AN ANALYSIS OF THE GREEN PRODUCT ATTRIBUTES THAT ENTICE GREEN PURCHASING- A STUDY DONE IN BANGALORE CITY

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ABSTRACT

Attributes related to green products plays a vital role in attracting the customers. It will also help the customers to differentiate it from the conventional products. The present study aimed to find out the factors that lead the customers to identify a product as green, what is the image they have about the green product, what category of green products they usually purchase and how they give weightage to conventional product and green product based on certain factors. A total 1061 samples were employed for the study through stratified random sampling. Statistical tools like mean score and correlation analysis were used. The survey found out that people consider 'recyclable' symbol as an important criteria while looking into a green product. It was observed that people go for different category of green products based on the frequency of exposure they get for that particular product. Respondents feel that green products create less harm to the environment when compare to conventional products.

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Keywords: Green products, Image, Weightage, Identifying factors, Conventional products, Recyclable and frequency.

Contribution/ Originality

This study is one of the few studies conducted in India which dealt with the perception of consumers towards green products and conventional products by applying the concept of gap analysis. This study can provide a better insight to the marketers about how consumers perceive each factor under green and conventional product.

1. INTRODUCTION

Green/eco-friendly products are slowly getting their pace in the market. Green products started to create its own identity in the market and have become a niche market for green consumers. The reason behind the popularity of such products can be of many reasons like governmental pressure, competitive advantage, for market share, increasing concern of the people towards environmental issues etc. Beyond all these, consumers' feel of improving his standard of living and health consciousness has paved way to the popularity of green products to a greater extent.

The emergence of green marketing as a concept can be traced back to 1980, when the term was first coined out as 'ecological marketing' during a workshop conducted by AMA. Green marketing is the process of incorporating the system, policies or attributes of a manufacturing firm which reflect the concept of 'greenness' (Prakash, 2002). A firm which adopts the true green marketing strategy can be able to reflect the 'greenness' in the every aspect of their business. The reachability of a product depends on the features or attributes of product and how appealing it is to the

customers. Marketers should able to differentiate the green products from a conventional product in the minds of a customer by providing enough information about the product. Here comes the importance of how customers perceive a product as green or how customers are identifying a product as green. This is the first step for a marketer, which can grab the customers towards a green product.

Thus, the aim of the present study is to identify a customer's perception about a green product, how they are identifying a product as green, the green products and advertisements they purchase or come across in daily life and the weightage they give for green and conventional products based on some factors.

2. THEORETICAL FRAMEWORK

A study conducted by Maheshwari and Malhotra (2011) observed that 64% of the respondents are being motivated by the features of green products. Most of the customers perceive green product as 'recyclable' (Rumi et al., 2014). Among the Indian customers, 67% of the youths believe 'conserves water and energy' as an important criteria of a green product and they are ready spend more on such products (Shetty and Gujarathi, 2013). Ottman (2012) identified that customers are more concerned about the attributes such as 'recyclable' and 'biodegrable' while making a purchase. Respondents not only just give the preference to the greenness of the products; they even prefer to have either a less packaging or an eco-friendly packaging of the product (Vernekar and Wadhwa, 2011).

There is an increase in the percentage of customers who are looking forwards for a symbol of 'recyclable' in the product in 2011 when compared to previous years. The customers not only look into the recyclable aspect just for packaging, but also are interested to find out the level of recyclable to the product inside (Times, 2012). In some cases, customers feel that they are getting confused with eco-labeling of the product. They feel that eco-labels many a times failed to provide proper information about the product. Hence eco-label cannot be taken as a criteria which enables a customer to go for eco-friendly purchase every time (Dolan et al., 2015). When it comes to the case of selecting cosmetic products most of the females are tend to identify and choose a product which is 100% natural (Junaid et al., 2013). Quality and convenience is considered as the foremost factor for selecting a green product among the customers (Singh, 2011). Usability of a green product depends on how customers perceive the product. Most of the customers consider green product as less effective when compare to conventional product which is being manufactured using chemicals. Since green product is natural, customers believe that green products prove to be effective by the repeated usage (Lin and Chang, 2012). Many of the customers believe that conventional products are better in the aspects like packaging, branding and promotional aspects when compared to the green products (Mitra, 2014). A survey conducted by guardian (Sustainable business) observed that customers consider lack of availability and variety as the major barrier towards the purchase of green products.

When comes the purchasing aspect of green products, a survey conducted by Bearse et al. (2009) found that most of the purchases done by the customers are in the category of 'grocery items', followed by organic foods (Rumi et al., 2014).

3. RESEARCH METHODS

3.1. Respondents and Procedure

The data was collected through mall intercept method from the major hypermarkets and malls concentrated in Bangalore city. Stratified random sampling technique is used to collect the data. The survey was done during the month of October 2015. A total of 1250 questionnaires were employed out of which only 1061 were found to be valid for the study.

4. DATA ANALYSIS AND DISCUSSION

In order to find out which attribute of green products is being valued as most important among the respondent a mean score test was conducted.

Table-1. Mean score table for green product attributes Vs. Demographic factors

Variable	Criteria	Recyclable	Conserves water and energy	Locally grown/produced/organic	Biodegradable	Less packaging
Age of the responder	Below 25	2.40	2.51	3.09	3.18	3.82
	25-30	2.24	2.01	2.99	3.95	3.80
	31-35	2.08	1.20	2.95	4.72	4.05
	36-40	2.01	1.19	4.82	3.16	3.83
	Above 40	2.12	3.51	3.67	2.58	3.12
	Total	2.19	2.26	3.47	3.40	3.67
Gender	Male	2.20	1.69	3.65	3.61	3.85
	Female	2.18	2.83	3.30	3.20	3.49
	Total	2.19	2.26	3.47	3.40	3.67
Marital Status	Single	2.34	2.45	3.04	3.38	3.78
	Married	2.09	2.13	3.77	3.41	3.60
	Total	2.19	2.26	3.47	3.40	3.67
Qualification	Graduate	2.29	2.54	2.69	3.26	4.22
	Post Graduate	2.22	1.28	4.46	3.71	3.33
	Professional	2.02	1.13	3.05	4.84	3.96
	Others	2.07	3.55	3.71	2.60	3.07
	Total	2.19	2.26	3.47	3.40	3.67
Occupation	Employed	2.12	2.26	2.99	3.67	3.95
	Business	2.07	1.14	4.89	2.95	3.95
	Homemaker	2.56	3.51	3.99	2.86	2.08
	Student	2.36	2.45	3.53	2.94	3.72
	Total	2.19	2.26	3.47	3.40	3.67
Monthly Income	Below Rs. 25,000	2.05	1.17	4.26	3.56	3.96
	Rs. 25,000 - 50,000	2.21	2.21	2.73	3.68	4.17
	Rs. 50,001 – 75,000	2.27	3.26	3.93	2.88	2.65
	Above Rs. 75,000	2.44	2.78	3.56	1.89	4.33
	Total	2.19	2.26	3.47	3.40	3.67

Source: Primary data

The above tables shows that almost all the respondents considers 'recyclable and conserves water and energy' as the most important attribute of a green product. At the same time homemakers considers 'less packaging' as an important attribute, whereas the respondents who falls in the income group of above 75,000 considers 'biodegradable' aspect as the important one.

4.1. Factors of Green Products' Identity

As the current study focus on the green product purchase, it is important to know the factors that help the customers to identify a product as 'green'. Ranking patterns of the different respondents are analyzed for the factors of green product identity and the results are furnished below.

Table-2. Factors of green product identity

Identification factors	Mean score	Garrett's Rank
Eco friendly Seal/Logo	96.75	IV
Recyclable/Recycled Logo	106.33	II
100% Natural	103.29	III
100% Virgin Plastics	133	I

Source: Primary data

It can be seen from the above table that the respondents have chosen to give Rank 1 (133) to the factor '100% Virgin plastics' followed by 'Recyclable / Recycled Logo' (106.33) and '100% Natural' (103.29). The respondents have given least preference to the factor 'Eco-friendly seal/Logo' (96.75).

4.2. Preference of Respondents towards Various Categories of Green Products

Table-3. Preference towards various categories of green products

Preference towards various categories of green products	Frequency	Percent	Cumulative Percent
Everyday Grocery	170	16	16
Health and Beauty	319	30.1	46.1
Apparel	53	5	51.1
Cleaning and Household	9	0.8	51.9
Organic Food / Locally grown vegetables	329	31	82.9
Paper Products	181	17.1	100
Total	1061	100	

Source: Primary data

It is inferred from the above table 3 that among the different green product category, Organic Food / Locally grown vegetables stands at first with 31% respondents, followed by Health and Beauty products with 30.1% ; paper products and every day grocery reserves third and fourth position with 17.1% and 16% respectively. Apparel and cleaning household are the last factors in the category of preferring the green product.

4.3. Frequency of Noticing the Greenness

Table-4. Frequency of noticing the greenness

Frequency of noticing the greenness	Frequency	Percent	Valid Percent	Cumulative Percent
Everyday Grocery and household Items	191	18	18	18
Health and Beauty	446	42	42	60
Apparel	85	8	8	68
Cleaning and Household	12	1.1	1.1	69.2
Organic Food/Locally grown vegetables	24	2.3	2.3	71.4
Paper products	303	28.6	28.6	100
Total	1061	100	100	

Source: Primary data

It is inferred from the above table that 42 % of the respondents have noticed the greenness in Health and Beauty products, 28 % of the respondents noticed in the paper products, 18% in everyday grocery and household items; 8% have noticed the greenness in Apparels and 2.3% have noticed in organic food and locally grown vegetables and only 1.1% have noticed the greenness in cleaning and household products.

4.4. Green Purchase Behavior Based on Promotion Frequency

A Karl Pearson correlation coefficient test was done in order to find out the relationship between the frequency of noticing the greenness in the products and the preference towards various categories of green products. The result is presented in the following correlation table 5.

H0: There is no significant relationship between preference towards various categories of green products and the frequency of noticing the greenness of the product.

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Table-5. Correlation Coefficient

Factors	Correlation Value	Preference towards various categories of green products	Frequency of noticing the greenness
Preference towards various categories of green products	Pearson Correlation	1	.432[**]
	Sig. (2-tailed)		.000
	N	1061	1061
Frequency of noticing the greenness	Pearson Correlation	.432[**]	1
	Sig. (2-tailed)	.000	
	N	1061	1061
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary data

The above correlation coefficient table explains the significant p value at 1% significant level between preference towards various categories of green products and Frequency of noticing the greenness. It is further noticed that there is a high positive correlation between the two study variable. It shows high positive impact of one variable on the other. Hence, it is concluded that customers prefer to buy a specific green product category based on the frequency of noticing the greenness of that green products. Only contradiction in this case is, respondents do not come across the advertisements of locally/organically grown vegetables but still they go for the highest purchase of such products. This may be because of the fact that they may not consider frequent advertisements on such products as an important criterion while making a purchase.

4.5. Preference Gap between Conventional and Green Product Purchase

In order to identify the gap exist in preference between green products and conventional products mean score analysis was performed. The difference in mean score of various factors of the green products and conventional products are calculated and the results are presented in the following table 6.

Table-6. Mean Score Analysis

S.No	Factors	Conventional Products	Green Products	Gap
1	Quality	2.75	2.22	0.53
2	Reputation /Brand	4.68	2.85	1.83
3	Value	4.00	3.90	0.10
4	Environmental Impact	5.98	1.89	4.09
5	Usability	4.75	3.79	0.96
6	Availability	4.71	4.18	0.53
7	Packaging	4.89	4.80	0.09

Source: Primary Data

It is inferred from the table 6 that the respondents have given ranking for the factors that influences the preference of green products and conventional products. Based on the rank given by the respondents with respect to green products, the factors are enlisted as environmental impact, quality, reputation/brand, value, usability, availability and packaging; whereas the ranks given by the respondents for the preference of the conventional products determines the factors in the order of quality, value, reputation/brand, availability, usability, packaging and environmental impact. There is a highest gap exist between the environmental impact of conventional product and green product. This means that people are aware that green products create less impact on the environment when compared to their conventional counterpart.

5. CONCLUSION

The present study aimed to find out the customers preference towards the various attributes of green products, factors that help the respondents to identify a product as green, impact of noticing the greenness on the green product purchase and the preference gap between green products and conventional products. Customers consider 'recyclable' and 'conserves water and energy' as the major attributes of green product. Among the green product category respondents go for the highest purchase in the category of organically / locally grown vegetables.

As far as the frequency of noticing the greenness based on the promotional aspect, customers notice the greenness in the product category of 'health and beauty'. The finding of the study showed that the purchase of a particular category of green product depends on the frequency to which the customers notice the greenness in that particular product based on promotional aspect. It was also observed from the study that customers do understand that green products are less harmful to the environment when compared to conventional product.

6. RESEARCH IMPLICATION AND DISCUSSION

The fact remains the same that until and unless customers are not receiving proper information about the green product, it is quite normal that they will consider green product as an inferior one when compared to the conventional product (Michaud and Llerena, 2011). At the same time, customers will not buy a product just because it is green; they are not ready to compromise with its quality (Braimah and Tweneboah-Koduah, 2011).

The current study found that respondents have given least preference to eco-labels in identifying a product as green. So it is the responsibility of the marketer to make the eco-label clear and identifiable to the customers (Lin and Chang, 2012). A strong eco-label is capable to provide right information about the green product to a right customer.

The marketers need to take care of the promotional aspect of the green products since for many of the customers green marketing is in booming stage. In order to get a place for green products in the minds of the customers 'reinforcement strategy' need to be adopted.

Even though customers have given high weightage to the factors under green products, most of them still rely on the traditional aspects like quality, price and availability. If these factors are not met with the expectation of the customers, it is doubtful to predict the purchase behavior of most of the customers. This may be due to the reason that the percentage contributing true green customers are too less.

It will be easy for the reputed/known brands to promote green products among its loyal customers. Such promotion's reachability will be high and it makes at least the customers to turn once towards the green product. Usage of social media can also create success to those who are engaged in green business.

7. RESEARCH LIMITATION AND FUTURE RESEARCH

The current study has focused only the Bangalore city as the study area. So this study cannot be taken granted as a generalized study to a greater extent. Future research can be done by covering the other parts of Karnataka which includes both urban and rural population. Limited statistical tools have been used for the study. Researches in future can incorporate other statistical tools to widen the scope of the study. The other P's of marketing can also be included in the future research and analysis can be made to understand which P is the strongest one that can influence the green purchase decision of the customers to a larger extent.

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