

Project Dissertation Report on Consumer Buying behaviour towards Organic Food Products

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EXECUTIVE SUMMARY

There has been an increment in demand for organic food items in various regions of the world since early twenty first century. The major reasons are expanding consumer awareness of purity, quality as well as food safety. However, the statistics demonstrates that consumption of organic food is still on the rise. In comparison to non-organic food, the proportion is minimal. A situation like this implies the significance of consumer behaviour research, especially the consumer's attitude toward purchasing food that is organic. The purpose of this study was to find influential points on behaviour of consumer towards organic food in Delhi-NCR region. It evaluates consumers awareness and knowledge levels towards organic food products. The “theory of planned behaviour (TPB)” formulated by Icek Ajzen around 1985 was utilised as the theoretical framework since it has been put to use in various studies that pertain to consumer behaviour since as early 1991. The data was collected from citizens of Delhi-NCR region. Simple Random sampling method was used to analyse the sample of data collected. A questionnaire was prepared through google forms and was emailed to emails that were available. The rest of the responses were acquired through the use of social media sharing the link to the form through WhatsApp and through the use of target messaging tools on LinkedIn. The responses were analysed through the use of MS Excel. The test used for analysis on the dataset was Chi-Square test along with Correlation coefficient.

The test showed that there is relationship between demographic factors of consumers and awareness levels of consumers regarding organic food products. The demographic variables which were considered were gender, income, age and education. The three constructs of TPB were also analysed using the same test and an association was established between consumer buying behaviour and the three constructs. Lastly, descriptive statistics was applied on some variables to analyse their effect.

LIST OF FIGURES

Figure 1.....	5
Figure 2.....	7
Figure 3.....	7
Figure 4.....	17
Figure 5.....	18

LIST OF TABLES

Table 1.....	12
Table 2.....	12
Table 3.....	13
Table 4.....	13
Table 5.....	14
Table 6.....	14
Table 7.....	15
Table 8.....	16
Table 9.....	16
Table 10.....	17

TABLE OF CONTENTS

1 INTRODUCTION.....	1
1.1 The Purpose of Research.....	1
1.2 Origins of Organic food.....	1
1.3 Significance of organic food in India.....	2
2 LITERATURE REVIEW.....	4
2.1 Guidelines of Government.....	4
2.2 Organic Food Trend.....	6
2.3 Factors influencing consumer's behaviour towards organic food products.....	6
2.4 Demographic Factors.....	7
2.5 Awareness levels regarding organic food.....	8
3 RESEARCH METHODOLOGY.....	9
3.1 About Theoretical Framework.....	9
3.2 The Research Method.....	9
3.3 The Questionnaire.....	11
3.4 Simple Random sampling method.....	11
4 RESULTS.....	12
4.1 Chi- Square Test for Awareness association with Demographics.....	12
4.2 Factors Affecting buying behaviour of consumers.....	14
4.3 Health Consciousness association with Consumer Buying Behaviour.....	17
4.4 Descriptive Statistics.....	18
5 CHALLENGES AND IMPLICATIONS.....	19
6 CONCLUSION.....	20
7 BIBLIOGRAPHIES.....	22
8 ANNEXURE.....	24

1 INTRODUCTION

1.1 The Purpose of Research

The research purpose of this study is to find trends in purchase of organic food products and factors affecting the consumer buying behaviour while purchasing the organic food products. Also further wants to study the consumer awareness and knowledge levels towards the organic food products. Lastly descriptive statistics was used to determine influence of variables like health-consciousness, trendy, high cost, easy availability and limited ads quantitatively on purchase of organic eatables.

The result presents the results of quantitative research methods. The data was gathered through Google questionnaires that were circulated among respondents through various social media platforms.

1.2 Origins of Organic food

During the early 1900's "the concept of organic farming" was coined by "Sir Albert Howard, F.H. The agricultural system was further improved by King, Rudolf Steiner with the methods and help of animal manure (often composted), crop covering, crop rotation, and biology-based pest control. Howard was posted as an agricultural researcher in India, he was inspired by the traditional and sustainable agricultural practices he encountered there and campaigned for recruitment in the West. These practices were recognised by certain ardent people like J.I., Rodale and his son Robert. They were so inspired that later they have published many texts on the journal "Organic Gardening and Farming" and organic farming since the 1940s. In the 1960's the main reason for increase in demand of organic food products was journal by Rachel Carson's "Silence Spring" publication. It documents the level of environmental damage caused by pesticides. Sales of organic foods have been steadily increasing since the second half of the 20th century. Awareness about the environment has been increased along with worries regarding effect on health due to pesticide residues and the eating of genetically modified (GMO) crops are one among the major reasons that boosted the growth of the organic sector. According to the data analysis in Developed countries like United States, retail sales increased from \$ 20.39 billion in 2008 to \$ 47.9 billion in 2019, while sales in Europe exceeded to \$ 52 billion in 2019. The prices of organic foods are generally higher than those grown by traditional methods. Depending on the season type, product type, supply and demand analysis, the price of organic food can be less than 10% to more than 100% higher than the price of agricultural products grown by traditional methods.

The main definition of organic food is plants or animal products grown without the use of traditional and harmful chemical fertilisers and pesticides, growth hormones, genetically modified organisms or antibiotics. It is grown ethically, environmentally, and socially responsible (Agricultural and Processed Food Products Exports Development Authority) (APEDA, 2018, March 31); (Paul and Rana, 2012); (Hill and Lynchehaun 2002). (Davies, Titterington, and Cochrane,

1995). Organic food consumption is frequently associated with an alternative lifestyle, such as active environmentalism, vegetarianism, and/or alternative medicine (Cicia, Giudice, and Scarpa, 2002). If we talk about data regarding the organic food sector since the last decade the it is seen that it is one of the fastest growing segments of the global food market. Since 1999, the global market for organic produce has grown fivefold (McCarthy, 2015).

1.3 Significance of Organic food in India

Only a few years ago, Indian organic food producers relied primarily on exports, as few domestic retailers trusted their products for prices slightly higher than traditional agricultural products. Retailers assumed that these products would not be sold. Organic production was also initially limited to fruits, vegetables and dairy products. Being free of harmful chemicals and lead, people slowly began to customize these products for their children. The organic market has begun to grow with growing awareness that inferior goods can cause life-threatening illnesses. It has expanded to grains, legumes, grains, tea, spices and even oil seeds. Increased demand has made it readily available in multi-brand retail stores and supermarkets. Five years ago, the ratio of organic food exports to domestic use was 75:25. It's almost the same now. With regard to India's organic market, including the beauty, personal care, health and textile industries, we see the largest growth in organic foods. The currently certified and organized organic market is around Rs 2,500 and is growing at a CAGR of 20%. The organic food industry has a promising future. Given the opportunities for many start-ups and the huge food market in India, many brands / companies are trying to diversify by trading organic foods. The trend towards organic food is now especially popular in urban metropolitan cities such as Bangalore, Mumbai and Delhi. More demand will result in increased production and a greater burden on the environment, until the demand cannot be met unless organic food production is increased. Organic India, 24 Letter Mantra, Morarka "Down To Earth," Conscious Foods, and Ecofarm are the top five organic food companies in India. Madhya Pradesh, Maharashtra, and Rajasthan are the top three Indian states in terms of organic agriculture area (ASSOCHAM and Ernst and Young, 2018). Fruits and vegetables (30 percent); cotton (29 percent); oil, seeds, and soybean (11 percent) are the most popular organic crops in India, followed by others, and globally, fruits and vegetables (36 percent) are the most popular, followed by dairy products (32 percent) and grocery (28 percent) (Hill, and Lynchehaun, 2002). The factors which contribute to significance of organic food in India are:

A) GOVERNMENT SUPPORT

The GOI has a major role in promoting the organic food industry. They are taking active steps in creating awareness about organic food and boosting organic farming, through implementing various policies and measures that favours its production. Our Honourable Prime Minister, Mr. Narendra Modi introduced Paramparagat Krishi Vikas Yojana (PKVY), which says that 2 lakh hectares land

should be made available for organic farming which will benefit more farmers to shift from conventional farming. There are also different provisions being made to provide financial assistance to farmers to motivate them to shift. From July 1, 2018, Food Safety & Standards Authority of India (FSSAI) made Certification mandatory for organic foods effective, which will regulate and standardize the industry. Consumers would have to no longer worry about the originality of it. Farmers can obtain certificate from one of the 28 third party certification agencies accredited by the “Agricultural and Processed Food Products Export Development Authority (APEDA)” under the “National Programme for Organic Production (NPOP)”. The other option is to get the certificate from Participatory Guarantee System India (PGS).

B) GENERAL AWARENESS

There is a rise in General Awareness among people about the importance of leading a healthy lifestyle. People are putting in efforts to stay disease free, physically and mentally fit in order to feel effective and happy. They exercise regularly, develop healthier eating habits, and stay healthy for the long term. People are beginning to realize that many illnesses can be prevented with proper care and precautions. Fear of illness leads people to take adequate dietary precautions. The level of food contamination from the ground causes people to worry about their health. Social media has also helped raise awareness of the harmful effects of chemicals used in agriculture. So, the overall awareness has increased and it is in the favour of organic food. People are asking questions, discussing and researching more about organic food. They are now adapting it more out of their personal choice as they are now more informed about it.

C) RISE OF ECOMMERCE

Over the years, Ecommerce has changed the definition of “market”. Varied ranges of products of every small or big brand, with competitive prices are at your display, to choose from. E-Commerce bridges the gap between manufacturers' geographic location and consumers by making it possible to buy what is manufactured / manufactured anywhere in the world with a single click. This makes organic products available in cities where they are not locally produced or are not available. This has increased the demand for organic foods. Internet access is now widely available, making it very cheap. This makes it easier for people to learn more about organic foods and their benefits and to meet the companies that trade them. There is an extensive coverage on internet regarding the ill effects of chemicals and pesticides and the need to live a natural and healthy lifestyle.

2 LITERATURE REVIEW

2.1 Guidelines of Government

The developing countries agricultural policies must specialise in increasing the productivity of the land under cultivation, with lower costs, higher efficiency of products with little or no damage to both humans and therefore the environment. Major Government initiatives that promote organic farming and production of organic food products include:

- 1. Paramparagat Krishi Vikas Yojana (PKVY)**
It markets cluster-based organic farming with PGS (Participatory Guarantee System) certification. Cluster formation, training, certification, and marketing are supported within the framework of the program. 50,000 rupees per hectare / three years are going to be provided, of which 62 percent (31,000 rupees) are going to be given as an incentive for organic input to farmers.
- 2. Rashtriya Krishi Vikas Yojana**
Support for promoting organic farming of assorted components is additionally available from Rashtriya Krishi Vikas Yojana (RKVY) with the approval of the State Sanctions Commission.

What does an "organic" sticker mean?

The U.S. Department of Agriculture (USDA) establishes, defines, and regulates the use and meaning of "organic" in food labels. It is a term used to describe raw or processed agricultural products and raw materials that are (a) organically grown (agricultural), (b) treated according to April 2001 standards and fully enforced from October 2002. These standards prohibit the use of the following:

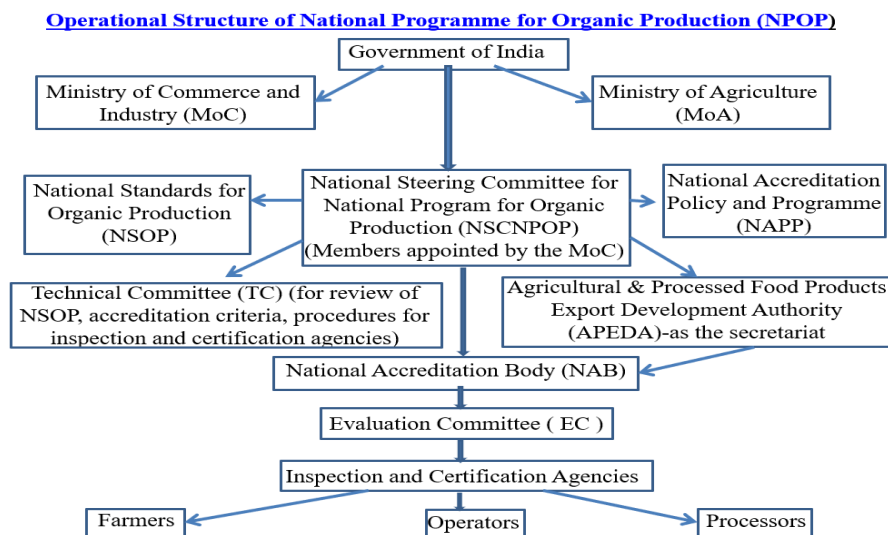
1. Most synthetic fertilizers and pesticides
2. Sewage sludge fertilizer
3. Genetic engineering
4. Growth hormone
5. Irradiation
6. Antibiotics
7. Artificial ingredient
8. Many synthetic additives

Scope and operating structure of the National Organic Program

The National Organic Production Program proposes to provide an institutional mechanism for implementing national organic production standards through national accreditation policies and schemes. The objectives of the national program for organic farming are:

- (A) Provide a means to evaluate organic farming certification schemes and products according to approved criteria.
- (B) Accreditation program
- (C) Promote certification of organic things in accordance with national rules for organic products.
- (D) Promote the development of organic farming and processing

Figure 1



Source: Mandal, A. K., & Sinha, O. P. (2014). Review on current research status on bottom ash: An Indian perspective. *Journal of The Institution of Engineers (India): Series A*, 95(4), 277-297.

2.2 Organic Food Trend

The world's largest organic farming think tanks, IFOAM (International Forum on Organic Farming) and FiBL, Institute for Organic Farming, published their latest research on the world of organic farming in 2018. India has overtaken Mexico and Uganda as the world's largest producer of organic food. According to a survey conducted by ASSOCHAM and EY in 2018 on the Organic Market in India: A New Paradigm for Agriculture, the market size of packaged organic foods in India will increase by 2021 from 533 million rupees in 2016. It is expected to exceed 781 million rupees. It grows at 17% every year. According to TechSci's research report (January 2018) "Indian Organic Food Market by Product Type Competition Forecasts and Opportunities, 2013-2023", the Indian Organic Food Market will have a CAGR of more than 23% by 2023. It is

expected to grow. It is a constructive government policy that supports and promotes organic farming in India.

2.3 “Factors influencing Consumers’ Attitude towards Organic Food Products”

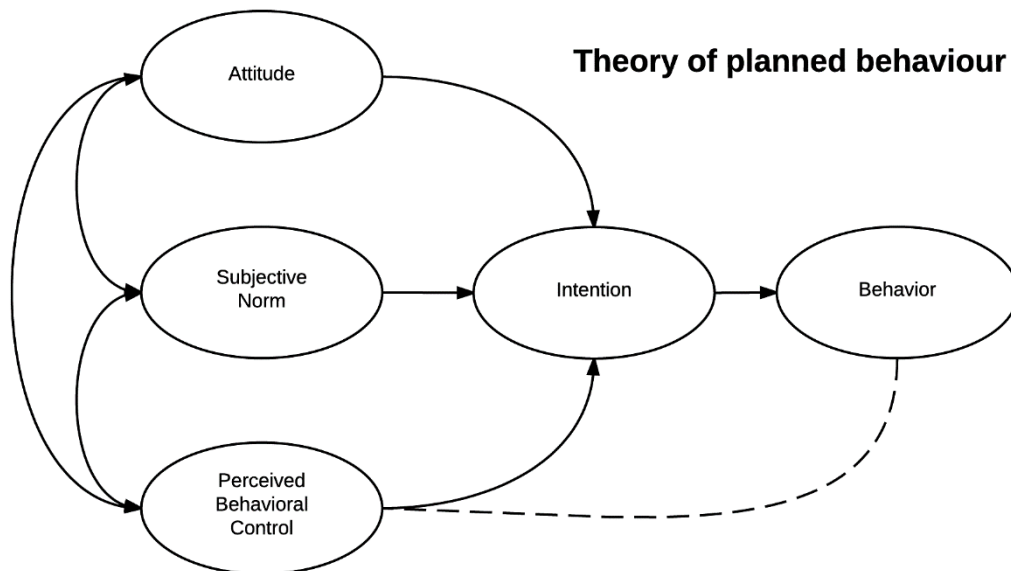
A 2013 study of "Consumer Insights on the Organic Food Market in Delhi – NCR" by Rekha Mishra and Neeraj Kaushik concludes that organic food marketing is a future trend in India's agricultural sector. It has great potential for marketing organic foods as it has not been thoroughly researched in India. Therefore, it is important to consider the factors that influence consumers' attitudes towards organic foods.

Although consumer profiles represent the normal buying behaviour of organic food shoppers, it is still essential to look at the factors that motivate such buying patterns in order to gain insight into the eating behaviour of organic food shoppers. (Hutchins & Greenhalgh, 1995).

"Theory of Planned Behaviour" and "Theory of Inferred Action" are one of the most commonly applied theories for determining consumer buying behaviour (Saba and Messina, 2003; Chen, 2007). Dean et al., 2008;). Both the theory of planned behaviour and the theory of rational behaviour conclude that behavioural intent leads to the individual's actual behaviour.

Theory of Planned Behaviour (TPB) may be a psychological theory that links beliefs to behaviour. Theory states that three core components: attitudes, subjective norms, and perceived behavioural control close to shape an individual's behavioural intentions. The TPB's belief is that behavioural intent is that the closest determinant of human social behaviour.

Figure 2

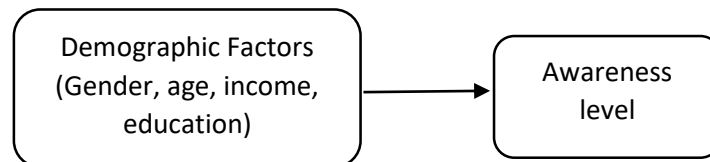


Source: Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50(2), 179-211.

2.4 Demographic Factors

Several studies have revealed that women seem to be more fascinated towards organics than men, and also purchase organic food more regularly than their counterpart (Lea and Worsley, 2005). Past Studies on organic food states that the people who purchase organic food are generally younger than those who do not purchase the same (Jolly, 1991). Thompson and Kidwell, 1998; Von Alvensleben, 1998; Fotopoulos and Krystallis, 2002 observed that on one hand the younger generation has more concern for environment but on the other hand they are less likely to pay more for organic products as their purchasing power is comparatively less than the older people. Moreover, older people are relatively more concern towards their health and are keener to shell out an additional amount for organic food (Lockie et al., 2002; Hill et al, 2002); Storstad and Bjorkhaug, 2003; Wier et al., 2003; Pellegrini, 2009; Coulibaly et al, 2011 emphasized that there is a direct relation between education and attitude of buyers towards organic product. “(Misra, S. K., Huang, C.L., & Ott, S.L., 1991; Buzby, J.C. and Skees, J., 1994; Wilkins et al., 1994; Thompson and Kidwell, 1998)” showed that education does not play a crucial role in purchasing decisions. On the contrary, a 2007 Durham study showed a downward link between education and organic food consumption. In addition, family children have been observed to have a good and direct effect on consumer attitudes and purchasing behaviour towards organic foods. The presence of children when shopping in a supermarket can also change a parent's purchasing decision when shopping in a supermarket. (Essoussi and Zahaf, 2008). High-income households are likely to have a positive attitude and intent to buy organic food (Grunert and Kristensen, 1991; Von Alvensleben, 1998).

Figure 3:



Source: Self

2.4.1 Health consciousness

Health awareness measures the likelihood of a person taking healthy behaviour. Health-conscious people are interested in their well-being, motivated, and seek to maintain their health and quality of life (Plank & Gould, 1990; Kraft & Goodell, 1993; Tregear et al., 1994; Newsometal. 2005). Previous studies have considered health awareness to be one of the most important factors affecting consumers when purchasing and consuming organic foods (Squires et al., 2001; Padel and Foster, 2005). Garcia and Magistris, 2007).

2.4.2 Environmental problems

Environmental protection has become a serious concern in recent years as the environment is constantly being damaged by careless practices in product manufacturing (Easterling et al., 1996). Consumers who are actively engaged in green consumption practices are expected to consume more organic foods (Lockie et al., 2004). Environmentally friendly consumers are more likely to be expected to buy organic foods. However, environmental issues are not the most important factor, but they do have some impact on consumers' consumption of organic products (Vermeir and Verbeke, 2006).

2.4.3 Subjective norms

Subjective norms are social pressures on an individual to track his or her behaviour and associate it with the behaviour of familiar groups such as family and friends. Such a norm is the belief that important people and groups prefer and prefer certain behaviours (Ajzen, 1991). There is a direct and positive relationship between subjective norms towards organic foods and consumer attitudes (Tarkiainen and Sundqvist, 2005). Indeed, subjective norms are recognized as a major factor in social impact that definitely influences behavioural intent (Ajzen and Fishbein, 1980).

2.4.4 Willingness to pay

Willingness to pay for organic products is an additional amount that consumers are willing to pay for organic products in addition to the amount charged for equivalent traditional products (Fillion and Arazi, 2002; Kalogeras et al., 2009). The main barrier to purchasing organic food is high prices (Tregear et al., 1994; Roddy et al., 1996; Magnusson et al., 2001; Zanolli and Naspetti, 2002). Therefore, willingness to pay is the focus of much research. According to some studies, some consumers are willing to pay more for organic foods, but most consumers are not willing to pay more for these products (Millock, 2002).

2.5 Awareness and knowledge levels regarding Organic Food

Several studies have found a link between demographics and perceptions of organic foods. The study showed that consumers distinguish between organic and non-organic foods by factors such as gender, family income, education, and occupational status. Psychological factors such as attitudes, perceptions, beliefs and intentions also show positive results. (Niranjan, 2017)

According to Lockie et al. (2004), age and income are important factors to motivate the purchasing willingness of organic food. Onyango et al. (2008) have investigated the consumers' opinions about the consequences of specific food attributes and private traits on organic food. Winter and Davis (2006) have concluded supported the results of the American organic food retailer named "Whole Foods Market", that the important reasons to prefer organic food were avoidance of harmful effects of agricultural chemicals, and consumption of genetically modified food products including having fresh and healthy eating. Olivas and Bernabeu (2012) have concluded that the organic food consumption are often considered the effect of an interaction between eating a healthy diet, showing respect for environment and therefore the individuals' sociability. Aaker (1997) regarded brand awareness to be a

remarkably durable and sustainable asset. Bhaskaran (2006) has reported that the increase in environmental awareness features a thoughtful effect on consumers' behaviour, with green product market intensifying at an interesting rate.

3 RESEARCH METHODOLOGY

3.1 About Theoretical Framework

To structure the literature review of the research the utilisation of the theory of planned behaviour was done. To understand the factors that affect purchasing decision of organic food in Delhi- NCR there is need to understand three construct which are as follows:

1. Attitude towards behaviour
2. Perceived control behaviour
3. Subjective Norms

These constructs were taken up from the renowned theory called the Theory of Planned Behaviour. It is a very useful theory and is used in studies related to consumer food choices since 1992. This theory gives idea that consumer's behaviour in choosing whether to buy or not buy anything is influenced by that person's motivation to do the deed.

Attitude towards Behaviour

Attitude can be best explained as negative or positive feelings a consumer has in why they are engaging in some behaviour. Attitudes are positive or negative learned attitudes towards people, things, or problems (Eagly and Chaiken1993). Consistent with this definition, in this paper, attitudes towards organic products are considered to be the level of consumer sentiment. Consumers tend to be more positive about organic products (Vermeir and Verbeke 2006), which increases consumer satisfaction. Regarding the relationship between attitude and satisfaction, there is empirical evidence that a positive attitude towards organic products influences the generation of satisfaction (Kim2018). Consumer satisfaction differs between organic and traditional products, with truly organic products tending to be more satisfying (Paul and Rana2012). This presents a chance for the sector of organic food, as the COVID-19 tragedy affects attitude of consumer for organic things for safer and fitter properties and can change consumer behaviour.

Subjective Norms

It is the consumer's perception of their reference group approval or lack of approval in matters concerning buying certain kinds of goods. This construct is a major influencer of intention to buy organic food products.

Perceived Behavioural Controls

This can be viewed as the ease one is able to carry out a given task or vice-versa the difficulty of performing the given task. It also looks into the assumption of challenges and blockages in performing the task. This measures the control of oneself and blockages in performing certain behaviour. (Asif et al.). The two major blocks to buy organic food products are price and availability.

3.2 Research Method

The data was collected with the use of Questionnaire on Google forms that was circulated via various social media platforms like WhatsApp, LinkedIn. To analyse data the use of MS Excel was done. In that I used Power Query to transform and clean data. The Chi-square test was performed to find associations between awareness levels and demographics (Age, Gender, Education, Income) of the consumers. The test was also used to analyse the three constructs given in “the theory of planned behaviour” along with correlation analysis. Lastly, descriptive statistics method was used to determine the influence of health-consciousness, trendy, limited ads, higher cost and easy availability of organic food products quantitatively.

3.3 The questionnaire

The questionnaire which was circulated had 16 questions in all. Initially the questions were related to demographics of the respondents which includes questions related to age, gender, income and education. It was proceeded by questions regarding the awareness of consumers regarding organic food products. Further questions were devised regarding consumer buying behaviour keeping the three constructs given in the theory of planned behaviour. These questions were created based on Likert Scale model where consumers had to choose from five options.

- “Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree”

3.4 Simple Random Sampling Method

The respondents from Delhi-NCR region were chosen randomly. Here, every person is picked totally by chance and every person of the population has an equal opportunity of being selected. The total number of responses were 166. The total number of females are 54 and males are 112.

4 RESULTS

4.1 Chi- Square Test for Awareness association with Demographics of Respondents

The chi-square test of independence compares two variables during a contingency table to ascertain if they're related. More generally, it tests whether the distributions of categorical variables differ from one another. The formula for the chi-square statistic used in the chi square test is:

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

The subscript “c” stands for degrees of freedom. “O” is the observed value and E is the expected value. The practical implication of this formula through hand is very rare. The summation symbol means to perform a calculation for every data item in the data set.

4.1.1 Gender

“H0: There is no association between Gender and Awareness level regarding organic food products.”

Table 1

Observed Values

Awareness	Gender		Grand Total
	Female	Male	
No	35	32	67
Yes	19	80	99
Grand Total	54	112	166

Expected Values

Awareness	Gender		Grand Total
	Female	Male	
No	21.79518	45.20481928	67
Yes	32.20482	66.79518072	99
Grand Total	54	112	166

4.1.2 Age

“H0: There is no association between Age and Awareness level regarding organic food products”

Table 2 Observed Values

Age	Awareness		Grand Total
	No	Yes	
18 years to 25 years	30	24	54
26 years to 35 years	20	34	54
36 to 50 years	1	27	28
Above 50 years	0	30	30
Grand Total	51	115	166

Expected Values

Age	Awareness		Grand Total
	No	Yes	
18 years to 25 years	16.59036145	37.40964	54
26 years to 35 years	16.59036145	37.40964	54
36 to 50 years	8.602409639	19.39759	28
Above 50 years	9.21686747	20.78313	30
Grand Total	51	115	166

4.1.3 Income

“H0: There is no association between Income and Awareness level regarding organic food products.”

Table 3

Observed Values

Income	Awareness		Grand Total
	No	Yes	
12 -36 lakhs	20	34	54
36 -60 lakhs	20	34	54
Less than 12 lakhs	34	12	46
More than 60 lakhs	0	12	12
Grand Total	74	92	166

Expected Values

Income	Awareness		Grand Total
	No	Yes	
12 -36 lakhs	24.07228916	29.92771	54
36 -60 lakhs	24.07228916	29.92771	54
Less than 12 lakhs	20.5060241	25.49398	46
More than 60 lakhs	5.34939759	6.650602	12
Grand Total	74	92	166

4.1.4 Education

“H0: There is no association between Education and Awareness level regarding organic food products.”

Table 4 Observed Values

Education	Awareness		Grand Total
	No	Yes	
12th pass	15	6	21
Graduate	4	56	60
Post Graduate	2	83	85
Grand Total	21	145	166

Expected Values

Education	Awareness		Grand Total
	No	Yes	
12th pass	2.656626506	18.34337	21
Graduate	7.590361446	52.40964	60
Post Graduate	10.75301205	74.24699	85
Grand Total	21	145	166

Table 5 showing the p-values of the Chi-Square test

Variable 1	Variable 2	Degree of freedom	p-value
Awareness	Gender	1	0.00**
Awareness	Age	3	0.00**
Awareness	Income	3	0.00**
Awareness	Education	2	0.00**

The demographic variables gender, age, income and education has a p-value of .000* but the extent of significance (.001) was more. So, the null hypothesis can be rejected and one can conclude that there is a statistically good association between awareness level and demographic variables like gender, age, education and household income of the people.

4.2 Factors Affecting buying behaviour of consumers

4.2.1 Selective Norms

“H0: There is no relationship between selective norms on consumer choice to buy organic food products.”

The main question used to analyse this construct was “Do you agree it is trendy to buy organic food products.”

Table 6 Observed Values

Trendy	Prefer and Buy		Grand Total
	No	Yes	
Agree	23	65	88
Disagree	16	1	15
Neutral	20	24	44
Strongly agree		17	17
Grand Total	59	107	166

Expected Values

Trendy	Prefer and Buy		Grand Total
	No	Yes	
Agree	31.27710843	56.72289	88
Disagree	5.331325301	9.668675	15
Neutral	15.63855422	28.36145	44
Strongly agree	6.042168675	10.95783	17
Grand Total	59	107	166

Here the p-value is 3.21074E-08 which is less than significance level 0.001. Hence, we reject the null hypothesis and we can say that there is association between selective norms on consumer choice to buy organic food products.

4.2.2 Attitude towards Behaviour

“H0: There is no relationship between Attitude on consumer’s intention to buy organic food products.”

The main question used to analyse this construct were:

“Q1. Though the organic food product is regarded healthy, the lack of trust on the originality of organic food product is a reason for not buying the organic food product. Do you agree?

Q2. Do you find organic food products tasty?”

Table 7

Observed Values

Attitude	Prefer and buy		Grand Total
	No	Yes	
Agree	24	21	45
Disagree	8	4	12
Neutral	23	60	83
Strongly agree	4	22	26
Grand Total	59	107	166

Expected Values

Attitude	Prefer and Buy		Grand Total
	No	Yes	
Agree	15.9939759	29.00602	45
Disagree	4.265060241	7.73494	12
Neutral	29.5	53.5	83
Strongly agree	9.240963855	16.75904	26
Grand Total	59	107	166

Here the p-value is 0.000414541 which is less than significance level 0.001. Hence, we reject the null hypothesis and we can say that there is association between attitude on consumer choice to buy organic food products.

Table 8

Observed Values

Tasty	Prefer and buy		Grand Total
	No	Yes	
No		35	27
Yes		24	80
Grand Total		59	107

Expected Values

Tasty	Prefer and buy		Grand Total
	No	Yes	
No	22.03614458	39.96386	62
Yes	36.96385542	67.03614	104
Grand Total	59	107	166

Here the p-value is 1.38793E-05 which is less than significance level 0.001. Hence, we reject the null hypothesis and we can say that there is association between attitude on consumer choice to buy organic food products.

4.2.3 Perceived Behavioural Control

“H0: There is no relationship between perceived behavioural control on consumer’s intention to buy organic food products.”

The main question used to analyse this construct was “Does higher cost of organic food products prevents you from buying them?”

Table 9

Observed Values

Costly	Prefer and buy		Grand Total
	No	Yes	
Agree	35	11	92
Disagree		8	8
Neutral	20	35	55
Strongly Agree		3	3
Strongly Disagree	4	50	8
Grand Total	59	107	166

Expected Values

Costly	Prefer and Buy		Grand Total
	No	Yes	
Agree	32.69879518	59.3012	92
Disagree	2.843373494	5.156627	8
Neutral	19.54819277	35.45181	55
Strongly Agree	1.06626506	1.933735	3
Strongly Disagree	2.843373494	5.156627	8
Grand Total	59	107	166

Here the p-value is less than significance level 0.001. Hence, we reject the null hypothesis and we can say that there is association between perceived behavioural control on consumer's intention to buy organic food products.

4.2.4 Correlation Analysis

Correlation is employed to check relationships between quantitative variables or categorical variables. Correlations are useful because if you'll determine what relationship variables have, you'll make predictions about future behaviour. A coefficient of correlation may be a thanks to put a worth to the connection. Correlation coefficients have a worth of between -1 and 1. A "0" means there's no relationship between the variables in the least, while -1 or 1 means there's an ideal negative or direct correlation.

Figure 4

	Healthy Score	Easily Available	Trendy	Limited Ads	Higher Cost	Prefer and Buy
Healthy Score	1					
Easily Available	0.237680959	1				
Trendy	0.39046632	0.213768776	1			
Limited Ads	-0.130518845	-0.180023903	-0.207052297	1		
Higher Cost	-0.05850269	0.073231616	0.101916515	0.057882451	1	
Prefer and Buy	0.526375876	0.119334559	0.321350002	-0.123165411	-0.010754767	1

Source: Self

- The health-conscious variable and trendy variable are highly related with buying behaviour which means that people prefer organic food because it is healthy and trendy.
- There is very less correlation between easily available and prefer and buy variable which means that people find it hard to buy organic food products because they are not easily available.
- The negative correlation of variable higher cost and limited ads imply that consumers don't prefer and buy organic food products because they are expensive and have limited advertisements.

4.3 Health Consciousness association with Consumer Buying Behaviour

“H0: There is no relationship between healthy food on consumer's intention to buy organic food products.”

Table 10

Observed Values				
Healthy	Prefer and Buy		Grand Total	
	No	Yes		
Agree		15	63	78
Neutral		44	22	66
Strongly agree			22	22
Grand Total		59	107	166

Expected Values				
	No	Yes	Grand Total	
Agree	27.72289157	50.277108	78	
Neutral	23.45783133	42.542169	66	
Strongly agree	7.819277108	14.180723	22	
Grand Total	59	107	166	

Here the p-value is less than significance level 0.001. Hence, we reject the null hypothesis and we can say that there is association between healthy food and consumer choice to buy organic food products.

The other key findings were that maximum respondents agreed that organic food products are very costly and it is one of the reasons why people don't prefer buying organic food products. The organic food product which is mostly preferred is organic fruits and vegetables followed by pulses and dal.

4.4 Descriptive Statistics

Figure 5

Healthy Score	Easily Available	Trendy	Limited Ads	Higher Cost
Mean	3.734939759	2.861446	3.46988	3.753012
Standard Error	0.052792536	0.072461	0.063185	0.052284
Median	4	3	4	4
Mode	4	3	4	4
Standard Deviation	0.680184242	0.933593	0.814078	0.673631
Sample Variance	0.462650602	0.871595	0.662724	0.453779
Kurtosis	-0.824110568	-0.07403	-0.56087	-0.24819
Skewness	0.385850143	0.190126	-0.51582	-0.02048
Range	2	4	3	3
Minimum	3	1	2	2
Maximum	5	5	5	5
Sum	620	475	576	623
Count	166	166	166	166

Source: Self

The data for health consciousness shows that data is positively skewed and it has the highest sum which indicates that majority people agree that organic food products are healthier and is one of the reasons to buy.

The data regarding availability of organic food products has negative kurtosis which means its peak level is less than normal distribution. The data shows that most people disagree that organic food is easily available which means it is a barrier in purchase of organic food products.

The data regarding trendy food shows that many people feel that it is a style statement to buy organic food products and they buy organic food products because it is very trendy and since other people are buying it so they do get influenced by them.

The data regarding Limited ads shows that majority people agree to the fact that very less ads are there to promote organic food products.

The data regarding higher cost shows that more than 50% people agree that organic food products are very costly which again is a barrier in purchase of organic food products.

5 CHALLENGES AND IMPLICATIONS

The challenge of finding relationship of intention of consumer to buy organic food products with subjective norms, attitude and perceived behavioural control was achieved by Chi-Square test but the relationship of intention of consumer with their behaviour was not put to test directly. This is one of the limitations of my research.

First of all, when doing descriptive analysis, the data set must contain a greater number of responses so that data can be represented well also greater number of questions that would measure the variables more accurately should have been incorporated. Further talking about things like eye-tracking which are part of neuromarketing techniques, which studies the in-situ behaviour of shoppers. These techniques give permission to understand more fully the behaviour of people than the survey method used.

According to the analysis there is lack of awareness regarding organic food products in low income and less educated segments. Government and Manufactures should devise good marketing campaigns to increase awareness about organic food products.

According to the findings there was a lack of trust among majority of consumers regarding originality of organic food products which prevented them from buying them. To increase trust regarding originality of organic food products in consumers manufactures should design beautiful packets which should have an eco-label that tells users about all the characteristics of the merchandise and may give trust to consumers

The other possible variables that have moderating effect, such as culture or country can also be studies as part of future work. The researcher also suggests adding constructs or variables in future studies such as alternate attractiveness, perceived cost, perceived usefulness, perceived performance, family member's role distributions etc. for better understanding of attitude and behaviours. Further, the impact of digitization on the sale of organic food products can also be studied in the future.

6 CONCLUSION AND DISCUSSIONS

The findings of the study are split into two parts. First part deals with Awareness level association with the demographic variables of the consumer. Second part deals with the theory (TPB) being used in the study which groups the major factors that influenced consumers buying organic goods.

1. Perceived Behavioural Control
2. Subjective Norms
3. Attitude towards behaviour

This theory was useful in structuring the research and giving a theoretical framework. It made understanding the subject at hand easy.

To understand the relationship between awareness levels and demographic variables of the consumer Chi-square test was used. The demographic variables in consideration were:

1. Gender
2. Income
3. Age
4. Education

Through the test it was concluded that there was an association between demographics of the consumer and their awareness level about organic food products. The p-values calculated for these variables were less than significance level of 0.001.

Same test was used to study association between buying behaviour of consumer and the three constructs of TPB namely subjective norms (trendy which means influence from others), attitude towards behaviour (positive or negative) and perceived behaviour control (challenges and barriers in buying organic food).

The test shows clear association between buying behaviour and the three constructs.

According to the analysis it is observed that males are more aware about organic food products than females. According to the data the awareness level has increased with age of respondents. The awareness level is more in segments of higher income group consumers. The awareness level was more in segments of consumers who are highly educated. There was a lack of trust among majority of consumers regarding originality of organic food products which prevented them from buying them. According to the data respondents felt there were limited ads on organic food products which affected them in buying these products negatively. The health-consciousness factor influenced people in buying organic food products positively.

According to the findings of the study, consumer behaviour plays a big role within the organic food products segment. Organic food marketers must be innovative and dynamic so as to satisfy the changing purchasing habits of urban residents for organic food products. the bulk of organic food consumers believed

that organic food products contained no pesticides, whereas the bulk of non-organic food consumers believed that organic food commodities were natural products. the first reason for purchasing an organic foodstuff was health concerns. Though the organic foodstuff was considered healthy, a scarcity of trust within the originality of the organic foodstuff was one more reason why the organic foodstuff wasn't purchased within the study area. As a result, the corporate producing and selling organic food products must find ways to create trust among consumers so as to extend their purchase intention.

Price should be reduced as people with low-income group are inclined towards purchasing non-organic foods. Businesses and governments should work together to promote innovation in the field of organic farming to reduce the cost of production. Better production and distribution at lesser cost will reduce prices leading to increased demand, which will in turn will lead to economies of scale and lower production.

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ANNEXURE

Questionnaire

Consumer Behavior towards the purchase of Organic food products

The data collected will be used for the research project for the completion of MBA course only.

Your Age: *

- 18 years to 25 years
- 26 years to 35 years
- 36 to 50 years
- Above 50 years

Your Household income: *

- Less than 12 lakhs
- 12 -36 lakhs
- 36 -60 lakhs
- More than 60 lakhs

Gender: *

- Male
- Female

Highest level of education: *

- 10th pass
- 12th pass
- Graduate
- Post Graduate
- PhD

Are you aware about organic food products? *

- Yes
- No

Do you agree that organic food products are healthy? *

- Strongly disagree 1 2 3 4 5 Strongly agree
- -
 -
 -
 -

Do you prefer organic food products in your diet and have bought it? *

- Yes
- No

Do you find organic food products tasty? *

- Yes
- No

What type of organic food products do you mostly buy? *

- Organic Beverages (like organic tea)
- Organic Fruits and Vegetables
- Organic Meat, Poultry & Dairy
- Organic Spices & Pulses
- Other...

Do you agree that organic food products are easily available? *

- | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Strongly disagree | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Strongly agree |

Do you agree that it is trendy to buy organic food products? *

- | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Strongly disagree | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Strongly agree |

Organic product advertisements are limited. Do you agree? *

- | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Strongly disagree | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Strongly agree |



Does higher cost of organic food products prevents you from buying them? *

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Are you aware that organic food products are free from chemical and pesticides? *

Yes

No

Do you feel Organic is just a luxury marketing promotion? *

Yes

No

Though the organic food product is regarded healthy, the lack of trust on the originality of organic food product is a reason for not buying the organic food product. Do you agree? *

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree