An Analysis of Preference of Organic Food Products by the Consumer in Theni District, Tamil Nadu

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Abstract

In this competitive World, Organic food plays important role in Consumer Preference Level. Today’s people are given more importance to their health more than money. There is several Organic companies providing food products; in this study, they commonly take Organic food products. The consumers who get Preference on Organic products started to buy and utilising their regular Consumption. This stimulates the research to know - why the Consumers Preference Level on the Organic foods. Which factors influence Consumers Preference Level?

Keywords: Consumer Preference, Organic foods, Food Products, Theni District, Tamil Nadu

Introduction

India is the origin of Organic farming. Organic food defines,”foods produced by Organic farming”. Organic food is grown; nature is originally intended, without artificial flavours and grown without pesticides and chemical fertilisers. Currently, manufacturers in the United States, the Western Countries, Japan and many of the countries are required to obtain special certification to market Organic food within their border. Organic food is a by-product of farming methods that avoid artificial artificial chemicals, hormones, antibiotics, growth regulators and livestock feed additives. The use of radiation and Genetically Monitored Organisms (GMOs) or GMOs is generally prohibited by organic laws.

Organic food has always been seen as a healthy option. Still, it is only in recent years that the concept has become not only a national phenomenon, but also a Global phenomenon with consumers of food products. In the past, organic food was sort of a fad and although the principles were applied, they were by no means mainstream.

Facts Based on the Study

The following objectives are the Facts based study

- To observe the reasons for selecting Organic food products.
- To estimate the Level of Preference for Organic food products.
- To identify influence factors, the Consumers Preference Level of Organic food products.

System of Research Method

Data Source

A study based on preliminary data collected from interviews of 240 Organic food preference consumers in Theni district, Tamil Nadu by adopted a convenient sampling strategy. From World Health Organization (WHO) report,
company annual reports, articles on journals, magazines and websites Secondary data and information. Preliminary data were collected from August 1 to September 10, 2021.

**Structural Work Analysis**

The data is presented in tabular form, indicating the various reactions of the Organic food preference consumer. The analysis is done using the Simple percentages age test and Chi-square test.

**Sample Design**

Sixty consumers from each Periyakulam Taluk, Bodinayanur Taluk, Andipatti Taluk and Nallapalayam Taluk in the Theni district and a total of Two hundred and forty Organic food preference consumers have been selected using convenience sampling techniques to express consumer preference over Organic food in Theni District. Tamilnadu.

From Organic food stores and Departmental stores, organic food consumers identified and questionnaire issued to them. For easy understanding of the survey questions to the Local consumer language – Tamil prepared schedule issued.

**Indexes are used**

Preference is calculated. The index score is calculated as follows:

\[
\text{Index Score} = \frac{\text{Total Score}}{\text{Maximum Score of Respondent Customer}} \times 100
\]

Simple percentages and Average and Standard deviations (SD) were calculated. Index scores are classified as low, medium, and high based on the Mean plus or minus SD. The Mean minus the SD is classified as Low, the Mean plus the SD is classified as High, and the Mean between a high score and low score is classified as Medium.

**Study Area Profile**

Tamil Nadu is the 11th largest geographically and the 6th most popular State in India. It is the 6th largest State in India according to the Human Development Index in 2011 and is the 2nd largest State economy in India with a GDP of Rupees 4789 billion (US $ 72 billion).

The State has the largest number of Commercial Enterprises (10.56 percentages) and ranks second in Total Employment in India (9.97 percentages), while the Population share is around 6 per cent.

**Analysis and Justification**

Objectively based on the study the various determine factors of the Preference level of Organic Food Products by Consumers discussing in follows:

**Residence Area and Preference**

The following hypothesis is designed to determine the preference between Organic food product Consumer residence area and level of preference.

\[ H_0: \text{Residence Area and Level of Preference have no relationship.} \]

**Table 1: Relationship between Residence Area and Preference Level (in bracket %)**

| Variables | Preference Level | Population N = 240 | \( \chi^2 \) Value | ‘P’ Value |
|-----------|-----------------|--------------------|-----------------|-----------|
|           | Low \( n = 56 \) | Medium \( n = 158 \) | High \( n = 26 \) |            |
| Rural     | 28              | 82                 | 18              | 128       |
| Resident  | Semi            | (21.6)             | (64.1)          | (14.3)    |
|           | 14              | 18                 | 6               |           |
| Urban     | (24.2)          | (65.5)             | (10.3)          | 58        |
|           | 14              | 38                 | 2               | 2.1497    |
| Area      | Urban           | (25.8)             | (70.5)          | (3.7)     |
|           | 54              |                    |                 | 0.705     |

Table Information: Computed from Primary Data

Table 1 shows that among 240 Organic Food Product Consumers, 128 of them are residing in rural, and among most of them live in rural areas, with 82 (64.1 percentages) of Organic food consumers having a Medium preference level of 28 (21.6 per cent) and respondents consuming 18 (14.3 percentages) of Low levels of Organic food products. Consumers with High preference positions the 58...
respondents living in Semi-urban areas, the majority were 38 (65.5 percentages) Organic food products consumers with Medium preferences, and 14 (24.2 percentages) respondents were consumers with the Lowest preference level 6 (10.3 percentages)—priority status. Among the 54 responding consumers residing in Urban areas, the majority of the 38 (70.5 percentages) Organic food products consumers have a Medium level of preference, 14 (25.8 percentages) has a Lower preference level consumers, 2 (3.7 percentages) of responding consumers have a High Preference.

If the calculated Chi square value is 2.157 and the ‘P’ value is greater than 0.71, the null hypothesis (H0) is accepted. Therefore, it is expected that there is no relationship between the acceptance of the Residence Area and the Preferences.

Sex
To examine the relationship between Sex and the Degree of Preference for Organic food product Consumers, the following hypothesis was formulated.

\[ H_0: \text{Sex and Level of Preference have no relationship.} \]

Table 2: Relationship between Sex and Preference Level (in bracket %)

| Variables | Preference Level | Population N = 240 | \( \chi^2 \) Value | ‘P’ Value |
|-----------|------------------|-------------------|------------------|-----------|
|           | Low n = 56       | Medium n = 158    | High n = 26      |           |
| Sex       |                  |                   |                 |           |
| Male      | 29 (30.8)        | 56 (59.6)         | 9 (9.6)          |           |
| Female    | 26 (17.8)        | 103 (70.5)        | 17 (11.7)        |           |

Table Information: Computed from Primary Data

Table 2 shows that among 240 Organic Food Product Consumers, the 94 male responding, 56 (59.6 percentages) respondents were in the Medium preference position, 29 (30.8 percentages) were in the Low preference and 9 (9.6 percentages) were in the High preference position. Of the 146 female respondents, 103 (70.5 percentages) were in the Medium Preference category, 26 (17.8 percentages) were in the Low preference category and 17 (11.7 percentages) were in the High preference category.

The calculated Chi Square value is 3.282 and the ‘P’ value is 0.193. Since the ‘P’ value is > 0.05, the null hypothesis (H0) is accepted. Therefore, it is assumed that there is no relationship between Sex and Preferences.

Age
The following hypothesis is designed to identify the relation between the Age and Preference level of the Organic food product consumer.

\[ H_0: \text{Age and Level of Preference have no relationship.} \]

Table 3: Relationship between Age and Preference Level (in bracket %)

| Variables | Preference Level | Population N = 240 | \( \chi^2 \) Value | ‘P’ Value |
|-----------|------------------|-------------------|------------------|-----------|
|           | Low n = 56       | Medium n = 158    | High n = 26      |           |
| Age       | Up to 18         |                   |                  |           |
|           | 4 (25.0)         | 10 (62.6)         | 2 (12.4)         |           |
|           | 50 (26.8)        | 116 (62.4)        | 20 (10.8)        |           |
| Age       | 41 and above     |                   |                  |           |
|           | 2 (5.4)          | 32 (84.2)         | 4 (10.6)         |           |

Table Information: Computed from Primary Data

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Table 3 shows that among 240 Organic Food Product Consumers, the 16 consumers who responded, 18 were up to the age group of majority, with 10 (62.6 percentages) respondents having Medium preferences and 2 (12.4 percentages) responding consumers with the High preference Level and 4 (25.0 percentages) respondents’ consumers with Low preference options. Of the 186 responding consumers aged 19-40, 116 (62.4 percentages) of the respondent consumers had a Medium preference, 50 (26.8 percentages) of the respondent consumer had a Low preference and 20 (10.8 percentages) of the responding consumer had a High preference level. Of the 38 responding consumers aged 41 and older, 32 (84.2 percentages) were responding at the Medium preference level, 4 (10.6 percentages) were responding at the Higher preference level and 2 (5.4 percentages) at the Lower preference level.

The calculated Chi - Square value is 4.35 and the ‘P’ value is 0.36. Since the ‘P’ value is > 0.05, the null hypothesis (H0) is accepted. Therefore, there is no relationship between age and level of Preference.

Marital Status

The following hypothesis is formulated to find a relationship between the Marital Status and the preference level of Organic food product consumers.

H₀: Marital Status and Level of Preference have no relationship.

| Table 4: Relationship between Marital Status and Preference Level (in bracket %) |
|---|---|---|---|---|
| Variables | Preference Level | Population N = 240 | \( \chi^2 \) Value | ‘P’ Value |
| | Low n = 56 | Medium n = 158 | High n = 26 | |
| Marital Status | Married | 27 (22.9) | 74 (62.7) | 17 (14.4) | 118 | 2.349 | 0.308 |
| | Unmarried | 30 (24.5) | 85 (69.8) | 7 (5.7) | 122 |

Table Information: Computed from Primary Data

Table 4 shows that among 240 Organic Food Product Consumers, 118 responding Consumers are married. Most of the 74 (62.7 percentages) consumers who responded have a Medium preference, 27 (22.9 percentages) responding consumers have a Low preference and 17 (14.4 percentages) responding consumers have a High preference. Of the 122 unmarried respondents, 85 (69.8 percentages) were Medium -priority respondents, 48 (6.5 percentages) were High-priority respondents and 7 (5.7 percentages) were Low-priority respondents.

The calculated Chi-Square value is 2.35 and the ‘P’ value is 0.31. Since the ‘P’ value is > 0.05, the null hypothesis (H0) is accepted. Therefore, it is inferred that there is no relationship between marital status and the Preferences level.

Family Types

The following hypothesis is formulated to find a relationship between the Family types and the level of preference of Organic food product consumers.

H₀: Family types and Level of Preference have no relationship.

| Table 5: Relationship between Family Types and Preference Level (in bracket %) |
|---|---|---|---|---|
| Variables | Preference Level | Population N = 240 | \( \chi^2 \) Value | ‘P’ Value |
| | Low n = 56 | Medium n = 158 | High n = 26 | |
| Family Types | Nuclear | 23 (16.4) | 104 (74.3) | 13 (9.3) | 140 | 5.375 | 0.059 |
| | Joint | 31 (31.0) | 54 (54.0) | 15 (15.0) | 100 |

Table Information: Computed from Primary Data
Table 5 shows that among 240 Organic Food Product Consumers, 140 of responding consumers live in the Nuclear family, with 104 (74.3 percentages) responding consumers having Medium preferences, 23 (16.4 percentages) responding consumers having Low preferences and 13 (9.3 percentages) responding consumers having High preferences. 100 of the respondents live in a Joint family, with 54 (54 percentages) respondent consumers having Medium preference, 31 (31 percentages) respondent consumers with a Lower preference level and 15 (15 percentages) respondents consumers with a Higher preference.

The calculated Chi-Square value is 5.38 and the ‘P’ value 0.059. Since the value of ‘P’ is > 0.05, the null hypothesis (H₀) is accepted. Therefore, there is no relationship between Family type and preferences.

**Family Members**

To know the relationship between Family members and the preference of Organic food product consumers, the following hypothesis has been formulated.

H₀: Family Members and Level of Preference have no relationship.

Table 6: Relationship between Family Members and Preference Level (in bracket %)

| Variables      | Preference Level | Population | χ² Value | ‘P’ Value |
|----------------|------------------|------------|----------|-----------|
|                | Low n = 56       | Medium n = 158 | High n = 26 |
| Up to 3 Members| 16 (25.7)        | 46 (74.3)  | 0 (0)    | 62        | 12.668     | 0.012       |
|                | 4-6              |            |          |           |            |             |
|                | 28 (18.3)        | 100 (64.9) | 26 (16.8) | 144       |            |             |
|                | 7 and above      |            |          |           |            |             |
|                | 12 (50.0)        | 12 (50.0)  | 0 (0)    | 24        |            |             |

**Table Information:** Computed from Primary Data

Table 6 shows the 240 Organic food product consumers, 62 have up to 3 members in the family, of which 46 (74.3 percentages) are responding to Medium Preference consumers, 0 (0 percentage) are responding to High priority consumers and 16 (25.7 percentages) are responding to Low Preference consumers. The family of 144 has 4 - 6 members, of which 100 (64.9 percentages) answering consumers are of the High preference level, 28 (18.3 percentages) answering the Low preference consumers and 24 (16.8 percentages) Responds to High preference consumers. Of the responding consumers, 24 had 7 or more family members. Among them, 12 (50.0 percentages) consumers respond to Low preference level and 0 (0 percentage) consumers respond to High preference level.

The calculated Chi-Square value is 12.67 and the ‘P’ value 0.012. Since the value of ‘P’ is < 0.05, the null hypothesis (H₀) is rejected. Therefore, it is assumed that there is a relationship between Family members and preferences.

**Earning Members**

The following hypothesis is designed to identify the relationship between Earning members in the family and preference Organic food product consumers.

H₀: Earning members in the family and Level of Preference has no relationship.
Table 7: Relationship between Earning members in Family and Preference Level (in bracket %)

| Variables | Preference Level | Population N = 240 | $\chi^2$ Value | ‘P’ Value |
|-----------|------------------|---------------------|----------------|-----------|
| Earnings Members in the Family | Low $n = 56$ | Medium $n = 158$ | High $n = 26$ | |
| Up to 1 | 18 (24.2) | 54 (73.0) | 2 (2.8) | 74 | 13.9667 | 0.006 |
| 2 | 16 (14.6) | 82 (74.5) | 12 (10.9) | 110 | |
| 3 and above | 22 (39.3) | 22 (39.3) | 12 (21.4) | 56 | |

Table Information: Computed from Primary Data

Table 4.7 shows that 74 out of 240 respondents have a One earning member, most of whom 54 (73.0 per cent) respondent consumers have a Medium preference, 18 (24.2 per cent) respondent consumers have a Low preference level and 2 (2.8 per cent) respondent consumer High preference level. Out of 110, the two earning members of the responding consumer family, 82 (74.5 percentages) of the responding consumers were of the Medium preference level and 16 (14.6 percentages) were of the Lowest preference level 12 (10.4 percentages) consumers were among the Highest Preference level. Out of 56 the responding consumers has three or more earning members and 22 (39.3 percentages) responding consumers have Median preference level, 12 (21.4 percentages) responding consumers have a High preference level and 22 (39.3 percentages) responding consumers have a Low preference level.

The calculated Chi-Square value is 13.97 and the ‘P’ value is 0.006 < 0.05, rejecting the null hypothesis ($H_0$). Therefore, there is a relationship between Earning members in the family and the level of preferences.

Academic Qualification

The following table is designed to find a relationship between Academic Qualification and preference level for Organic food product consumers.

$H_0$: Academic Qualification and Level of Preference have no relationship.

Table 8: Relationship between Academic qualification and Preference Level (in bracket %)

| Variables | Preference Level | Population N = 240 | $\chi^2$ Value | ‘P’ Value |
|-----------|------------------|---------------------|----------------|-----------|
| Academic Qualification | Low $n = 56$ | Medium $n = 158$ | High $n = 26$ | |
| Non Formal Education | 0 (0) | 30 (93.8) | 2 (6.2) | 32 | |
| Up to HSC | 16 (20.0) | 82 (60.0) | 12 (20.0) | 110 | 18.56 | 0.100 |
| Diploma | 8 (30.7) | 18 (69.3) | 0 (0) | 26 | |
| UG Degree | 28 (38.9) | 34 (47.2) | 10 (13.9) | 72 | |
Table 8 shows that 32 out of 240 organic food consumers do not have a formal education. Most of them were 30 (93.8 percentages) responding consumers with Medium preference, 0 (0 percentages) respondents with Low preference and 2 (6.2 percentages) responding consumers with High preference. Of the consumers who responded, 10 have a Higher Secondary Course (HSC) of Academic qualification, of these 6 (60.0 percentages) respondents have a Medium preference level, 2 (20 percentages) respondents have a High preference level and 2 (20 percentages) respondents have a Low preference level. Of the 26 Diploma holders, 18 (69.3 percentages) of the respondents were Medium preference consumers, 0 (0 percentage) were High preference consumers and 8 (30.7 percentages) were Low preference. Among the UG Degree of 72, 34 (47.2 percentages) respondents were in the Medium preference level, 28 (38.9 percentages) were in the Low preference category and 10 (13.9 percentages) were in the High preference category. Of the 86 PG Degree respondents, 62 (72.1 percentages) respondents had a Medium preference level, 14 (18.6 percentages) consumers with a Low preference level and 4 (9.3 percentages) respondents with a high level of preference. Of the 6 Professionals, 2 (33.3 percentages) of responding consumers are at a Lower preference level, 2 (33.3 percentages) of responding consumers are in the Medium preference, and 2 (33.3 percentages) of responding consumers are at the highest priority level. Of the other 8 details, 6 (75 percentages) responding consumers had Medium preference, 0 (0 percentage) responding consumers had Low preferences and 2 (25 percentages) responding consumers had High preferences.

The calculated Chi-Square value is 18.56 and the ‘P’ value is 0.1. Since the value of ‘P’ is > 0.05, the null hypothesis (H0) is accepted. Therefore, it is assumed that there is no relation between Academic qualification and Preferences.

### Results of Investigation

- The majority of the respondent consumers in the 196 (77 percentages) age group of 19-40 years give more Preference to Organic Food Consumers.
- The majority of the 146 (61 Percentages) female respondent consumers preferred Organic Food Consumers.
- The majority of the respondent consumers 144 (64 percentages) are from the strength of 4 - 6 members in the family.
- The majority 140 (58 percentages) of the respondent consumers, are from nuclear family type.
- The majority of the respondent consumers 128 (53 percentages) are residing in the rural area.
- Most 122 (51 percentages) of the Organic Food Consumers are unmarried.
- The majority of the respondent consumers 110 (46 percentages) are from earning for two members in the Family.
- The majority, 86 (36 percentages) of the Organic Food Consumers are PG Degrees.
- Most 84 (35 percentages) of the Organic Food Consumers are Students.

### Forward Ideas

Selected variables - There is a positive relationship between family members, a family was earning members and preferences in organic food products. Considering the expansion of the geographical area and other food items can further inform the researcher.

There is no association between selected individual variables on the Residence area, Gender, Age (in years), Marital status, Family type, Academic qualifications, and Preference levels on Organic food consumers.
Final View
Organic food consumption is increasing due to environmental and health concerns related to food production. The increase in the consumer gap in organic food products is increasing the need to release food from artificial chemicals due to other problems. Once consumers prefer the product, they continue to use those products due to their health issues in the government’s effort to streamline tax regulatory mechanisms to promote organic manufacturers. The present study reveals that most of the responses are with Medium Preference Level on Organic food products.

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