly well despite the failure in many aspects. We miss the green consumers in Saudi Arabia, but when they are found unfortunately they don't avoid buying from companies that have questionable environmental orientation. There is a lack of green products in abundance, and when exist there is the lack of clarity and inaccessibility makes the buyer is unaware of their locations. We found that buyers are not willing to bear the increase in price if the product is the same quality and characteristics recognized with being environmentally sound. The social strata with higher level of education are often representing the most affinity group members to have orientation toward green products. It is important to note that Arab consumers environmentally conscious is growing, but has a weak culture of consumption in different areas, especially food which, because of the business organizations that are promoting the consumption patterns of unfriendly environmentally products and services which has significant impact of the promotion of consumption culture of the Arabic consumers. Finally, business organizations can adopt the concept of green marketing in raising the level of its products and services.

RECOMMENDATIONS:

We recommend that more efforts of the various levels (individual, organizations, governments), are needed to raise awareness of the concept and meaning of green marketing to a degree it become a culture in the community. This could be achieved through campaigns guidance and educational programs. There should be more specialized studies and in-depth understanding of the nature of the products that are consistent with green marketing. Moreover, there is a need to include environmental subjects and its importance in the academic curriculum of at different educational level so that we have more percentage of green consumers in Saudi Arabia. For companies that sell green products, these products provide the care and attention to where and how to display so that they are clear and easy to

access. Additionally, companies and organizations that produce green products need to do the proper research and use experts in order to reduce the costs of producing green products and then reduce their prices. Consumers with a high level of education could be a motive for changing the culture of consumption towards more environmental awareness so business organizations respond to this new culture and a shift towards the adoption of green marketing approach. Finally, there is a need for further studies specializing in consumer behavior to identify the most effective promotional methods to encourage them to adopt the values and culture of eco-friendly consumption, particularly in the areas of food products.

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