

A Study On Consumer Perception Towards Green Marketing Communication With Special Reference To Pepsico India

By

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Abstract

In the unprecedented times of Global warming, the biggest threat to the world is to save the planet. Saving and conserving the natural and depleting resources is one of the important tasks of humanity. Communication about the danger of climate change has accelerated because of the earnest and selfless efforts of young minds like Greta Thunberg and Ridhima Pandey. The responsibility of generating awareness does not only lie on the shoulders of the activists but equally on the business and organisations as well. The brands are changing their marketing communication strategy to remain ahead of their competitors and in this attempt, they are also putting efforts to make the consumers aware about this escalating threat. In this prevailing scenario, it would be interesting to understand if the consumer perception towards the brand changes based on its green marketing initiatives and strategies. The paper makes a study on varied green marketing communication strategies executed by one of the leading FMCG brand of India- PepsiCO India. The paper discusses about how PepsiCo has increased its rate of targeting the consumers who are nowadays more concerned about the protection and conservation of environment and who are called as "Green Consumers". The research methodology used in the study is survey method. Questionnaires were distributed to all the respondents in the age group of 18-49 years and who are familiar with the marketing communication strategies of PepsiCo. As a part of the study, the researcher employs convenience sampling method and data of 97 respondents have been analysed. The findings of the research indicate that the Green Marketing Communication Strategies of PepsiCo. has played a significant role in influencing the consumer's perception about the brand and their purchase decision about it indicative of the fact that many more such popular brands like Pepsi should not only engage in Green Marketing Practices but it should also adopt strong Marketing Communication Strategies to disseminate information about it amongst the customers.

Keywords: Green Marketing Communication, Green Consumer, Global Warming, Green Marketing

Introduction

The mankind is suffering from a permanent struggle for innovation in every field at the cost of deterioration of the environment. In the aspiration of development and leading a better life, they are venturing into developing technology and products that may serve their need but these ventures are destroying the environment and is causing Global warming. The human needs and desires are unlimited to the limited resources. The sense of responsibility lies on the shoulder of every human being. It becomes important to be aware about the

environment and surroundings and at the same time making and spreading awareness is equally important. Green Marketing can be explained as an attempt by the marketer to build strategies targeting the environmental consumers. (Polonsky, 1995) . It also means those products in market that are less toxic in comparison to others and have a longer life and made with reusable material (Ottman, 1992). Companies have started producing environmental friendly products and the demand for the consumption from the consumer has also risen. (Webster, 1975) found out that consumers who are socially conscious try to do something about reducing pollution and acknowledge that their buying behavior will impact the environment. In a bid to create a differentiating mark in the market, the companies have been leaving no stone unturned to attract the attention of the target customers and to win their hearts and manufacturing eco-friendly products have been a significant part of it. However along with introducing major changes in the product or its packaging, its also necessary that the companies in order to earn the reputation of being an environmentally friendly company and to win the hearts of its stakeholders, it should also conceptualise innovative marcom strategies to spread the word effectively and to generate a widespread awareness amongst the masses. Thus, not only the products but companies all over the world are practicing green marketing practices to spread awareness about the grave issue and make consumers aware about the reasons behind environmental damage and its alarming consequences. Companies are either conducting awareness campaigns or changing their packaging or sometimes renovating the product to make it environment friendly. The Green marketing was highlighted in the late 1980s and early 1990s but in 1975, The American Marketing Association conducted their first ever workshop on “Ecological Marketing”. For the Global economy, new trends involve adding the aspect of green marketing in their strategy targeting green consumer and creating a new market opportunity. It has been observed that companies in India are venturing into Green Marketing Practices and their activities revolve around the green initiatives. The term has also been described as an organization’s efforts at designing, promoting, pricing and distributing products that will not harm the environment (Fuller, 1999).

According to e2exchange.com, the companies besides focussing on green marketing practices which centres around manufacturing environment friendly products, it should also be equally active in green positioning which means communicating the green branding initiatives of the companies and the outstanding attributes of its eco-friendly products.

The site discusses about the significant phases in the area of Green Marketing by emphasising on certain key words which revolve around creating an awareness about its significance ranging from Green Design to Green Pricing to Green Positioning to Green Packaging and Green Disposal. In the growing worldwide concern about the accelerating negative consequences of climate change, it becomes the prime responsibility of every organisation that besides coming forward with designing environment friendly products, it should take firm step towards building environmental sustainability by creating authentic stories and narratives about the brands doing commendable work in the area so as to create widespread awareness amongst the public finally leading to its strong reputation building.

In the midst of some brands taking concrete steps in this direction, a major area to focus on is whether such marketing initiatives with a social impact influences the perception of the consumers towards the brand and whether customers develop a liking towards such brands which are very much in the forefront of green marketing leading to lead generation.

Literature Review

Green marketing refers to the management process that aims to meet the needs of customers and society in a profitable and sustainable manner by identifying and anticipating those needs. According to Peattie and Crane (2005), it involves avoiding products that can harm living organisms, contribute to environmental degradation during production or use, and consume excessive non-renewable energy. Factors such as increased accessibility to environmental information, companies promoting green products through advertising, growing environmental concerns, and the endorsement of green products by social and environmental organizations have all contributed to the encouragement of green consumerism, as supported by extensive research (Elkington, 1994; Ottman, 1992).

Earlier research has found that companies aim to enhance consumer awareness of the environmental characteristics of their products in order to promote purchase behavior, thereby creating awareness of green marketing specifically in relation to products (Prakash, 2002). The precise relationship between environmental awareness and environmentally conscious behavior remains uncertain. Previous studies conducted by Bonni and Oppenheim (2008), Maheswari and Malhorta (2011), and Tolliver-Nigro (2009) have indicated that environmental awareness has a limited impact on behavior. The level of awareness and understanding regarding the positive impacts of environmentally-friendly products on the environment can influence consumers' decisions to purchase and use such products (Murthy, 2010).

According to J.L. Wiener and A. Sukhdial (1990), individuals' perceived level of personal involvement in environmental protection plays a crucial role in their reluctance to engage in ecologically beneficial actions. The authors emphasize that although many people may express significant concern for the environment, they often believe that the responsibility for preserving and safeguarding it lies primarily with the government and/or large corporations. This viewpoint is likely to impact customers' willingness to invest in environmentally friendly products.

Objectives:

To explore PepsiCo's Green Marketing Communication Strategies.

- To examine the relation between PepsiCo's Green Marketing Communication and consumer's brand perception.
- To examine the difference in consumer brand perception and consumer purchase decision based on demographic characteristics in regard to PepsiCo's Green Marketing Communication.

Hypothesis

H1: There is a significant relation between PepsiCo's Green Marketing Communication and consumer brand awareness and perception

H2: There is a significant difference in consumer brand perception related to PepsiCo's Green Marketing Communication based on demographic characteristics.

Research Methodology

The present study is descriptive in nature. The study employs quantitative research

methodology and conducts survey as a part of it. The researcher uses purposive convenience sampling method and administers structured questionnaire to the respondents in the age group of 18-49 years and who are familiar with the marketing communication strategies of PepsiCo.

Sample size selected for study was 100 out of which 97 responded and the data has been analysed accordingly on SPSS using Exploratory Factor Analysis, Cronbach's Alpha, T-test and One way Anova.

Result And Findings

Table 1

	Purpose	Statistical Measures Used
Construct Validity		Factor Analysis: Exploratory Factor Analysis
Reliability		Cronbach's Alpha

Five Point Likert scale was used in the questionnaire which is considered to be the most favourable range for carrying out Exploratory Factor Analysis. This study is basically exploratory in nature and the researcher carried out EFA to arrive at factors that affect the brand awareness of PepsiCo's Green Marketing Communication Campaign.

Since the items of the measurement instrument were adopted from previous studies and were modified according to the suitability of the research objectives, Exploratory Factor Analysis (EFA) was first performed to examine the items categorization. Furthermore, to check the reliability of multiple question on likert scale, coefficient alpha reliability was also conducted on statements.

The data collected was analysed on SPSS version 21. For factor analysis, those items that had very low loading of less than 0.5 were deleted. Statements that were crossloaded were also deleted. This test also provides for that the correlation matrix has significant correlations among at least some of the variables. In this case the Bartlett's test of Sphericity reached statistical significance, which supported the factorability of the correlation matrix.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin	Measure	of Sampling Adequacy.	.875
	Approx.	Chi-Square	2447.260
Bartlett's	Test	df	561
	of Sphericity	Sig.	.000

Df- Degree of freedom, Sig- Significance

KMO is done to test and determine the robustness of the partial correlation (i.e., how the variables explain each other). A KMO level near 1.0 is considered desirable, whereas values less than 0.5 are considered unsatisfactory (Kaiser, 1974). Most experts now consider that such a KMO of at least 0.80 is sufficient for factor analysis to begin. In our results, for the dependent factor, we have a KMO value of 0.899 (refer table 2.1). This indicates that the degree of information among the variables overlap greatly or showing the presence of a strong partial correlation.

The initial instrument consisted of a total of 34 items (14 items on Awareness and perception towards Green Marketing Communication, 9 items on Consumer Awareness towards PepsiCo Green Marketing and 11 items on Consumer Brand Perception towards

PepsiCo Green Marketing). The KMO measure was .875 but from the 34 items 6 items' loading were not suited for the study therefore the items AP1, AP7,AP13, AP14,CA5,SC11 were removed and the result of the KMO test improved to .899 and is mentioned below in the table 2.1 and 2.2.

Table 2.1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin		Measure	of Sampling Adequacy.	.899
		Approx.	Chi-Square	2057.264
Bartlett's		Test	df	378
			Sig.	.000

Df- Degree of freedom, Sig- Significance

Table 2.2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.264	43.798	43.798	12.264	43.798	43.798	7.219	25.783	25.783
2	2.829	10.105	53.903	2.829	10.105	53.903	5.084	18.156	43.939
3	2.009	7.174	61.078	2.009	7.174	61.078	4.799	17.139	61.078
4	1.537	5.491	66.568						
5	1.131	4.039	70.607						
6	.874	3.120	73.728						
7	.721	2.575	76.303						
8	.689	2.461	78.764						
9	.635	2.269	81.033						
10	.597	2.133	83.166						
11	.532	1.899	85.065						
12	.501	1.788	86.853						
13	.446	1.592	88.444						
14	.382	1.363	89.808						
15	.344	1.230	91.038						
16	.324	1.157	92.195						
17	.322	1.151	93.346						
18	.269	.962	94.308						
19	.260	.929	95.236						
20	.236	.842	96.079						
21	.209	.746	96.825						
22	.189	.677	97.501						
23	.161	.576	98.078						
24	.150	.537	98.614						
25	.139	.498	99.112						
26	.103	.367	99.479						
27	.079	.282	99.761						
28	.067	.239	100.000						

Extraction Method: Principal Component Analysis.

The above table 2.2 explains the total variance in the remaining factors. The below points explain the same.

Table 3: Mean, Standard Deviation and Reliability

Construct	Mean	Variance	Standard Deviation	Reliability
Awareness and Purchase (No. of Items 10) Consumer Awareness towards Brand(No. of Items 8)	36.2784	48.411	6.95782	.885
	24.6701	46.078	6.78804	.906

Results from the reliability analysis presented in Table 3 indicated that the overall mean score, standard deviation and variance with the Cronbach's alpha values as .885, .906 and .944.

The Descriptive statistics for measurement scale for relationship depicted in the table 3.1 below. Six items (S1,S7,S13,S14,S19 and S34) were dropped from the relationship benefits scale during scale purification due to factor loading less than .5 and cross loadings.

Table 3.1: Descriptive Statistics for Relationship Benefits

S.No	Coding	Items	Factor Loadings	CronbachAlpha
Awareness and Purchase				
1	AP5	I tend to be more loyal to products from companies that sell eco-friendly FMCG products	.722	
2	AP10	My purchase habits are affected by my concern for environment	.696	
3	AP4	I am aware of the eco-friendly FMCG products and its advantages.	.672	
4	AP6	I am aware of Eco-friendly products utilization increases the quality of green environment.	.651	
5	AP8	It is important to me that the products I use do not harm the environment	.644	
6	AP2	I actively seek out environmental information about the product I buy.	.641	
7	AP12	I am willing to pay little extra to buy products that do not harm environment	.640	
8	AP11	I think that every person should urge his/her friends to use products that do not pollute or harm the environment	.627	
9	AP9	I would describe myself as an environmentally responsible Green consumer	.625	

10		I buy eco-friendly products as it is packaged in reuse, recycle, and refillable containers to protect the environment With the new communication strategy	.581
11	CBP6	With the new communication strategy PepsiCo is making people aware about the environment concern.	.831
12	CBP1	I am satisfied with the PepsiCo eco-friendly products because of its green environmental commitment.	.815
13	CBP3	I am satisfied with eco-friendly products as it offers less packaging and recyclable.	.799
14	CBP8	I would buy PepsiCo products after seeing the Green Marketing Communication	.775
15	CBP5	I appreciate the marketing communication strategies offered by PepsiCo	.767
16	CBP7	With PepsiCo green initiatives my perception towards the brand has changed	.944
17	CBP2	I am satisfied with the quality of eco-friendly products by PepsiCo	.756
18	CBP9	I support the noble cause PepsiCo is doing	.755
19	CBP4	The durability of eco-friendly products is satisfactory when it is compared with non-eco-friendly products.	.692
20	CBP10	Do you feel that green marketing communication initiatives of PepsiCo has helped in influencing your brand image of the company	.599
Consumer Awareness towards Brand's Green Marketing Initiatives			
21	CA1	I am aware that PepsiCo is going green	.791
22	CA2	PepsiCo delivers environmentally sound products that satisfy customer and society	.781
23	CA3	PepsiCo is successful in attracting customers due to its green marketing initiatives	.734
24	CA7	I know what is PepsiCo Positive	.669
25	CA4	I prefer PepsiCo's green products over other brands even if I have to pay more	.666
26	CA9	I buy PepsiCo eco-friendly products as it is packaged in reuse, recycle,	.906

		and refillable containers to protect the environment.	
27	CA6	PepsiCo is one of the leading companies who is working for sustainable development.	.567
28	CA8	I am willing to give up the quality of the product I am buying if it is made of recycled materials.	.511

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

Hypothesis Testing

H1: There is a significant relation between PepsiCo's Green Marketing Communication and consumer brand awareness and perception

Table 4

Correlations		
	AP	CA
Pearson Correlation	1	.300**
Sig. (2-tailed)		.003
AP	N	97
Pearson Correlation		.300**
Sig. (2-tailed)		.003
CA	N	97

**. Correlation is significant at the 0.01 level (2-tailed).

For the above hypothesis testing, correlation was done by using SPSS. The result is shown in the table 4. The result shows that there is a correlation is significant at 0.30 at 1% level of significance.

Therefore it can be said that there is a significant relation between Pepsico's Green Marketing Communication and Consumer's Brand Awareness and Perception. Thus H1 is supported.

H2: There is a significant difference in consumer brand perception related to PepsiCo's Green Marketing Communication based on demographic characteristics.

Table 5

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
CBP	Male	50	3.43	.797	.113
	Female	47	3.97	.519	.076

The table above shows the Independent sample t-test. The significance value is less than 0.05, so we conclude that there is a significant difference in consumer's brand perception related to PepsiCo's Green Marketing Communication of both male and female. It can also be concluded that gender effect is significant in Consumer Brand Perception related to PepsiCo's Green Marketing Communication (Table 5). Since the mean of male is less than the mean of female, it can be inferred that female consumers have a significant brand perception of the green marketing communication of PepsiCo.

Table 5.1
Independent Samples Test

			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	7.261		
	Sig.	.008		
	t	-3.911	-3.961	
	df	95	84.764	
Consumer Brand Awareness	Sig. (2-tailed)	.000	.000	
	Mean Difference	-.538	-.538	
	Std. Error Difference	.138	.136	
t-test for Equality of Means	95% Confidence Interval of the Difference	Lower -.811	-.808	
		Upper -.265	-.268	

An independent-samples t-test was conducted to analyse whether there is a significant difference in consumer brand perception related to PepsiCo's Green Marketing Communication with respect to both Male and Female. There were significant differences ($t(95) = (-3.911, p = 0.00)$) in the scores with mean score for Male ($M = 3.43, SD = 0.797$) was lower than Female ($M = 3.97, SD = .519$). The magnitude of the differences in the means (mean difference = $-.538$, 95% CI: $-.811$ to $-.265$) was significant. Hence, H2 was supported.

Examining Differences among Demographics on the basis of age

One-way ANOVA is used to analyse as to whether there is a significant difference in consumer brand perception related to PepsiCo's Green Marketing Communication with respect to age. For the purpose of the study four age categories were considered i.e., 18-25, 26-33, 34-41 and 42-49. However, the results of One-way ANOVA are presented in the table 6.

Consumer Brand Perception

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.248	3	.749	1.443	.235
Within Groups	48.310	93	.519		
Total	50.558	96			

The alternate hypothesis for one-way ANOVA is

H2: There is a significant difference in consumer brand perception related to PepsiCo's Green Marketing Communication based on demographic characteristics.

The p value computed above is more than 0.05 so, the alternate hypothesis is rejected

and we can say that there is no significant difference in Consumer Brand Perception across different age groups. So, a person belonging to a particular age group feels the same way than other people belonging to another age group. So H2 is rejected.

Conclusion

The Objectives set for the study have been achieved by using SPSS and have been appropriately presented in the paper. Furthermore, the hypothesis framed for the study have been statistically tested using EFA, T-Test, Anova and Correlation. Initially KMO is done to test and determine the robustness of the partial correlation and to check the reliability of multiple questions on Likert scale, coefficient alpha reliability was also conducted on statements. The objective of the paper is to explore PepsiCo's various green marketing communication strategies and its relation with brand perception and to examine the difference in consumer brand perception and consumer purchase decision based on demographic characteristics in regard to PepsiCo's Green Marketing Communication. To test the hypothesis the questionnaire was circulated to 100 respondents out of which 97 responses were analysed. The result of the KMO and Cronbach alpha are presented in the Table 2.1, 2.2, 3.3.1.

To test the hypothesis Correlation and T-test was applied. It was found out that there is a significant relation between PepsiCo's Green Marketing Communication and Consumer's Brand Awareness and Perception. It was also concluded that the gender effect is significant in Consumer Brand Perception related to PepsiCo's Green Marketing Communication. PepsiCo has engaged itself in promotion of green marketing strategies in the recent years and it is concluded that these strategies are playing a significant role in influencing Consumer's perception and brand awareness.

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