

Consumers Perception and Factors Influencing Buying Organic Food in Ludhiana City

Abstract

The present study was carried out with objectives to analyse consumers' perceptions and factors influencing buying organic food in Ludhiana city of Punjab, during 2024. A total of 120 consumers were selected through the snowball sampling. Primary data was collected. Mean, frequency, per cent, one sample t-test, and factor analysis was used for the analysis of the data. The results of the study indicate that consumers buy organic food because it is healthier (4.40) and environmentally friendly (4.30). The quality and health benefits are important positive factors that influence consumers buying decisions. Lack of awareness and high price of organic food affect consumers buying decision. Two important factors were observed, one is the high price of organic food, and another is the quality and healthy product. Based on the results, there is a need to promote organic food and reduce the price of organic food through various channels.

Key words: Organic food, consumers, perception, factor influencing

Introduction

Global population continues to rise; ensuring access to high-quality food has become a universal challenge. Unfortunately, food produced using unhealthy practices can contribute to health issues. Bridging the gap between consumer expectations and market supply, especially in terms of quality and pricing, remains a significant hurdle (Beniwal and Patil, 2022). Most consumers do not understand the meaning of organic food. So the knowledge factor influences the buying behaviour of consumers. Therefore, there is a need to educate consumers towards organic foods and their benefits (Hill *et al*, 2002). Quality, emotional, and ethical values influence consumers buying behavior (Devakumar and Chowdappa 2018). Organic strategy proved to be one of the best competitive strategies in the aggressive global platform (Patnaik, 2018). Consumers' perceptions towards organic food can add many insights to the marketing of organic food (Sharma and Singhvi, 2018). Jiji and Priya (2019) stated that organic food is made from agricultural products that are free of chemicals and genetically modified materials. It aims to achieve a sustainable agriculture system. The public is becoming more aware of organic food because of health and environmental concerns.

Kushwahet *al* (2019) found significant associations between social, emotional, and epistemic values and ethical consumption intentions. Factors such as food quality, convenience and price, and support for local farmers significantly influenced consumer purchase intentions. Interestingly, support for local farmers had a negative impact. There is a need for marketing professionals, policymakers, and other stakeholders to promote the benefits of organically produced foods (Basha and Lal, 2019; Lal *et al*, 2019). In this context, a comparative study of consumers' awareness and buying behaviour towards organic food was undertaken with the objectives to analyse consumers' perceptions and factors influencing buying behavior of consumers towards organic food.

Review of Literature

Manvi and Nishanth (2019) identified three main factors that affect consumer perception of organic food i.e. health and weight, sensory appeal, and extrinsic value. Organic foods are processed minimally and naturally, without any chemicals (Nethra and Dhanaraj, 2019).Parmar and Sahrawat (2019) found that consumers are more health-conscious and prefer organic products that are free of chemicals and artificial fertilizers. Customers also preferred organic products over non-organic products for health, taste or texture or feeling and quality.Dangi *et*

al(2020)revealed that respondents perceived regular organic food buying as valuable and enjoyable. A more favourable appearance compared to conventional food is negatively related to behavioural intention of the consumers.Gupta and Aggarwal (2020);Ravindran and Priya (2023) observed that demographic factors and psychological factors help to differentiate between organic and non-organic consumers.Shrestha (2020) measured consumers'intention to buy organic foods and found that environmental concern, trust, and availability motivate organic food purchase intention. Marketers need to make organic food accessible and promote health and environmental benefits to build trust.Baydas *et al* (2021) majority of respondents stated that they had paid attention to the organic certification.Chaudhary and Ekta (2021) revealed consumers want to buy organic food products because they are local, affordable, valuable, safe, healthy, varied, and well-packaged. There is a link between consumers' satisfaction and organic food benefits.Krishna and Balasubramanian (2021) revealed that organic agricultural techniques diverge significantly from conventional methods, as they prohibit the usage of synthetic fertilizers such as pesticides, weedicides, and insecticides. Gumber (2022)revealed that higher prices pose a significant challenge for consumers in the markets, but addressing this can enhance their standard of living and promote organic product adoption.Kaur and Rana (2022);Kamboj *et al*(2023);Dharchana(2023)revealed key elements to promote organic products include price, subjective norms, health awareness, and availability. Additionally, age, education, and income play crucial roles in actual purchasing behaviour.

Research Methodology

Research design

The population of the study consists of consumers of Ludhiana city. The exploratory research design was undertaken for the attainment of the objectives.

Sample design and selection

To achieve the objectives of the study a sample of 120 consumers from Ludhiana city was selected through snowball sampling technique.The whole sample survey was taken in two ways. Some consumers were contacted at the institutes to check consumer knowledge about organic food. The consumers contacted were of mixed age groups.The consumers were contacted at markets and households of Ludhiana City who buy organic food.

Data collection

Primary data was collected from 120 sample respondents. Data was collected through a well-

designed, structured, and pre-tested questionnaire. The questionnaire was prepared based on the previous literature reviews and current updated facts related to the consumers' perception towards organic food. Literature reviews help in understanding various parameters to be included in the questionnaire. The questionnaire contains questions related to demographics, reasons of buying, perception, drivers and factors affecting buying behavior of consumers towards organic food. Respondents were asked scale-based questions. For a scale-based questions, respondents were asked to provide their responses on a point Likert scale indicating their level of agreement (5= Strongly agree, 4= Agree, 3= Neutral, 2= Disagree and 1= Strongly disagree). The respondents were enquired various questions based on age, gender, income, education etc. Questionnaires were examined and corrected by undergoing a pilot study with a group of ten respondents. All the corrections were incorporated in the final text of the questionnaire. Data was collected at the Ludhiana City during, 2024.

Data analysis

The data collected through the questionnaire were converted to a master table in Microsoft Excel. Further the collected data were grouped into tables and analyzed using various statistical tools like, mean score, frequency, percent, standard deviation, one sample t-test, and factor analysis.

Table 1: List of items included in the questionnaire

Items	Author(s)/study
Organic food is healthier than conventional food	Sharma <i>et al</i> (2014)
Organic food is expensive than non-organic food	Akhtar and Nisar (2016)
Organic food has is quality and healthy product	Baydas <i>et al</i> (2021)
Organic food has higher quality than conventional food, good in taste	Sharma <i>et al</i> (2014)
Organic food does not carry pesticide residues	Kumar and Ali (2011)
I buy organic food because of family and friend's recommendation	Zhen and Mansori (2012)
Organic food is fresh food	Ahmad and Juhdi (2010)
Organic food labels are easily understood	Kamboj <i>et al</i> (2023)
Not many organic products are available in the market	Yi L K (2009)
Organic foods are produced from organic farming methods	Malkanthiet <i>al</i> (2021)

Results and Discussion

Demographic profile of the respondents includes gender, age, education, income, occupation and family type of the respondents. Table 2 revealed demographic profile of the respondents. It can be seen that majority (52.50 per cent) were male and (47.50 per cent) were female respondents.

Table 2: Demographic profile of the respondents (n=120)

Particular	Frequency	Percent
Male	63	52.50
Female	57	47.50
Age of the respondents		
Below 18 years	16	13.33
18-25 years	53	44.17
26-30 years	15	12.50
31-40 years	12	10.00
41-50 years	15	12.50
Above 50 years	9.0	7.50
Education of the respondents		
Primary education	6.0	5.00
Secondary education	10	8.33
High school	13	10.83
Undergraduate	50	41.67
Postgraduate and above	41	34.17
Occupation of the respondents		
Student	61	50.83
Government employee	31	25.83
Self-employed	8.0	6.67
Housemaker	8.0	6.67
Private employee	12	10.00
Family income of the respondents		
Rs. 0 to 50,000	10	8.33
Rs. 51,000 to 1,00,000	63	52.50
Rs. 1,00,000 to 2,00,000	7.0	5.83

Above Rs. 2,00,000	40	33.34
Family type		
Nuclear	84	70.00
Joint	36	30.00
Total	100	100

(Source: Primary data)

Majority (44.17 per cent) belong to young age group between 18-25 years. Majority of the respondents (41.67 per cent) had education up to undergraduate level followed by (34.17 per cent) postgraduate level and (10.83 per cent) up to high school. Majority of the respondents (52.50 per cent) family income was below one lakh. Majority of the respondents (70 per cent) belong to nuclear family type.

Table 3: Reasons for choosing organic food (n=120)

Particular	Mean	Std. Dev.	t-value	p-value
Organic food is good for health and well-being	4.79	0.62	31.63	<0.001
Production of organic food is from organic farming	4.45	0.79	20.01	<0.001
Organic food is quality food	4.45	0.78	20.01	<0.001
Organic food does not carry pesticide residues	4.00	1.10	10.00	<0.001
Influence of family and friends who buy organic food	3.64	1.12	6.26	<0.001
You trust in organic certification process and regulations	3.55	0.98	6.11	<0.001
I am familiar with the certification and label for organic food	3.45	1.09	4.51	<0.001

Significance at 5 percent level of significance ($p < 0.05$)

Table 3 reveals that highest mean score was observed to the statement “Organic food is good for health and well-being” (4.79) followed by the mean score of the statement “Organic food is quality food” (4.45), “Production of organic food is from organic farming” (4.45) “Organic food does not carry pesticide residues” (4.00) “Influence of family and friends who buy organic food” (3.64), followed by the mean score of the statement “You trust in organic certification process and regulations” (3.55) followed by the mean score of the statement “I am familiar with the certification and label for organic food” (3.45).

Table 4: Consumers perception towards organic food (n=120)

Statements	Mean	Std. Dev.	t-value	p-value
I buy organic food because it is healthier than conventional food	4.40	0.90	17.08	<0.001
I buy organic food because it is more environment friendly than conventional food	4.30	0.91	15.59	<0.001
Organic food has higher quality than conventional food	4.31	0.79	18.05	<0.001
Organic food taste is better than other food	3.94	0.95	10.84	<0.001
Organic food gives positive impact on my health	4.35	0.82	17.89	<0.001
Organic food is easily available in my area	3.06	1.07	0.67	0.498
Organic food has trustworthy labeling	3.71	1.02	7.67	<0.001
I want to pay premium price for organic food	3.67	0.99	7.41	<0.001
I am influenced by my family and friends for buying organic food	3.67	1.22	6.04	<0.001

Significance at 5 percent level of significance (p<0.05)

Table 4 represents that majority of the respondents buy organic food because it is healthier than conventional food with highest mean score (4.40) similar results were reported (Sharma *et al* 2014) followed by the mean score of the statement “Organic food gives positive impact on my health” (4.35) “Organic food because it has higher quality than conventional food” (4.31) “Organic food because it is more environment friendly than conventional food” (4.30) “I buy organic food because it tastes better than organic food” (3.94) similar results were reported (Sharma *et al*, 2014) “Organic food has trustworthy labelling” (3.71) followed by the mean score of the statement “I want to pay premium price for organic food” (3.67) “I am influenced by my family and friends to buy organic food” (3.67).

The results of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity. This test is used to assess the suitability of data for conducting factor analysis. The KMO measure of sampling adequacy evaluates the proportion of variance among variables that can be accounted for by underlying factors. The KMO value found to be 0.77 and it indicate adequacy of sample for factor analysis and it is found to be significant (P<0.001).

Factor extracted

Factor extracted from the factor analysis includes the factor name, the percent of variance, explained by each factor, the items that load on each factor and their corresponding item

loadings, presented in the Table 5.

Table 5: Factor extracted

Factor	Factor Name	% of variance	Items	Item loading
1	Healthy and environment friendly	35.86	I buy organic food because it is healthier than conventional food	0.748
			I buy organic food because it is more environment friendly than conventional food	0.876
			Organic food has a higher quality than conventional food	0.727
			Organic food taste better than other food	0.661
			Organic food gives positive impact on my health	0.767
			I am influenced by my family and friends to buy organic food	0.525
2	High prices and market availability	20.39	Organic food is easily available in my area	0.653
			Organic food has a trustworthy labeling	0.834
			I want to pay a premium price to buy organic food	0.659

Factor definitions

Two factors were obtained from Principal Component Analysis. The factors are healthy and environment friendly and high prices and market availability. These factors were able to explain 56.25 per cent of variance in the original data set. Factor loadings have been presented in the Table 5 factor definition for the extracted factors have been provided as follows.

(i) Healthy and environment friendly

This factor deals with the information given by the respondents regarding their buying behavior towards organic food due to health benefits, environment friendly, high quality and better taste of organic food. These factors explain 35.86 per cent of variance in the data.

(ii) High prices and market availability

This factor deals with the information given by respondents regarding high prices, market availability of organic food. These factors explain 20.39 per cent of variance in the data. These factors primarily give the information about availability, trustworthy labeling and premium prices of organic food (Gumber, 2022).

Factors affecting buying behavior towards organic food

The respondents were asked about factors that affect their buying behavior towards organic food on a scale of (1= strongly disagree) to (5=strongly agree) their agreement or disagreement. The results were presented in the Table 6.

Table 6: Factors drive and affecting buying behavior towards organic food (n=120)

Particular	Mean	Std. Dev.	t-value	p-value
Organic food are quality products	4.57	0.77	22.28	<0.001
Organic food is beneficial for health	4.57	0.71	24.03	<0.001
I believe organic food do not carry pesticide residue	4.10	1.05	11.45	<0.001
I believe that price of organic food is high	3.99	1.07	10.12	<0.001
There is lack of awareness and promotion among consumers	4.01	0.93	11.91	<0.001
Lack of a reliable certification of organic food	3.78	0.91	9.34	<0.001
Organic food has a limited variety and choice of products	3.82	1.06	8.47	<0.001
I believe organic food is not easily available in market	3.73	1.22	6.57	<0.001

(Significant at 5 percent level of significance ($p < 0.05$))

It can be seen from the Table 6 that highest mean score was observed to the statement “Organic food are quality products” (4.57) followed by “Organic food is beneficial for health” (4.57) “I believe organic food do not carry pesticide residue” (4.10), followed by mean score of the statement “I believe that organic food is not well promoted or advertised in the market” (4.01), “I believe that price of organic food is high” (3.99) “Organic food has a limited variety and choice of products” (3.82) “Lack of a reliable certification of organic food” (3.78), followed by mean score of the statement “I believe that organic food is not easily available in the market” (3.73)

Factor extracted

The KMO value found to be 0.69 it indicate adequacy of sample size and found to be significant ($p < 0.001$). Factor extracted from the factor analysis, this includes the factor name, the percent of variance, explained by each factor, the items that load on each factor, and their corresponding item loadings, presented in the Table 7.

Table 7: Factor extracted

Factor	Factor Name	% of variance	Items	Item loading
1	Safety and limited availability	33.35	I believe organic food do not carry pesticide residue	0.725
			Price of organic food is high	0.508
			Lack of awareness and promotion	0.642
			Lack of a reliable certification of organic food	0.416
			I believe that organic food has a limited variety and choice of products	0.708
			I believe that organic food is not easily available in market	0.844
2	Quality and healthy	23.89	Organic food is quality product	0.888
			Organic food is beneficial for health	0.863

Factor definitions

Two factors were obtained from Principal Component Analysis. The factors are safety and limited availability and high nutritional value and healthy. These factors were able to explain 57.24 per cent of variance in the original data set. Factor loadings have been presented in the Table 7. Factor definitions for the extracted factors have been provided as follows.

(i) Safety and limited availability

This factor deals with the information given by the respondents regarding factors affecting buying behavior. These factors explain 33.35 per cent of variance in data. These factors primarily give the information about free from pesticide residue, high prices, lack in promotion and advertisement, reliable certification, limited choice and variety of products, less availability of organic food.

(ii) Quality and healthy

This factor deals with the information given by the respondents regarding quality and health benefits of organic product. These factors explain 23.89 per cent of variance in data.

Conclusion

The study found organic food is good for health, and organic food is quality food. Organic food is free from pesticide residue, and consumers prefer buying organic food. Consumers' perceptions were positive toward buying organic food. The finding of the study is valuable to the individual and marketers to understand the reason for choosing organic food among consumers. Higher price, limited availability, quality, and health concern were found to be two important drivers and factors that influence the buying decision of consumers towards buying organic food.

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