RESEARCH ARTICLE

LEVEL OF AWARENESS AMONG CONSUMERS TOWARDS ORGANIC PRODUCTS IN TIRUCHIRAPPALLI CITY

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ABSTRACT

India is emerging as one of the most significant developing countries for organic agriculture. Organic products are gaining importance in India. Consumption pattern of foods are changing quickly as a result of the nutrition's in food and health aspects. Thus, this study emphasis on the level of awareness of organic products among consumers in Tiruchirappalli City. For the purpose of this study 100 sample respondents have been undertaken for the analysis and the results show that respondents are aware of organic products through friends and colleagues.

INTRODUCTION

Organic farming was practiced in India since thousands of years. The great Indian civilization thrived on organic farming and was one of the most prosperous countries in the world, till the British ruled it. In traditional India, the entire agriculture was practiced using organic techniques, where the fertilizers, pesticides, etc., were obtained from plant and animal products. Organic farming was the backbone of the Indian economy and organically grown products are available in the markets but in limited amounts though the growing demands are there for such products. Increasing awareness about the benefits of consuming organic products are attached with intensifying health concern; so it drives the use of organic products in India.In current scenario, market for organic products in India is growing at a rapid pace over the last few years. Organic products are invariably catching up pace among the Indian retailers, especially with the niche retailers owing to wide awake in the midst of Indian consumers towards leading a healthy life. Thus this study attempts to focus the level of awareness among consumers towards organic products in Tiruchirappalli City.

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Tiruchirappalli city

Tiruchirappalli, better called as Trichy, is the fourth largest city of Tamil Nadu and the transportation center of the State. It is located on the banks of the River Cauvery on which the first man-made dam KALLANAI was built across. The world famous landmark in Trichy is the 85m tall Rock Fort right in the middle of the City, which used to be a military fort during the Pre-British era. Tiruchirappalli is one of the oldest inhabited cities located in the centre of the State of Tamil Nadu. It is a place of historic, cultural and economic importance. The district has a rich and varied cultural heritage. It is also known for its exquisite handicrafts, castings and South Indian musical instruments as the economy is mainly agrarian. The agriculture practice is sustained by a network of irrigation sources and improved methods of cultivation. Tiruchirapalli is a famous city in South India located on the southern bank of the river Cauvery. The Rock Fort rising abruptly from the plains to a height of 83 meters in the centre of the city is a famous land mark. The district is well known as an educational centre. There are now 3 Revenue Divisions, 9 Taluks and 14 Community Development Blocks. There are 471 Revenue Villages. Out of this, 431 villages are inhabited in this district. The urban frame includes 1 Municipal Corporation, 3 Municipalities, 17 Town Panchayats and 10 Census Towns in

Tiruchirappalli district. Tiruchirappalli Corporation has four zones; the selected zones are Srirangam zone, Ariyamangalam zone, Ponmalai zone and Abishekapuram zone.

Significance of the study

India has emerged as one of the largest potential markets for organic food spending worldwide owing that organic products are healthy, contain no chemicals or preservative as it is completely natural. Health awareness among consumers in major cities across India has been the key factor contributing towards growth in the market. Quality of organic products is to be better relative to conventional products.

The food produced by organic methods tastes better and contains an improved balance of vitamins and minerals and it creates positive environmental impact. Organic products include varied categories ranging from fruits, vegetables, dairy products, processed foods, pulses, food grains and other products such as beverages, confectionaries, snacks and organic cosmetics. The implementation of various standards to improve the quality and the organic food produced in the country is looking forward to push growth in India's organic food market over the next five years.

Statement of the problem

India is on the threshold of an organic revolution and the Indian organic food industry through at an embryonic stage has experienced a steady and fast growth in past few years. Currently food consumption patterns are changing rapidly due to the result of environment issues, and it focuses concern about the health factors, with increase in consumer's interest to procure the products. Organic products have been grooming these days and many are shifting their purchase behavior towards organic products. Keeping in mind the significance of this study it is very important to evaluate the level of awareness of the consumers towards the organic products which has been arisen as the need of the hour to give more attention to the shift undertaken by the consumers in their regular buying habits. It is, therefore important to determine how this drastic change has made consumers to take up innovative decisions in their purchasing power and follow up new changing style of purchasing products. Thus this study has been undertaken to focus the level of awareness among consumers towards organic products in Tiruchirappalli city.

Review of related literature

Renee Shaw Hughner, Pierre McDonagh, Andrea Prothero, Clifford J. Shultz II and Julie Stanton (2007), identified several themes that reflects various stimulus used by consumers when decides to purchase organic food. The organic and broader food industries must enhance to know the variety of motivations, perceptions and attitudes consumers hold regarding organic foods and their consumption if the own long-term interests in addition to those of other stakeholders of food marketing are to be best served.

Lucimar Santiago de Abreu, Sergio P. Mendes, Paul Kledal and Lucie Sirieix (2008), study focused on the consumption of agro-ecological products, based on a socioeconomic and anthropological approach which focus was on the motivation and the spending practices in the metropolitan region of Campinas, Sao Paulo State, Brazil. The purpose was to confirm that what level the consumer behavior shows cultural and economic values with reference to current ecological culture. Therefore, the understanding of cultural dynamics of each and every expenditure process can give meaningful to the current circumstance of local relations and global exchanges.

Joris Aertsens, Wim Verbeke, Koen Mondelaers and Guido Van Huylenbroeck (2009), paper aims to provide an overview, within a framework linking Schwartz values theory and the theory of planned behaviour (TPB). It seeks to focus on the importance of affective attitude, emotions, personal custom, involvement and ambiguity related to organic food consumption. Both the values theory and the theory of planned behaviour have been referred to related theories for better understanding consumer's choice for organic food.

Douglas H.Costance and Jin Young Choi (2010), their paper investigates the predictors of interest and the perceived blockade to organic acceptance among pragmatic conventional producers in Texas, compared to organic and conventional producers. The results indicate that more than forty percent of producers who currently have conventional operations have some interest in organic production.The paper conclude that increased institutional support facilitates organic adoption.

Jan P. Voon, Kwang Sing Ngui and Anand Agrawal (2011), study investigated the determinants incentive to purchase organic food products among consumers in a Malaysian city, using a survey. Thus indicates the efforts to promote consumption should focus on influencing consumer attitudes.

Georgios Saltavareas (2012), this study examined the presence of children is a significant factor affecting the buying behaviour towards organic products within the households. The potential profile is useful to any organization which anxiety for organic products as well as organic producers and marketers, giving them sufficient information to put into practice for effective marketing strategies.

Sonia Attanasio, Angela Carelli, Lucio Cappelli and Patrizia papetti (2013), their paper examines about the consumer's intention to purchase the organic food products in Pontina Province, Italy and 280 respondents were interviewed using semi-structured questionnaires .Thu the results indicated that the create buying intention organic products is influenced by the perception about the value of organic food products and belief on the health and safety of the product.

Ravi Nandi, Wolfgang Bokelmann, Nithya Vishwanath Gowdru and Gustavo Dias (2014), paper examines to gain knowledge about consumers preferences regarding the organic products purchasing place in Bangalore, India. The results revealed that the most preferred purchase places for organic products were specialized organic stores and supermarkets.

Tah Poh Leong and Laily Paim (2015), study focuses on the analysis of the factors that affect college students of Chinese and their intention to use organic food; 500 samples had through online questionnaire mailed. Thus the findings would assist to increase the local availability of organic food products in Malaysia

Tatiana Abusuniva (2016), study focuses on increasing consumer awareness about organic foods among Australia. The sample size chosen for the study is 1011 through online survey; based on demographic profile that support for the research hypotheses by revealing positive and significant effects of healthiest, hedonism and trust on consumer purchase intention.

OBJECTIVES OF THE STUDY

- To analyze the demographic profile and the level of awareness among consumers towards organic products in Tiruchirappalli City.
- To highlight the findings, suggestions and conclusion.

MATERIALS AND METHODS

This research is descriptive in nature and examines the level of awareness among consumers towards organic products in Tiruchirappalli city. The population of the Tiruchirappalli Corporation, as per 2011 census the population is 9,16,857 approximately for all the four zones in Tiruchirappalli Corporation has four zones; the selected zones are Srirangam zone, Ariyamangalam zone, Ponmalai zone and Abishekapuram zone. This study has been conducted during the month of December2016 to May 2017.

The statistical tools like percentage analysis, correlation analysis and factor analysis are used for analysis form the collected data. Primary data was administered to collect data through a well structured questionnaire using Rensis Likert's five point scales from 100 sample respondents using convenience sampling technique by adopting survey method. Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. Both primary and secondary data have been used for this study but the analysis was made mainly using primary data. Primary data were collected through structured questionnaire. Secondary data has been obtained from journals, websites and magazines. The collected data has been analyzed with the help of statistical packages namely SPSS 20 by using statistical tools such as Percentage analysis, Karl Pearson's Co-efficient of correlation, Reliability test, KMO/ Bartlett's Test, and Factor analysis.

Hypothesis of the study

- There is a significant relationship between the gender of the sample respondents and level of awareness.

Analysis and interpretations

The main objective of this study was to determine the level of awareness among consumers towards organic products in Tiruchirappalli city. The data collected from the sample respondents have been analyzed and interpreted for discussions. Statistical tools such as Percentage analysis, Karl Pearson's Co-efficient of correlation, Reliability test, KMO/ Bartlett's Test, and Factor analysis has been used to measure the level of awareness among the selected sample respondents towards organic products in Tiruchirappalli city.

Demographic profile

Factors	Classification	Frequency	Per cent
Gender	Female	87	87
	Male	13	13
	Total	100	100
Age (in years)	31-40 years	75	75
	41-50 years	5	5
	Above 50 years	20	20
	Total	100	100
Monthly Income (In rupees)	Below ₹25000	57	57
	₹25000- ₹50000	34	34
	₹50000- ₹100000	7	7
	Above ₹100000	2	2
	Total	100	100
Source of awareness	Television	10	10
	Friends and Colleagues	49	49
	Others	41	41
	Total	100	100
Level of awareness	Less than 1 year	85	85
	1 to 2 years	15	15
	Total	100	100

Source: Primary Data

From the above table out of 100 respondents, 87 percent of the respondents are female and 13 percent of the respondents are male. It is inferred that majority of the respondents are female. Out of 100 respondents, 75 percent of the respondents belong to the age group of 31-40 years, 5 percent of the respondents belong to the age group of 41-40 years and 20 percent of the respondents belong to the age group of above 50 years. It is inferred that majority of the respondents belong to the age group of 31-40 years. Out of 100 respondents, 57 percent of the respondents earn monthly income below ₹25000, 34 percent of the respondents earn monthly income between ₹25000-₹50000, 7 percent of the respondents earn monthly income between ₹50000-₹100000 and 2 percent of the respondents earn monthly income above ₹100000. It is inferred that majority of the respondents earn monthly income below ₹25000. Out of 100 respondents, 10 percent of the respondents are aware through television, 49 percent of the respondents are aware through friends and colleagues and 41 percent of the respondents are aware through newspaper, magazines and internet. It is inferred that majority of the respondents are aware through friends and colleagues. Out of 100 respondents, 85 percent of the respondents are aware about the organic products for less than 1 year and 15 percent of the respondents are aware about the organic products between 1 to 2 years. It is inferred that majority of the respondents are aware about the organic products for less than 1 year.

Hypothesis

There is a significant relationship between the gender of the sample respondents and level of awareness.

Karl Pearson's Co-efficient of correlation between gender of the respondents and duration of awareness

Variables		Gender	Durationofawarenesslevel
Gender	Pearson Correlation	1	.593[**]
	Sig. (2-tailed)		.000
	N	100	100
Durationofawareness	Pearson Correlation	.593[**]	1
	Sig. (2-tailed)	.000	
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary Data

H_0: There is no significant relationship between gender of the respondents and duration of level of awareness.

H_1: There is significant relationship between gender of the respondents and duration of level of awareness.

Findings

A Pearson's bivariate correlation was done with two variables: gender of the respondents and duration of level of awareness. The test yielded as significant result ($r = .593$, $p = .000$). Though the relationship is statistically significant, the relationship is good. Hence it is proved that research hypothesis is accepted.

Factor Analysis

Factor analysis is used to resolve a large set of measured variables/ statements in terms of relatively new categories, known as factors. This technique allows to group variables/ statements into factors and the factors so derived may be treated as new variables (latent variables) and their value is derived by summing the values of the original variables which have been grouped into the factor. Thus, Factor Analysis helps to reduce the complexity of large number of observed variables into new (latent) variables which summarize the commonality of all the variables.

Factors considered for the level of awareness to purchase organic products

Following are the factors measured for analyzing and identifying the level of awareness among the sample respondents considered before purchasing organic products. The 12 main factors identified are namely A1, A2, A3……A12 are given in the table below.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.612
Bartlett's Test of Sphericity	Approx. Chi-Square	507.218
	df	66
	Sig.	.000

From the above table reveals that (KMO) Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's test of Sphericity have been applied to the resulting correlation matrix to test whether the relationship among variables has been significant or not as shown in the table. Thus the result of test shows that the significant value of .000 and there is a significant relationship among variables chosen. KMO test is yielded a result of .612 which states that factor analysis can be carried out appropriately for these variables are taken for the study.

Reliability test

The most widely used measure to assess the internal consistency of constructs is Cronbach's alpha (α). The generally agreed upon value of Cronbach's alpha (α) is 0.70, although it may decrease to 0.60 in case of exploratory research (Hair et al. 2006; pp.137). In this research the reliability measure for the whole scale is 0.804 which is acceptable. Hence, the construct reliability in this research is satisfactory. The result of Cronbach's alpha (α) draws a

significant amount of correlation between the variables tested. The validity of a test is the extent to which differences in scores reflect differences in the measured characteristic. Predictive validity is a measure of the usefulness of a measuring instrument as a predictor. Proof of predictive validity is determined by the correlation between results and actual behaviour. Construct validity is the extent to which a measuring instrument measures what it intends to measure.

Reliability analysis for level of awareness		
No of Cases	No of Items	Reliability Coefficient Alpha
100	12	.804

From the above table, it is observed that the reliability of coefficient alpha (α) .804 for the 100 cases of 12 items are. (Scale range between 0.0 to 1.0) which shows the reliability of the given factors.

Rotated factor loadings on the level of awareness among consumers

Factors for the level of awareness	FACTORS				
	1	2	3	4	5
1. Nutritious and healthy	.813	.165	.051	.150	.052
2. Absence of synthetic pesticides and chemical fertilizers	.764	.237	.324	-.232	-.006
3. Labeling and packaging	.737	-.043	.329	-.438	.151
4. Brand name	.712	-.040	-.130	.139	.414
5. Eco-friendly	.603	-.145	-.064	.452	-.119
6. Certified organic products	-.008	.852	-.183	-.037	-.067
7. Price	.143	.761	.296	.423	-.020
8. Availability	.171	.592	.352	.161	.443
9. Taste	.103	-.156	.798	-.104	.300
10. Quality	.079	.260	.775	.298	-.186
11. Storage life	.009	.203	.117	.858	.006
12 Freshness	.106	-.006	.072	-.073	.925
Percentage of variance	22.813	15.802	14.475	12.822	11.607
Cumulative percentage variance	22.813	38.615	53.090	65.912	77.519

Source : Primary Data
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The above table illustrates that the principal component analysis and rotated factor loading method is used for stimulating factors. Form the above table; it can be helpful to examine a rotated solution. The Rotated Factor matrix makes it simple for taking decision. It is observed that out of 12 factors, 5 factors are identified by rotation method. They are Factor 1 has profound association between variable factors one to five loading factors are nutritious and healthy, absence of synthetic pesticides and chemical fertilizers, labeling and packages, brand name, eco-friendly and the percentage variance is 22.813 percent of total variance, factor 2 has affiliation between loading factors six to eight factors are certified organic products, price, availability and the percentage variance is 15.802 per cent of total variance, factor 3 has affiliation between nine and ten loading factors are taste and quality and the percentage variance is 14.475 per cent of total variance, factor 4 has eleven loading factor is storage life and the percentage variance is 12.822 per cent of total variance and factor 5 has twelve loading factor is freshness and the percentage variance is 11.607 per cent of total variance. Thus the total percentage of variation in the factors shows 77.519 per cent.

Limitations of the study

- The study is limited to geographical region of Tiruchirappalli City Corporation only.
- The analysis is purely based on the opinion provided by the sample respondents.

Findings

- More than three fourth of the respondents (75 per cent) are in the age group of 31-40 years.
- Majority of the respondents (83 per cent) are female.
- More than half of the respondents (57 per cent) earn a monthly income below ₹25000.
- Majority of the respondents (49 per cent) are aware through friends and colleagues.
- Most of the respondents (85 per cent) are aware about organic products less than 1 year.

Suggestions

This study suggests that organic products stores can develop effective marketing strategies to influence consumers positively and to convey more relevant information to consumers. There is a vital need of creation of awareness of organic products among consumers and it is very much necessary to position the organic food products by their specific attributes. The organic products are too expensive than non-organic products so the organic consumers are not afford to purchase more quantity of products.

Conclusion

The consumers can emphasize the health benefits, safety and quality of organic foods and product. So, Consumers are attracted to organic foods and products and they are aware that organically grown foods and products are safer and less risky. Educational materials that could broaden the organic consumers through advertisements based on that the need of organic to be developed. Organic product can be a healthier and it creates better for the environment.

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