

CONSUMER'S PERCEIVED VALUE, ATTITUDE AND PURCHASE INTENTION OF GREEN PRODUCTS

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ABSTRACT

The findings reveal that the most of the consumers perceive that the green products have consistent quality, acceptable standard of quality and value for money. The consumers who have higher education levels and higher monthly income have higher perceived value towards green products. Besides the middle aged consumers and employees of private sector have more perceived value towards green products. The majority of the consumers are more concerned with their food safety, the protection of the environment and animal welfare.

The consumers who have higher education levels and higher monthly income are more likely to purchase green products. Meanwhile, the middle age consumers and employees of private sector have more intention in purchasing of green products. The perceived value, attitude purchase intention towards green products is also moderately and positively associated with each other. The reasonable price, value for money and acceptable quality of standards are positively influencing the consumer's purchase intention of green products at one per cent level of significance. Meanwhile, environmental friendliness and food safety are also are positively influencing the consumer's purchase intention of green products at five per cent level of significance.

INTRODUCTION

During the past decade, a business phenomenon, of the adaptation of environmental concerns into corporate practice has been gaining popularity. It is predictable that the pressure of this evolution on corporate sector will not decrease in force till the new millennium dawns (Sarkis, 2001). This concept that focused on environmental concerns had emerged during the last decade, challenged our capacity to be self-aware, and established a mutual global imperative in order to respond to this critical issue that started from natural resource conservation and world-wide climate change (Olson, 2008).

Over the last decade concern for the environmental issues has been increasing due to increased media exposure, greater awareness of environmental pollutions, the impact of major industry disasters and the rise of activist groups on the environment (Kalafatis, *et. al.*, 1999). As a result, various customers started considering nature protection as a central factor to incorporate in their buying decisions, increasing realization that

environmental protection is not just a task to be performed by government institutions or organizations, but is each citizen's responsibility (Fraj and Martinez, 2006).

The concern for environmental degradation has resulted in a new segment of consumers, i.e. the green consumers. These consumers have been identified as one who avoids products which are possible danger for health, damage the environment during production, use materials derived from threatened species or environment, and cause unnecessary waste. Moreover, due to the businesses' decision to respond to these consumers' environmental needs green marketing has started to become an important branch of learning (Finisterra do Paço, and Raposo, 2008).

In the last decade, consumers have become more enlightened on environmental issues. Green marketing refers to selling product or rendering services based on environmental benefit. It came into existence in late 1980s and early 1990s. Green marketing is growing rapidly and consumers are

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willing to pay a lot for green product. There has been little analysis of the impact of this new market on the consumers and the environment so far. Green marketing affects all areas of our economy, it does not just lead to environmental protection but it also creates new market and job opportunities.

Therefore, green marketing is one of the major trends in modern business (Kassaye, 2001). It is used to satisfy the consumers' wants, needs, protect the environment and benefits to the society in a more environmental friendly way (Welford, 2000). Green marketing is to market the products or services in a more sustainable way and it involves many activities such as changes to the production process, packaging changes and mortifying advertisement. However, in reality, the companies which adopted green marketing have encountered a number of challenges which include the variability of demand, majority of the consumers are not aware of the green products and their uses, unfavorable consumer's attitude towards green products, high cost invested in developing green products which require huge investment in research and development and majority of the consumers are not willing to pay a premium for green products.

REVIEW OF LITERATURE

Roach (1991), indicated that consumers were concerned about the food safety and quality, environment protection and animal welfare when they made purchasing decision. Consumers' belief and attitude had become two factors that would affect their intention on green food consumption. According to Ottman (1992), consumers purchased green products when their primary needs and wants for quality, availability, convenience, performance, and affordability were met. Consumers also purchased green products when they realised that green products can help to solve the environment problems.

Roberts (1996) indicated that environmentally conscious consumers and consumers who believed the specific ecological activities can improve the environment issues were more likely to perform green consumer behaviours. Chan and Lau (2002) conducted a cross-cultural research study in China and America, wherein consumers in Shanghai and Los Angeles were surveyed, concluded that the asymmetric influence of green purchasing intention on green purchasing behaviour warrants further attention.

Soonthorsmai,(2007) found that consumers

who were increasingly aware and concerned about the essentials of environmental issues were known as green consumers. Chris (2008) showed that consumers were beginning to have a more sustainable life, become more environments friendly and be concerned about their health and they have a desire to eat food that was known as green.

Abdul Rahim (2009) also indicated that the consumers are more likely to have a positive attitude toward green food when they are more concerned about the environmental issues and health consciousness. According to Beckford, *et. al.*, (2010) green purchase intention was a significant predictor of green purchase behaviour, which meant that purchase intention was positively affecting the probability of a customer decision that he would buy green products. According to Peter (2011), green products were products that guaranteed that they were produced in a more environmental friendly way that minimal the impact of the environment as opposed to their non-green or conventional equivalents.

OBJECTIVES

The present study attempts to examine the consumer's perceived value, attitude and purchase intention towards green products. The objectives of the study are :

1. To study the consumer's perceived value, attitude and purchase intention of green products.
2. To examine the relationship between socio-economic characteristics of consumers and perceived value, attitude and purchase intention of green products.
3. To analyze the influence of consumer's perceived value and attitude on consumer's purchase intention of green products.

METHODOLOGY

Among the different cities in Tamil Nadu, the Chennai city has been purposively selected for the present study. The consumers have been selected by adopting random sampling technique through pre-tested and structured questionnaire. The questions are measured by using Likert five point scale (1 represents strongly disagree and 5 represents strongly agree). The data and information have been collected from 300 consumers and pertain to the year 2011-2012. To accomplish the objective of the present study, the descriptive statistics, ANOVA test, Chi-Square analysis, correlation analysis and regression have been applied.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of Consumers

The socio-economic characteristics of consumers were analyzed and the results are presented in **Table-1**. The results indicate that about 54.00 per cent of the consumers are males while the rest of 46.00 per cent of the consumers are females. The results also show that about 41.33 of the consumers are employed in private sector followed by government (36.67 per cent) and business (22.00 per cent). It is clear that about 44.00 per cent of the consumers belong to the age group of 26-40 years followed by 41-60 years (28.00 per cent), below 25 years (19.33 per cent) and above 60 years (8.67 per cent).

Table-1. Socio-Economic Characteristics of Consumers

Particulars	Frequency	Per cent
Gender		
Male	162	54.00
Female	138	46.00
Age(Years)		
Below 25	58	19.33
26-40	132	44.00
41-60	84	28.00
Above 60	26	8.67
Educational Qualification		
Secondary	28	9.33
Higher Secondary	46	15.33
Graduates	122	40.67
Post Graduates	68	22.67
Professionals	36	12.00

Occupation		
Business	66	22.00
Government	110	36.67
Private	124	41.33
Monthly Income(Rs.)		
Below 10000	52	17.33
10001-20000	76	25.33
20001-40000	134	44.67
>40000	38	12.67
Marital Status		
Married	212	70.67
Unmarried	88	29.33
Family Type		
Nuclear	228	76.00
Joint	72	24.00

The majority of the consumers (40.67 per cent) are graduates followed by post graduates (22.67 per cent), higher secondary education (15.33 per cent), professionals (12.00 per cent) and secondary education (9.33 per cent). The results also show that about 44.67 per cent of the consumers belong to the monthly income of more than Rs. 20001- 40000 followed by Rs.10001-20000(25.33 per cent), below Rs, 10000(17.33 per cent) and more than Rs. 40000(12.67 per cent). It is apparent that about 70.67 per cent of the consumers are married while the rest of 29.33 per cent of the consumers are unmarried and about 76.00 per cent of the consumers belong to the nuclear family, while the rest of 24.00 per cent of the consumers belong to the joint family.

Consumer's Perceived Value towards Green Products

The consumers' perceived value toward green products was analyzed and the results are presented in **Table-2**.

Table-2. Consumer's Perceived Value towards Green Products

Statements	Level of Agreement (%)					Mean	F-Score	Sig Value	
	SA	A	N	DA	SDA				
Green products have consistent quality.	42.75	27.50	10.25	9.75	9.75	4.72			
Green products are reasonably priced.	44.25	34.75	12.25	3.25	5.50	4.68			
Green products offer value for money.	42.50	31.50	10.25	11.50	4.25	4.64	25.984	0.01	
Green products have an acceptable standard of quality.	39.75	32.25	14.50	10.25	3.25	4.70			
Green products are economical.	41.25	33.50	13.75	8.50	3.00	4.66			

The results show that consumers perceive that the green products are having consistent quality, acceptable standard of quality and value for money. Moreover; most of the consumers are strongly agreed that green products are reasonably priced and the majority of the consumers state that the green products are economical. In Overall, the analysis indicates that the consumers have higher value towards green products as perceived by them. The F-value of 25.984 is significant at one per cent level of significance indicating that there is a significant difference in perceived value towards green products among the consumers.

Relationship between Socio-Economic Characteristics and Consumer's Perceived Value towards Green Products

The relationship between socio-economic characteristics and consumers' perceived value towards green products was analyzed by adopting Chi-Square test and the results are presented in **Table-3**.

Table-3. Socio-Economic Characteristics and Consumer's Perceived Value towards Green Products

Socio-Economic Characteristics	Chi-Square Value
Gender	0.582
Occupation	2.926**
Age	2.854**

Educational Qualification	3.102**
Monthly Income	3.288**
Marital Status	0.726
Family Type	0.592

Note: ** indicates significant at one per cent level.

The results show that consumers belong to the higher education levels have more perceived value towards green products than the consumers who have a lower education levels. In addition, the consumers who have a higher monthly income levels have greater perceived value towards green products than middle and low monthly income levels. Besides the middle aged consumers and employees of private sector have more value towards green products as perceived them.

Consumer's Attitude and Purchase Intention towards Green Products

The consumer's attitude and purchase intention towards green products was analyzed and the results are presented in **Table-4**. The results show that consumers are more concerned with their food safety, the protection of the environment and animal welfare. Moreover, most of the consumers are strongly agreed that green products are easy to access and the majority of the consumers claim that the green movement makes them aware of the green products. Overall, the analysis indicates that the consumers have a positive attitude and purchase intention towards green products. The F-value of 23.842 is

significant at one per cent level of significance indicating that there is a significant difference in

attitude and purchase intention towards green products among the consumers.

Table-4. Consumer's Attitude and Purchase Intention towards Green Products

Statements	Level of Agreement (%)					Mean SDA	F-Score	Sig Value	
	SA	A	N	DA	SDA				
I intend to purchase green foods because they are more concerned about food safety.	45.20	26.80	14.75	7.50	5.75	4.88			
I want to purchase green foods because they are more environmentally friendly.	42.75	37.50	11.50	4.25	4.00	4.76			
I plan to purchase green foods because I am concerned about animal welfare.	32.25	34.75	9.50	11.50	12.00	4.72	23.842	0.01	
I believe green food is available and easy to access.	33.50	37.50	12.75	11.50	4.75	4.58			
The green movement makes me aware of the green products	42.75	37.50	12.50	3.50	3.75	4.62			

Relationship between Socio-Economic Characteristics and Consumer's Attitude and Purchase Intention towards Green Products

The relationship between socio-economic characteristics and consumers' attitude towards green products was analyzed by adopting Chi-Square test and the results are presented in Table-5.

Table-5. Socio-Economic Characteristics and Consumers' Attitude towards Green Products

Socio-Economic Characteristics	Chi-Square Value
Gender	0.846
Occupation	2.642**
Age	3.148**
Educational Qualification	2.426**
Monthly Income	3.595**
Marital Status	0.645
Family Type	0.492

Note: ** indicates significant at one per cent level.

The results show that consumers who have a higher education level are more likely to purchase green products than the consumers who have a low

education level. In addition, the consumers who have a higher income were more intent on purchasing green products than middle and low income levels. Besides the middle age consumers and employees of private sector have more intention in purchasing of green products.

Relationship between Consumer's Perceived Value, Consumer's Attitude and Consumer's Purchase Intention of Green Products

The relationship between consumer's perceived value, consumer's attitude and consumer's purchase intention of green products was analyzed by computing correlation coefficients and the results are presented in Table-6.

Table-6. Relationship between Consumer's Perceived Value, Consumer's Attitude and Consumer's Purchase Intention of Green Products

Particulars	Perceived	Attitude Value	Purchase Intention
Perceived Value	1.00		
Attitude	0.56**	1.00	
Purchase Intention	0.58**	0.54**	1.00

Note: ** indicates significant at one per cent level.

The results show that the correlation

co-efficient between perceived value and attitude towards green products is 0.56, which is moderately and positively associated with each other at one per cent level of significance. This implies that when perceived value of green products increases, the attitude towards green products would also increase further.

The perceived value and purchase intention towards green products is also moderately and positively correlated with each other with the value of 0.58, significant at one per cent level of significance. It is inferred that when perceived value of green products increases, the purchase intention towards green products would also increase considerably.

Besides, the relationship between attitude and purchase intention towards green products shows that both are also positively and moderately associated with each other with the value of 0.54 which is significant at one per cent level of significance. It reveals that when attitude towards green products increases, the purchase intention towards green products would also increase remarkably.

Influence of Consumer's Perceived Value and Attitude on Consumer's Purchase Intention of Green Products

The influence of consumer's perceived value and attitude on consumer's purchase intention of green products was analyzed by employing multiple regression and the results are presented in **Table-7**. The result of this study found that out of the eight variables, five variables are positive and statistically significant. Thus, the consumer's perceived value and consumer's attitude are relevant in explaining the consumers' intention to purchase green products. The adjusted R^2 is 0.73 indicating that the regression model is good fit. It shows that about 73 per cent of the variation in the dependent variable (purchase intention towards green products) is explained by independent variables (consumer's perceived value and attitude towards green products).

Based on the statistically significant coefficients, reasonable price, value for money and acceptable quality of standards are positively influencing the consumer's purchase intention of green products at one per cent level of significance. Meanwhile, environmental friendliness and food safety are also positively influencing the consumer's purchase intention of green products at five per cent level of significance.

Table-7. Influence of Consumers' Perceived Value and Attitude on Consumer's Purchase Intention of Green Products

Variables	Regression Coefficient	t-Value	Sig
Intercept	1.268**	2.642	0.01
Consistency in Quality(X_1)	-0.146	1.388	0.36
Reasonable Price(X_2)	0.512**	2.967	0.01
Value for Money(X_3)	0.546**	3.114	0.00
Acceptable Quality Standards(X_4)	0.614**	3.226	0.01
Economy(X_5)	0.168	1.126	0.39
Environmental Friendliness(X_6)	0.586*	2.112	0.02
Food Safety(X_7)	0.464*	2.212	0.03
Animal Welfare(X_8)	0.284	0.795	0.42
R^2	0.75		
Adjusted R^2	0.73		
F	5.628		0.01
N	300		

Note: ** indicates significant per cent level * indicates significant at five per cent level

The results show that if green products have acceptable quality standards, the consumers have more intention to purchase them than that of unacceptable quality standards of green products. Besides, if green products have reasonable price and value for money, then the consumers have higher intention to purchase them. This finding also indicates that consumers who have high environmental concerns are more intent to purchase green products than consumers' who do not think that green product is concerned with the environment. This shows that when the consumers are concerned more about food safety, the likelihood of level of intention of purchase of green products increases compared to consumers who are less concerned about food safety.

CONCLUSION

The analysis indicates that the consumers perceive that the green products are having consistent quality, acceptable standard of quality and value for money. Moreover; most of the consumers are strongly agreed that green products are reasonably priced and are economical. The consumers belong to the higher education levels have more perceived value towards green products than the consumers who have a low education levels. In addition, the consumers who have a higher monthly income have greater perceived value towards green products than middle and low monthly income levels. Besides the middle aged consumers and employees of private sector have more perceived value towards green products.

The consumers are concerned about their food safety, the protection of the environment and animal welfare. Moreover, most of the consumers are strongly agreed that green products are easy to access and the green movement makes them aware of the green products. The consumers who have a higher education level are more likely to purchase green products than the consumers who have a low education level. In addition, the consumers who have a higher income were more intent on purchasing green products than middle and low income levels. Besides the middle age consumers and employees of private sector have more intention in purchasing of green products.

The perceived value, attitude purchase intention towards green products is also moderately and positively correlated with each other. The reasonable price, value for money and acceptable quality of standards are positively influencing the consumer's purchase intention of green products at

one per cent level of significance. Meanwhile, environmental friendliness and food safety are also positively influencing the consumer's purchase intention of green products at five per cent level of significance.

In addition, green products are still an emerging concept in Chennai, but it can become more popular among consumers of Chennai, if the consumers are made to be more aware of the issues environment pollution, food safety and animal welfare. Therefore, improving public awareness, attitude towards the green consumerism will increase consumers' intentions to purchase green products. It is imperative for the producers, processors, manufacturers or marketers to clearly understand consumers' behaviour and intention towards purchasing green products so that they can increase their attitude and knowledge on green products in order to satisfy consumers' needs and wants.

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