

A Study on Consumer Preferences Towards Various Attributes of Green Products

¹Bushra Hameed and ²Yasir Arafat Elahi

(MCN No.- IU/R&D/2019-MCN000732)

Department of Commerce and Business Management, Integral University

ARTICLE DETAILS

Article History

Published Online: 20 January 2019

Keywords

Green marketing, green consumerism, green product, environment, long term benefits

ABSTRACT

This paper glides through the various points of green consumerism why is it important for us and the planet with a massive majority of people trying to help out the environment in one way or the other for long term benefits whereas the regular consumer becoming more beware of chemicals and toxins present in their food. This study also explains green marketing and how various companies wear a garb of green marketing and are able to attract more customers. The pilot study for this project includes as a test set people of Lucknow and Kanpur where the data is collected keeping in mind the family income, qualification and other information mentioned on the label of a product which separates a green product from a non green product.

1. Introduction

“Green consumer refers to consumers who are concerned about the environment in their purchase behavior, activities associated with the marketplace and consumption habits and consider the effect of their behavior on the natural environment around them. However, these concerns are not only about the goods, but it is possible to influence on how green consumers travel or place they choose for working or vacation. In general, each consumer who shows the environmentally friendly behavior is called a green consumer.” (Shabani N., (2013

Green consumers are statistically aware and organized population, that is generally educated. Thus, their behavior is influenced by practical implications of products which are identified and are used for categorizing them. A ‘Green Consumer’ can thus be identified as anyone who has one or more of the following behavioral characteristics-

- environmental related motivation of consumers related to an extent to purchase choice, product use and post-use, household management, collective and consumer activism behaviors(K. Peattie, 2010)
- tendency to purchase and consume products with lower environmental impacts such as biodegradable products, recycled or reduced packaging, and low energy consumption(D. C. Pinto et al, 2014)
- use of organic products made with energy saving processes, then by recycling the product which has been used, infact a green consumer is one who purchases products and services perceived to have a positive (or less negative) influence on the environment (K. Haws et al, 2013)

2. Product attributes

Quality: Quality is the foremost concern of every individual buyer who buys a green product. Marketing strategies and trade gimmicks may provide an advantage over the other competing products to a product, but it is the product quality that will assist the product secure a continuous market place. In their research, Chang & Fong (2010) described how quality was an essential element of any product. and indicated through empirical data that product quality rating is directly co-related to

customer satisfaction and their brand loyalty. Johnson and Ettl (2001) explained that the quality of the product can be considered an outcome of its performance, or, in simpler terms its ability to fulfill the customers need without being in any defect. The attribute of quality in itself has many aspects of consideration like design, warranties, features etc. (Abdul-Muhmin, 2002).The company must be conscious that if businesses demonstrate equal interests through environmental action, the customer will demonstrate an investment in green products. The marketers are challenged to encourage a new item without informing customers of green products (Sweta Gupta, Deepak Singh, C.SThakur (March 2003)

High-quality products always impart more satisfying results to retailers, wholesalers and consumers alike because they are much more acceptable and dependable. (Schellhase et al., 2000).Further studies like (Mittal and Walfried, 1998; Eskildsen et al., 2004) also indicate that the product quality is a decisive factor which has a direct impact on the product performance, thus directly influencing the customer experience, his satisfaction, loyalty and also his intent of purchasing the product again.

Chemicals/ preservative/ pesticide free: Chemicals and preservatives sometimes become of an utmost importance for food products to increase their shelf lives. Reports of pesticides and other chemicals being added to a food product become a cause of concern for the customer. The customer thus faces a dilemma where they are unsure about the quality of the product since there is no way to detect the present impurities. Hartmann&Klaschka, 2017 had a general survey regarding awareness of harmful chemicals in food wherein they took inputs from the general public, teachers and university research fellows. There were 1300 participants in total out of which 10% of the highly educated participants did not have the knowledge if a given chemical was harmful for human consumption. A strong bias that was inferred from the general survey was that organically sourced and NGO based and promoted products are better and less harmful than those made by corporations. Becker et al, 2010 also indicated through their study how children with low body mass are prone to exposure to toxic compounds and chemicals like cadmium,

lead and phthalates present in toys and other products pertaining to adolescent use. They indicated through their study that since these children develop rapidly and have a lower immunity as compared to adults, such exposure can be deemed highly hazardous and prolonged contact to such chemicals can cause development anomalies and long term deformation effects. A solution that can be presented to this problem is basic chemical testing kits that can be used to detect most of the acids and pesticides present in the products with ease, thus providing people with a way to confirm that their food and other products are grown and sourced from non-hazardous and non-polluted source.

Product Certification: Product Certifications can be considered a primary method to create a unique standing of your brand in the minds of the consumers. are a way to make your product stand out and say that it has been verified by different agencies builds on a trust value in the consumers mind, but that only happens to a limit as private certification authorities will take fees the consumer usually looks forward to the government standards. A paper by Shwu-ing-wu, 2013 shows that because of the consumer awareness of ISO certified product has a positive influence on perceived quality but not on brand image, However perceived quality has a positive influence on brand image which goes on to have a positive effect on the purchase intention. All in all the research established that ISO Certification can be used as a key marketing factor.

Price : Pricing is a huge step in itself because you are putting a price to your service/product and then are expecting people to pay the exact amount. Bolton, 2009 said consumers are more sensitive to price increase than to the analogous price reduction. Also Balakrishnan et al, 2000 said that none of the special pricing techniques should be used too often otherwise the consumers will treat and perceive special prices as regular ones. according to Katarzyna Tulwin, 2014, more price sensitive buyers actually need lower price change to change their decision, also if the customer has a strong preference towards one product a strong incentive would be required to bring them to the other product.

Labeling information: Labelling on products has emerged as a primary tool (Cowburn and Stockley, 2005). As of 2018, India has a population of more than 1.3 billion with expected spending up to US\$1 trillion (PwC, 2012). The need for packaged food has grown since the early 1990's (Reardon and Minten, 2011). Over the most recent 20 years, there has been a right around 300 percent ascend in the utilization of bundled food and drink in creating nations, for example, India (Procter, 2007). In this advanced time of commercialization and web, individuals are getting increasingly mindful and demonstrating more prominent worry about what they eat (Latiff et al., 2016). The debate over Maggi noodles in India, which prompted a prohibition on it by Indian controller, to be specific, Food Safety and Standard Authority of India (FSSAI) over the unnecessary lead and mislabeling and which was later upset, Maggi's piece of the overall industry in the nation dropped by practically half (Bhusan, 2016). Before the presentation of superstores, the customary shop group empowered clients to be served straightforwardly by retailers (Turner, 1995), which in the new

organization of self-administration joined with a perplexing exhibit of pre-bundled food separates the customer from the learned wellsprings of food data (McIlveen and Semple, 2002). In these circumstances, food marks play a very significant role by spreading substantial dietary data to customers (Singla, 2010). The main objective of food labeling is to transfer information from the maker to the consumer (Van Boxsteal et al., 2014

Variety: This aspect in itself is very important as the unavailability of options cause a huge gap in the interest of the customer. Variety being the spice of life is a very important attribute as it defines the recurring sale possibility to the masses, particularly millennial who are more into the change.

Packaging: Another important aspect which defines how the products, good or bad, are being seen by the approaching customers. Rokka & Uusitalo (2008) found that "the largest consumer segment, one-third of consumers, favoured environmentally labelled packaging as the most important criteria in their choice. The findings emphasize the increasing importance of ethical and environmental dimension in product choices."

Pack-size: The availability of variation in the package sizes is important. New buyers usually don't like to spend a lot of money on trial and thus the availability of small packs, regular and wholesale discounted packages would also play a major role in attaining the loyalty and interest of potential customers.

Shelf life: This is an attribute that persuades loyalty in the consumers. Regardless of the unattaining factual aspects, it has been seen in studies that the longer a product can withhold itself, more are the chances of it being bought. The average price also increases by about 20% in such cases.

Green Products ' key effect:

1. Consumers have requested green products, i.e. the supply for such products was significantly higher.
2. Business has examined the green method-Generate global climate models, monitored, assessed and improved financial picture.
3. Green goods also have improved rivalry between companies to produce more eco-friendly products. In many nations, eco-labeling networks have been created that track and assess green goods. The lives assessment of these networks was carried out to know the effect of Products
4. Government has also adopted a number of initiatives supporting and facilitating such company movements.
5. Water: the use of water is double the rise in population. A great deal can be achieved at each stage.
6. Natural World: The population has increased and consumption has placed considerable stress on the natural world.

3. Green marketing challenges

Standardisation requirements: Only 5 percent of marketing messages from the 'Green' company are completely true and these claims are not authentically standardized. A green or

organic product is very hard to certify, given that there is no standardization. Without the involvement and certification of certain regulatory authorities or proof. For such labeling and certification, a normal quality control panel must be set up.

New conception: In India the advantages of green products are more trained and city customers become more conscious. However, there is still less literature. Consumers need to be trained and conscious of landscape ideas. New green activities need a ton of moment and energy to achieve the public. Indian customers recognize the significance of using organic and medicinal cosmetic goods through India's ayurvedic legacy. Indian consumers are subjected to good lifestyles such as fitness and natural eating. The customer is already conscious of these elements and will tend to embrace the green products.

Patience and perseverance: shareholders and companies need a long-term investment in the environment, marketers need to examine the longer-term advantages of this fresh environmental motion. It requires a great deal of patience and no instant outcomes. It will have its own approval span as it is a fresh notion and idea.

A few additional challenges

1. Green products involve expensive content for sustainable and recyclable use.
2. Needs a technology that demands enormous R&D expenditure.
3. The technology of water treatment is too expensive.
4. Most individuals are not conscious of the use and use of renewable products.

4. Objective of the study

The present study strives to ascertain the relationship between green consumers' buying behavior and product attributes.

5. Research Methodology

This research paper incorporates the data collected through online forms filled by the a sample audience of 24 individuals of mixed origin. The sample audience was pre-educated about the study and was given a basic understanding of the concept of 'Green Consumerism'. The audience was selected in general and it includes individuals of both genders, all educational qualifications, annual household income and other demographics to attain a diverse but reliable sample data. A questionnaire consisting of 10 questions was presented where the subject had to give a numerical rating to each question based upon personal understanding. The questions explored all major attributes of green products, and the range for answer was 1-5, where 1 being an indication of low interest and 5 being an indication of high-interest.

6. Data Analysis and Procedure

Upon the collection and consolidation of data, we move step by step through the statistical analysis. Firstly we analyze the internal correlation of the data through reliability test where we strive to find the value of 'Alpha de Cronbach' or Cronbach Alpha. We will be using IBM SPSS Statistics 22 analysis engine for our analysis.

Total Statistics of Collected Data (Table 1)

Raw Cronbach Alpha	Standarized Cronbach Alpha	Guttman's Lambda (G6)	Average Inter-Item Correlation
0.944	0.946	0.975	0.635

he above table shows that the overall reliability of the data is quite high, as indicated by the high values of both Cronbach's Alpha and Guttman's Lambda, both being above 90%. The average inter-term correlation factor, which basically

signifies the effect of one term over the others, is also at 63.5% thus indicating that the data acquired is quite correlated and is coherent.

Reliability if an Item is dropped (Table 2)

Items	Raw Cronbach Alpha	Standarized Cronbach Alpha	Guttman's Lambda (G6)	Average Inter-Item Correlation
Quality	0.938	0.94	0.968	0.633
Chemicals/Preservatives/Pesticides free	0.935	0.937	0.97	0.622
Health Benefits	0.931	0.934	0.965	0.612
Product Certification	0.934	0.935	0.97	0.616
Price	0.94	0.943	0.97	0.646
Labeling Information	0.936	0.937	0.968	0.623
Variety	0.941	0.943	0.97	0.646
Packaging	0.94	0.941	0.97	0.637
Pack Size	0.941	0.942	0.971	0.644
Shelf Life	0.947	0.949	0.973	0.674

The above table demonstrates how the reliability factors and correlation factor change when we remove individual attributes from the list. The fall in the internal correlation factor defines the higher influence of that particular factor over others.

In the above data, thus, it can be noted that Health benefits and product Certifications are amongst the most important factors of consideration.

Standardized Loadings (Table 3)

Quality	Chemicals/ Preservatives/ Pesticides-free	Health benefit	Product certification	Price	Labeling	Variety	Packa ging	Pack size	Shelf life
0.861	0.838	0.956	0.908	0.784	0.856	0.722	0.72	0.732	0.547

Average Item-Total Correlation (Table 4)

Items	Score
Quality	0.849
Chemicals/Preservatives/Pesticides free	0.873
Health benefits	0.931
Product certification	0.904
Price	0.799
Labeling information	0.866
Variety	0.788
Packaging	0.79
Pack size	0.77
Shelf life	0.615

The uniformity in the item-total correlation factor indicates that the data collected is significantly correlated and that our data is accurate. Table 4 however, also indicates that the health benefits and product certifications are amongst the most important attributes that influence product purchase. For further analysis of the data we would carry out bivariate analysis.

7. Result and discussion

This study found that there is positive and strong relationship between consumer buying behavior and the health benefits and product certification of green products. The results indicate that consumer buying behavior is largely influenced by factors like price, quality, product certification, health benefits, pesticide free, variety, labeling information, pack size and shelf life. Out of all the factors influencing consumer buying behavior, it was found that health benefits and product certification are the most important factors.

References

- Abdul-Muhmin, A. G. (2002). Effects of suppliers' marketing program variables on industrial buyers' relationship satisfaction and commitment. *Journal of Business & Industrial Marketing*, 17(7), 637-651.
- Becker, M., Edwards, S., & Massey, R. I. (2010). Toxic chemicals in toys and children's products: limitations of current responses and recommendations for government and industry.
- Chang, N. J., & Fong, C. M. (2010). Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. *African Journal of Business Management*, 4(13), 2836-2844.
- Damian Ryan & Calvin Jones, *Understanding DIGITAL Marketing Marketing strategies for engaging the digital generation*, Kogan Page, London and Philadelphia, ISBN 978 0 7494 5389 3.
- Eskildsen, J., Kristensen, K., Jørn Juhl, H., & Østergaard, P. (2004). The drivers of customer satisfaction and loyalty. The case of Denmark 2000–2002. *Total Quality Management & Business Excellence*, 15(5-6), 859-868.
- Hartmann, S., & Klaschka, U. (2017). Interested consumers' awareness of harmful chemicals in everyday products. *Environmental Sciences Europe*, 29(1), 29.
- J.A Ottman, et al, "Avoiding Green Marketing Myopia", *Environment*, Vol-48, June-2006 Mathur, L.K., Mathur, I. (2000). An Analysis of the wealth effect of green marketing strategies, *Journal of Business Research*, 50(2), 193-200.
- Johnson, M. D., & Etlie, J. E. (2001). Technology, customization, and reliability. *Journal of Quality Management*, 6(2), 193-210.
- Mittal, B., & Lassar, W. M. (1998). Why do customers switch? The dynamics of satisfaction versus loyalty. *Journal of services marketing*, 12(3), 177-194.
- Ottman, Jacquelyn. 1993. *Green Marketing: Challenges and Opportunities for the New Marketing Age*. Lincolnwood, Illinois: NTC Business Books.
- Oyeniya Omotayo, *Sales Promotion and Consumer Loyalty: A Study of Nigerian Telecommunication Industry*, *Journal of Competitiveness*, Issue 4/2011.
- Prothero, A. (1998). Green Marketing: The 'Fad' That Won't Slip Slide Away. *Journal of Marketing Management*, 14(6), July, pp. 507-513.
- Schellhase, R., Hardock, P., & Ohlwein, M. (2000). Customer satisfaction in business-to-business marketing: The case of retail organizations and their suppliers. *The Journal of Business and Industrial Marketing*, 15(2-3), 106-121.

14. Sarkar, A. N. (2012). Green branding and eco-innovations for evolving a sustainable
15. green marketing strategy. *Asia-Pacific Journal of Management Research and Innovation*, 8(1), 39-58.
16. Sharma D.D. (2008), —Marketing Research: Principle Application & Casesll N. Delhi, Sultan Chand & Sons
17. Unruh, G. And Ettenson, R. (2010, June). Growing Green; Three smart paths to developing sustainable products.
18. Wu, S. I., & Jang, J. Y. (2013). The performance of ISO certification based on consumer perspective: A case study of a travel agency. *Total Quality Management & Business Excellence*, 24(3-4), 496-518.