

Impact of Organic Product Attributes on Buyers' Buying Behavior with Special Reference to Health Consciousness

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ABSTRACT

Buyers' buying behavior refers to actions a person takes in purchasing and using goods and services, including the mental and social processes that come before and after these actions. Normally, Buyers' buying decision Process is a very complex phenomenon involving six stages namely, 'Problem Recognition', 'Information Search', 'Evaluation of Alternatives', 'Purchase Decision', 'Purchase' and 'Post-Purchase Evaluation'. Various marketing - mix, psychological, situational and socio-cultural factors influence the buying decision of an individual as well as of a household and shape someone as a separate consumer than others. Buyers' Behavior and Buying Decision Making has pointed out that marketing in India is growing through an indefinable phase and so also the changing role of consumer in making decision and the way in which the new generation of Indian consumer behaves. The characteristics of Indian families are changing under the influence of external factors such as liberalization and media explosion. Indian families are presently in a state of flux, shifting from being strictly hierarchical to more egalitarian in character. And the process of migration definitely has a big role to play in such transition.

Keywords: Organic products, price, attitude, Health consciousness, consumer satisfaction.

I. INTRODUCTION

Over the past decade consumption patterns of consumer has been changed especially in food consumption because most of the consumer are shifting towards organic food because of the his/her perception is to consume the organic food is good for health and it grows with use of organic manual and use of natural resources, because of which consumer's behavior got shifted towards organic food products, and quality and safety in food attract consumer interest in organic food that is free from pesticides and chemical residues. Organic agriculture is produced with an objective to produce healthy and quality foods without using synthetic chemical products. Thus, organic agriculture not only preserves the environment but it also improves public health, ringing significant benefits both to the economy as well as to the social cohesion of rural areas. The interest of consumers and public institutions in organically produced foods has increased, mainly in developed countries, in response to consumers' concerns about food safety, human health and the environment. The organic food market has grown continuously over the past decade, but, the total share of organic food is still small compared with the total food market.

IMPORTANCE OF THE STUDY

With rising concern of health issues and food safety, many consumers have turned their site to organic products. The increased consumers' interest in organic food has been attributed among others to the growing demand for food free from pesticides and chemical residues. Organic food promotes a balance of human, other living organisms and the nature. It also promotes no artificial preservatives and best maintain the originality of food. This prevents excess use harmful ingredients and thereby ensures health.

II. REVIEW OF LITERATURE

Review of literature is an integral part of any research study as it shows the direction towards which more research is required.

Harris et al.(2000) referred to food products that are described as organic or sustainable viewed as having a relatively less negative impact on the environment than directly competing products. Findings are reported on demographic variables, psychographic variables, willingness to pay, and consumer behavior. Consumers generally have a favorable attitude towards organic produce, and information and availability are the most important barriers to consumption.

Hughes (2002) reviewed documentations related to the consumer interest in evolving reform of the common agriculture policy as the demand for organic food products has risen sharply. Survey data shows that relatively small proportion of consumers account for the large majority of purchase of organic. Research on the ethical consumer indicates that 50% of consumers are concerned about ethical issues.

Torres-Moraga et al. (2008) reported that the relationship satisfaction-loyalty is significantly present when evaluating products alone albeit a weaker presence than when evaluating brand alone. The relationship satisfaction-loyalty is also present when evaluating product and brand combined, indicating that there is an intermediate position between product and brand.

Kumar et al. (2009) and explained the direct and indirect effects of individuals' self-concept, product-oriented variables and brand-specific variables on purchase intention toward a US retail brand versus a local brand that are available in the Indian market. Emotional value was found to be an important factor influencing purchase intention toward the US brand and the local brand as well.

Gurau (2012) conducted a life-stage analysis of consumer loyalty profile comparing generation X and millennial consumers. Life-stage model, the Millennia's and Generation X consumers included in similar life-stage groups displaying a highly similar pattern of brand loyalty behavior, and close preferences regarding the elements used for brand evaluation. On the other hand, the findings show important variations induced by the market-related situations, and by the different level of economic development of the two investigated countries.

Gupta (2012) studied the impact of globalization on consumer acculturation with respect to urban, educated, middle class Indian consumers indicates. It showed significant difference among various demographic segments with respect to predisposition towards foreign brands and consumer acculturation.

Dettmann (2008) reported that both industry and academic studies have investigated the demographic profile of the organic consumer, and to date, these studies have yielded conflicting results. This paper adds to the current body of literature by analyzing purchase and demographic data, in an effort to develop a demographic profile of the organic produce consumer.

Sangkumchalianga et al. (2012) has submitted to International food agribusiness review that the adoption of organic production and processing is highly determined by market demand. Therefore, this is reflected in consumers' perceptions and attitudes towards organic food products.

Bonti-Ankomah and Yiridoe (2006) concluded that a growing interest in organic agriculture has prompted numerous studies comparing aspects of organic versus conventional agriculture. A consumer-based approach to understanding organic agriculture is important not only in its own right, but also in terms of responses to changes in market dynamics.

Research Problem

Existing research studies on the similar topic gave an insight that not much has been written about the impact of organic food products on buyers' buying behaviour in less developed countries (as compared to developed countries) in general and India in particular. There has been a lot of research done on buyers' perception and behaviour but the research regarding the linkages between perceptions and shifting from conventional to organic food product is missing. So this research has been planned to develop a conceptual framework to find the specific reasons behind impact of organic product attributes in buyers' buying behaviour with special reference to health consciousness.

Research Methodology

For the purpose of conducting this study primary data was used. For Primary data a well -structured questionnaire was designed so as to take responses from consumers. And also literature was reviewed in very detail to analyze previous work done and to find out what limitations were remained in previous researches.

Data was collected through distributing questionnaire to the respondents and also purpose of the survey was discussed with them. The data was collected from the geographical area of major cities Punjab and Chandigarh. A five point (1–5) Likert-type scale has been employed for all item measures in the 500 questionnaire. The questionnaire consists of five sections i.e. Section A, B, C and D. All Questions are multiple choice and close ended on a scale 1 to 5. The sample is represented by 239 females and 261 males. Moreover, the sample belongs to various age groups namely 'up

to 30' (65.4%), 30-45 (24.8%), 45-60 (8%) and above 60 (1.8%). Sample is also scattered among the various income groups. 59.4 percent of the respondents have annual income up to 5 lakhs and 25.8 percent are in the category of 5 to 10 lakh and 9.2 percent were in 10 to 20 lakh and rest (5.6%) are in the category of rupees above 20 lakh. The sample is also spread over various education level groups. 2 % percent sampled individuals have attained the education up to the level of class 10 and 16.4 percent are from class 10+2 whereas 34.4 percent are having graduation. Rest of them 47.2 percent has acquired the post graduation and above level degrees. The data was collected through hard copy by meeting respondents face to face to increase the authenticity. The unit of analysis is individual.

III. RESULTS AND FINDINGS

Since demography of the sample has considerable bearing on the buying of the consumer. Hence, the respondent has been enquired about his demography in terms of age, gender, education levels and income group.

The age distribution of respondents has been presented in table given below. The table clearly shows that the sampled individuals are appropriately scattered in various age groups. The data has been divided into four age groups namely; up to 30 years, between 30 and 45, between 45 and 60 and above 60 years old. Out of 500 respondents, 65.4 % belongs to the category of up to 30 years of age and 24.8 % belongs to 30 and 45 also 8% of respondents were from 45 to 60 years of age whereas only 1.8% of the respondents were from age group of above 60 years. Therefore, more than 65% percent respondents are up to 30 years of age. Therefore, it is expected that they will adequately view of the organic products. People belong to the age group of 'up to 30 years' have substantial concern to new life style and buying is adequately represented in the survey. As education also has considerable impact on buying behavior of buyers.

Age wise distribution of respondents		
Age Group	No. of Respondents	Percentage
Up to 30	327	65.4
30-45	124	24.8
45-60	40	08
60 & above	09	01.8
Total	500	100

Gender wise distribution of sample respondents		
Gender	No. of Respondents	Percentage
Male	261	52.2
Female	239	47.8
Total	500	100

Gender plays a remarkable role in the buying behavior. For, various decisions in the family regarding the purchase of various products are dictated by the gender. For some products females are more aware than their counterpart and vice-versa. Moreover, some products are generally gender specific. More educated people are expected to have better knowledge regarding the organic products than the less educated.

Education wise distribution of respondents		
Level of Education	No. of Respondents	Percentage
Up to 10	10	2
10+2	82	16.4
Graduate	172	34.4
Post-Graduate & Above	236	47.2
Total	500	100

The different strata of society behave differently so far as the purchase of organic products are concerned. Moreover, higher income groups, generally, experience wide range of products. Therefore, they are expected to have better inclination towards organic food.

Income wise distribution of sample respondents		
Income Group (Annual)	No. of Respondents	Percentage
Up to 5 Lakh	297	59.4
5 to 10 Lakh	129	25.8
10 to 20 Lakh	46	9.2
Above 20 Lakh	28	5.6
Total	500	100

- That buyers' perception towards health consciousness for consumable goods, average scores of various factors are in a narrow range, from 73.76 % to 85.24%.
- That respondents' perception towards eco friendly consumable goods, average scores of various factors are in a narrow range, from 77.92 % to 84.84%.
- That respondents' perception towards eco friendly consumable goods, average scores of various factors are in a narrow range, from 75.68 % to 81.64%.
- That respondents' perception towards status and use of consumable goods, average scores of various factors are in a narrow range, from 74.16 % to 82.88%.
- That impact of product attributes in shifting from conventional to organic food products, average scores of various factors are in a narrow range, from 77.04 % to 86.72%.
- That role of buyers' trust in shifting from conventional to organic food products, average scores of various factors are in a narrow range, from 78.92 % to 83.88%.
- That role of life style in shifting from conventional to organic food products, average scores of various factors are in a narrow range, from 71.92 % to 78.72%.
- That the impact of advertisement on buyers' buying behavior in shifting from conventional to organic food products, average scores of various factors are in a narrow range, from 75.32 % to 78.16%.
- That the role of ethnocentric behavior impacting buyers' buying behavior in shifting from conventional to organic food products, average scores of various factors are in a narrow range, from 73.76 % to 78.52%.
- That the role of easy availability of organic food products impacting buyers' buying behavior in shifting from conventional to organic food products, average scores of various factors are in a narrow range, from 68.24 % to 72%.

IMPACT OF ORGANIC PRODUCT ATTRIBUTES IN BUYERS' BUYING BEHAVIOR WITH SPECIAL REFERENCE TO HEALTH CONSCIOUSNESS

A few questions in questionnaire were designed to get an idea of the impact of attributes (ranging from strongly agree to strongly disagree respectively on Likert scale of 1 to 5) of products in shifting from conventional to organic food products by the respondents. Based on the responses from all the 500 respondents, the average value (μ) and standard deviation (σ) were calculated. This score is plotted on a dot chart with respondents on X axis and score on Y-axis as shown in figure 1 below. The middle blue line corresponds to the average score (μ) of all the respondents, green line indicates the value $\mu + \sigma$ and the red line indicates the value $\mu - \sigma$. With the help of μ and σ , its respondent-wise status has been rated as follows:

Greater than ($\mu + \sigma$) : V. Good
 Between μ and ($\mu + \sigma$) : Good
 Between ($\mu - \sigma$) and μ : Fair
 Below ($\mu - \sigma$) : Poor

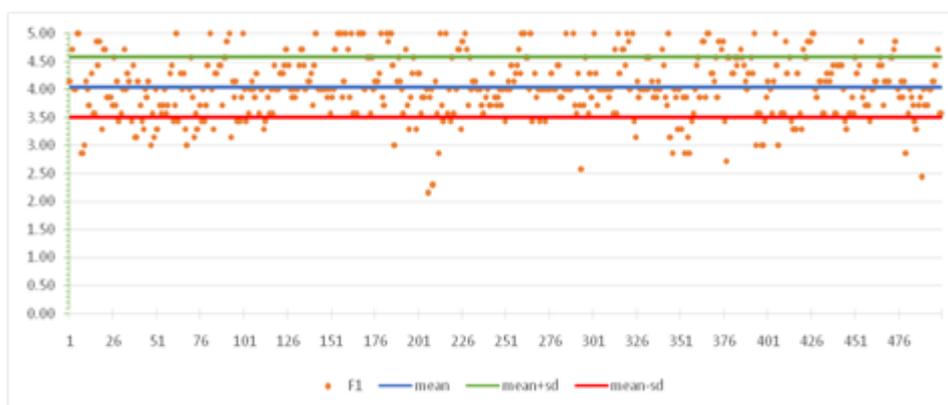


Fig 1 Impact of Product Attributes In Shifting From Conventional To Organic Food Products

The dot chart in figure 1 show that the impact of product attributes towards shifting from conventional to organic food products is very good in about 15.4% of the respondents' perception; good in 27.8% respondents whereas 42.6% are in fair range and remaining 14.2% are in poor range. Since all the respondents looking positively for their quality consciousness towards use of organic food products along with healthy habits adoption. The poor bracket with 14.2% respondents indicates that while shifting from conventional to organic food products in relation to impact of product attributes with quality consciousness, these respondents get fascinated by its outlook and benefits, but do not go for its detailed analysis. There are a few respondents in which the score of impact of product attributes for shifting in regard to health, taste, texture and nutritional value is far below the average.

Table: 1 Item Measure for Impact of Product Attributes In Shifting From Conventional To Organic Food Products

S.No.	Item measures for impact of product attributes in shifting from conventional to organic food products	Number of responses (Ni) with each score choice (Si)					Total Score	% age
		1	2	3	4	5		
1	They are healthy	2	6	24	258	210	2168	86.72
2	They taste good	1	14	102	265	118	1985	79.4
3	The fragrance of organic food is good	3	14	125	248	110	1948	77.92
4	They have high nutritional value	2	9	71	214	204	2109	84.36
5	The appearance of organic food is better	6	15	114	233	132	1970	78.8
6	Organic food has a pleasant texture	4	27	115	252	103	1926	77.04
7	They are fresher than conventional food	6	10	79	231	174	2057	82.28

Table 1 shows that average scores of various factors are in a narrow range, from 77.04 % to 86.72%. The highest score is awarded for they are healthy. The responses to these sub-factors were averaged to assess the overall status of impact of product attributes.

Table: II Understanding Impact of Product Attributes In Shifting From Conventional To Organic Food Products

S.No.	Ranking→ Understanding Parameter↓	No. of Respondents					Average Rating	Standard Deviation in Rating
		1	2	3	4	5		
1	They are healthy	2	6	24	258	210	4.336	0.663
2	They taste good	1	14	102	265	118	3.97	0.754
3	The fragrance of organic food is good	3	14	125	248	110	3.896	0.791
4	They have high nutritional value	2	9	71	214	204	4.218	0.781
5	The appearance of organic food is better	6	15	114	233	132	3.94	0.846
6	Organic food has a pleasant texture	4	27	115	252	103	3.844	0.836
7	They are fresher than conventional food	6	10	79	231	174	4.114	0.825

Table III Multiple Regression Analysis for Product Attributes (Step-Wise)

Dependent Variable		R	R square	Adjusted R square	F Significance	Durben Watson Statistic	
Product Attributes (F1)		0.645	0.416	0.411	0.000	1.623	
S. No	Independent Variable	B	Beta	Standard error	t-value	Significance	Tolerance
1	P4	0.311	0.311	0.43	7.210	0.000	0.635

2	P2	0.250	0.225	0.50	4.959	0.000	0.575
3	P3	0.151	0.148	0.46	3.278	0.000	0.579
4	P1	0.144	0.133	0.46	3.131	0.000	0.658

Table III shows that the multiple correlation coefficient (R), using these four independent variables simultaneously in stepwise method, is 0.645 ($R^2 = 0.416$) and the adjusted R^2 is 0.411, meaning that 41.1% of the variance in product attributes of organic food products can be predicted from four variables combined. As the results indicate that, status, eco friendly, quality consciousness and health consciousness are significant, but the other variables will always add a little to the prediction of the respondents. The corresponding f-significance = 0.000 is significant. This indicates that this combination of independent variables significantly predict the product attributes of the organic food products. The standardized beta coefficients are interpreted similarly to correlation coefficients or factor weights. The t value and the significance opposite each independent variable indicates whether that variable is significantly contributing to the equation for predicting dependent variable from the whole set of predictors. Thus, the status, eco friendly, quality consciousness and health consciousness, in this case, are the variables that are significantly adding anything to the prediction when the other variables are already considered. It is important to note that deleting any one of the independent variable, that is not significant, can affect the levels of significance for other predictors. The tolerance for each of these variables is > 0.589 ($1-0.411$), indicating that there is no problem of multicollinearity (overlap between independent variables).

CONCLUSION

Keeping in focus the perception of the consumer towards consumable goods in reference to health consciousness the factors that impacts the consumer most, they are focused towards eat a well balanced diet, control on their food to keep themselves stay fit and healthy, recommendation by doctors, dieticians and food consultants also affects the purchase decision of buyer.

Organic food products' attributes like their taste, texture, smell, appearance and high nutritional value impacts buyers' buying behavior and hence their shifting from conventional food products.

Keeping in consideration the above given results and findings along with discussion on them can help producers and marketers to well understand their prospective buyers and to formulate future marketing strategies to retain their buyers and to penetrate into new markets.

REFERENCES

- [1] Beharrell, B. and MacFie, J.H. (1991) "Consumer attitudes to organic foods", British Food Journal, Vol. 93, No. 2, pp.25-30.
- [2] Bloemer, Jose M. M. and Kasper, Hans D. P. (1994) "The impact of satisfaction on brand loyalty: urging on classifying satisfaction and brand loyalty", Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, Vol 7, pp.152-160.
- [3] Bonti-Ankomah, Samuel and Yiridoe, Emmanuel K (2006) "Organic and Conventional Food: A Literature Review of the Economics of Consumer Perceptions and Preferences". Final Report Submitted to Organic Agriculture Centre of Canada Nova Scotia Agricultural College P.O. Box 550, Truro, Nova Scotia B2N 5E3, Canada.
- [4] Dettmann, R. L. (2008) "Organic Produce: Who's Eating It? A Demographic Profile of Organic Produce Consumers", in Annual Meeting of the American Agricultural Economics Association.
- [5] Gupta, Nitin (2012) "The impact of globalization on consumer acculturation: A study of urban, educated, middle class Indian consumers", Asia Pacific Journal of Marketing and Logistics Vol. 24 No. 1, pp.41-58.
- [6] Gurau, Calin (2012) "A life-stage analysis of consumer loyalty profile: comparing Generation X and Millennial Consumers", Journal of Consumer Marketing, Vol. 29, No. 2, pp.103-113.
- [7] Harris, Brian, Burress, David and Eicher, Sharon (2000) "Demands for Local and Organic Produce: A Brief Review of the Literature", A Report of the Kaw Valley Project for Environmentally Identified Products, Institute for Public Policy and Business Research, University of Kansas. pp.1-58.
- [8] Hughes, David (2002) "Consumer Interests and the Reform of the Cap: A Review of Relevant Documentation and Research". Imperial College University of London.