



Research Paper

Awareness and Preference Towards Organic Food Products During Covid-19 Pandemic In Andhra Pradesh

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ABSTRACT

Indian consumerism has awakened to its true self from the impact of western culture after few decades due to the impact of the Covid-19 pandemic. This reflects in consumer's attitudes and preferences towards organic food products. This research draws on an online survey conducted among 250 respondents from A.P. This paper aims to study the awareness, preference, willingness and consumption of organic food products. Results indicated that the majority of the respondents are aware of the health benefits of organic products and prefers to buy them. Educated and upper-middle-income respondents are willing to pay a minimum of 10% and up to 50% excess amount for organic products. Fruits, vegetables and Milk are the highly wanted commodities in organic. The main constraints in the purchase of organic commodities are high price, difficulty to identify the true organic products, Accessibility and Availability. Consumers became aware and prefer organic products while farmers could not get a fair price for their products. Hence, fetching a good price for organic products for the farmers will encourage them to produce more and fulfil the demand-supply gap.

KEYWORDS

Consumer Behaviour, Organic Products, Consumer Awareness, Covid-19 Pandemic, Organic Consumption Pattern.

Received 27 September, 2021; Revised: 08 October, 2021; Accepted 10 October, 2021 © The author(s) 2021. Published with open access at www.questjournals.org

I. INTRODUCTION

1.1. Healthy food habits

Healthy food habits are an important aspect of life as they can affect long term health outcomes. The nutritional health status has proven resilient towards the destabilization of individuals during this COVID-19 pandemic. They have a major impact on mental and emotional health as well as the environment. Shifting to a good habit of taking more greens or more organic products often have more beneficial nutrients, such as antioxidants, than their conventionally grown. As a growing country, we are aiming at modernised lifestyles, fair knowledge of nutritional requirements despite the convenience and taste of the food being a priority.

The term organic refers to the process in which agricultural products are grown and processed. While the organic livestock of meat, eggs, and dairy products should be raised with living conditions that are favourable to their natural behaviours and being fed organic feed. The food organically grown has much more benefits than the conventional crops such as chemical-free, farm-fresh, environmentally friendly etc.

1.2. Importance of Organic food Products

To meet the high growth of population and life expectancies during the recent years, the green revolution became the most required factor of the agricultural sector. Through this scenario, organic production has gained popularity because it has a sustainable basis, its principles are environmentally correct, and it has an economically viable production. Thereafter, the consumers' preferences towards these products and the purchasing behaviour suggest environmental preservation with the shift to a more sustainable society. These days, especially during the lockdown period, terrace farming has been increasing at a rapid rate.

1.3. Covid-19 and Organic Food Consumption

Consumption patterns are assumed to change based on the seasons, time and location. With ongoing lockdown and strict measures of social distancing, consumer's choice of the place to shop is completely

restricted. This has resulted in location constraints, and this changed the location shortages. Imports and exports from one district to another district were also restricted. There was a clear mobility shift and a mobility shortage. There is more time flexibility when compared to the non-pandemic era as now consumers do not have to follow schedules. Pandemic hit global economies adversely - Many industries had to take a heavy blow on their working operations and a huge number of companies and industries had to shut-shop due to the lockdown. However, owing to the health benefits of protein foods during covid which is found in larger quantities in organic food, the consumption levels are believed to have increased. With the absence of the vaccine in earlier stages, people recognized and understood immunity as ammunition against coronavirus. Even while suffering and post covid the importance of quality food has been recognized. This has resulted in a sudden rise in the organic food industry over the country.

1.4.Objectives

1. To assess the awareness, preference and willingness to pay for organic food products.
2. To study the level of consumption of organic food products during the Covid-19 pandemic.

II. REVIEW OF LITERATURE

COVID19 certainly brings an economic slowdown estimation contraction of -3% in the world but there is a huge opportunity in the organic industry is clocking in robust growth from 25 to 100% in 2020. Due to the unavailability of a vaccine against the coronavirus, people recognize immunity as ammunition against the coronavirus. In India, online retailers are witness to 100% growth in their sales. All over in India like in NCR Indiaorganic.com, pure & eco India, Rajasthan Natural and organic, Gujarat Saurian organic, North Indian retail chain modern bazaar, Belarusbased e-retail Healthy Buddha are experiencing the growth in their demand around 25 to 30% in 2019Anamika et al., (2021).

Shankar et al, (2020) observed the following changes in the consumption pattern during the pandemic. The overall physical activity and dietary adherence remained unchanged in more than 80% of the participants. There was increased consumption of vegetables (80.9%), fruits (42.7%), and decreased unhealthy snacking (63%). Those with mental stress and poor sleep had unhealthy dietary habits. Poor glycemic control was seen in those with less physical activity and an unhealthy diet.

Consumption patterns are assumed to change based on the seasons, time and location. With lockdown and social distancing, consumers' choice of the place to shop is restricted. This has resulted in location constraints and location shortage. We have seen a mobility shift and mobility shortage. There is more time flexibility as consumers do not have to follow schedules. (Sheth 2020).

III. METHODOLOGY

Sampling and Data Collection: The study was based on an online primary survey of 250 respondents from the state of Andhra Pradesh. A well-constructed questionnaire was designed to record the responses on awareness about organic products and consumption of organic goods, consumer special preferences towards organic food and effectiveness of sources for organic goods during the covid-19 pandemic. An online survey was conducted using the google form which was circulated among different respondents through email and what's app. A total of 350 respondents were selected from Andhra Pradesh based on a convenience sampling for study representing consumers of various age groups across various income groups as the purpose was to have representation from all. Among 350 respondents we have received a response from 250 respondents.

Tools of analysis:

1. Percentage Analysis:

Percentages were worked out to study the general characteristics like income, education, family size, level of satisfaction etc.

$$\text{Percentage analysis} = \frac{\text{No.of.customers}}{\text{Total sample size}} \times 100$$

2. Rank Based Quotient:

This method was used to find out the factors that influenced the preference towards the organic products and rating of characters regarding the commodities.

$$\text{RBQ} = \frac{\sum_{i=1}^n F_i (n + i - 1)}{N * n}$$

F_i = Frequency of the consumers for the i^{th} rank

N = Number of consumers contacted for ranking
 n = the maximum number of ranks given for various brands by a Consumer.

Mean score was estimated for each factor and first rank was assigned to the factor with maximum mean score.

3. SCALING TECHNIQUE:

Differential scaling technique was used for analyzing preference of farmers towards organic products in Andhra Pradesh. To study the perception level 2vstatements about the opinion on Nilgiri’s supermarket were prepared. The consumer were requested to give their opinion about the statement based on a five point scale viz., strongly disagree, disagree, neutral, agree, strongly agree. The mean score was calculated for each eight statements inferences were drawn about the perception of customers.

IV. RESULTS

4.1. Awareness and Preference of Organic Products:

The awareness and preference towards the organic food commodities of sample household in general is discussed under this topic. The results of the study are depicted in the following tables and figures.

4.1.1. Socio-Economics Status of Sample Consumers

The socio-economic profiles of the respondents were also recorded on the parameters such as gender, age, education level, occupation, and household income to know the background information of respondents. The result has been depicted in the Table (1)

Table 1: Socio-Economics Profile of Sample Consumers

Demographics Profile	Value Labels	Number	Percentage
Gender	Male	129	51.4
	Female	119	47.6
	Prefer not to say	2	0.8
Age	15-25	13	5.2
	26-35	231	92.4
	36-45	4	1.6
	46+	2	0.8
Education	Primary (SSLC)	3	1.2
	Secondary (+2)	67	26.8
	Degree	166	66.4
	Post Graduate	14	5.6
Occupation	Private	87	34.8
	Govt	73	29.2
	Self	83	33.2
	Wage	7	2.8

The above table 1.0 reveals that the 92.4 percentage respondents were between the age group of 26 to 35 years. That means most of the respondents were youth who has the access to the internet through which the survey was conducted. Also, these age group people have more awareness and accessibility to organic products. Although we sent the questionnaire to the middle and old age consumers, the number of responses received was less. The reason may be the less access or less time to spend on digital medias. Around 51.4 per cent of the respondents were male and 47.6 per cent are female. Hence the majority was of male respondents, despite the difference is meagre. Being an online survey, it is foreseeable that majority of respondents (66.4 per cent) are degree holders.

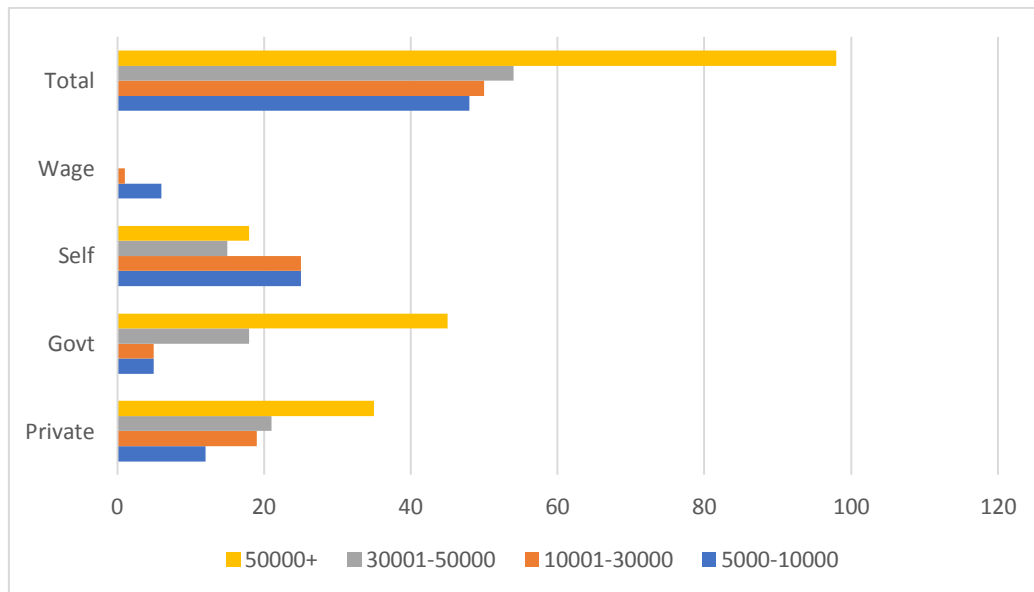


Figure 1.0: Monthly Income based on Occupation of the Respondents

The figure 1.0 explain about the occupation wise monthly income of the surveyed respondents. Around 35 percent of the total respondents are working in private sector. The government employee constitutes 29.2 percent of the total respondents and 33.2 percent are self employed people. A negligible amount (2.8 percent) of the respondents are wage earners. The income indicates that about 39.2 percent of the people are high income categories who prefers to buy the targeted commodities. Around 40 percent of the consumers fall into middle income category. The cross section of these occupation and income infers that majority of the high-income households are working in organized government and private sector. Most of the self-employed respondents informed that their income is low and/or middle level.

4.1.2. Awareness, Preference and Willingness towards Organic Commodities

The rapidly increasing health issues because of unhealthy food consumption, imbalance in work and personal life, lifestyle changes have made the Indian consumer much more conscious about what they eat. They are more inclined towards consuming healthy food which is free from chemical pesticides. The responses about consumer's awareness, preference and willingness to purchase organic commodities were given in Figure 1.0. It reveals that the majority of respondents 83.2% agreed that they are aware of organic food products and their health benefits. Therefore 85.6 per cent of the respondents prefer organic products over non-organic products. It gives a clear indication that the majority of the consumers are very well aware of and demand organic commodities. About 71.2 per cent of the respondents would like to buy organic commodities. 24.8 per cent of the respondents expressed their unwillingness due to other constraints such as high price, difficulty to identify and uneven supply of the organic commodities.

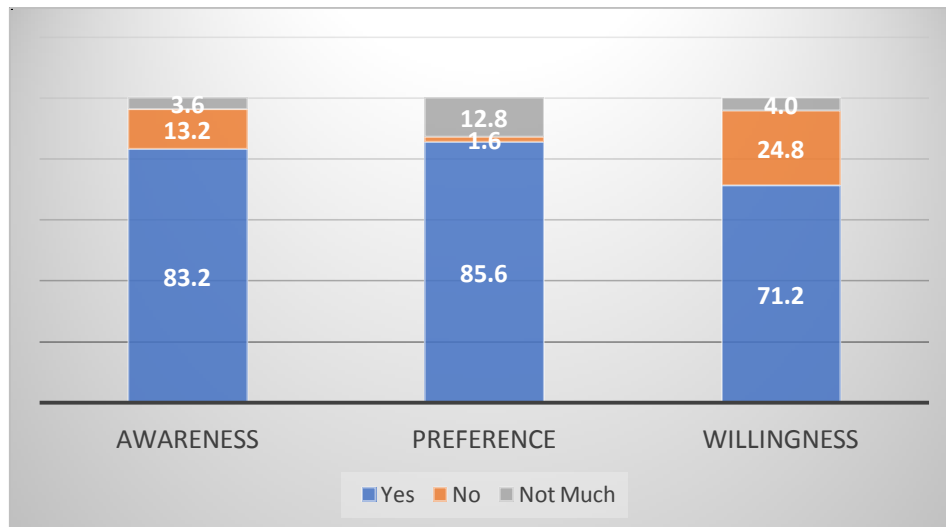


Figure 2.0: Awareness Preference and Willingness towards organic commodities (Percentage)

From the table 2.0, it could be inferred that the customers considered Farm fresh organic products as the most important attribute with the mean score of 21.6, followed by originality of the product, price, taste, value for money, brand and packaging. As far as organic food is considered, consumers give least preference to brand, packaging in contrast to the normal

Table 2.0. Factors influencing the Preferences towards organic food
(n=250)

Factors	Mean score	Rank
Farm fresh	21.6	I
True organic	13.9	II
Price	13.7	III
Taste	15.0	IV
Value for Money	15.0	V
Brand	10.6	VI
Packing	10.2	VI

4.1.3. Preferred categories in organic products

From Figure 3.0, it could be inferred that fruits and vegetables (20% and 19%, respectively) are the first and majority of the consumer's choice when comes to organic products. Milk and Food grains are the next most selected organic products each with 12% of the total share. Followed by pluses, oils, meat and masalas with the percentage contribution of 10%, 8%, 7% and 7%, respectively. Contradictorily the respondents give least preference to organic baby products.

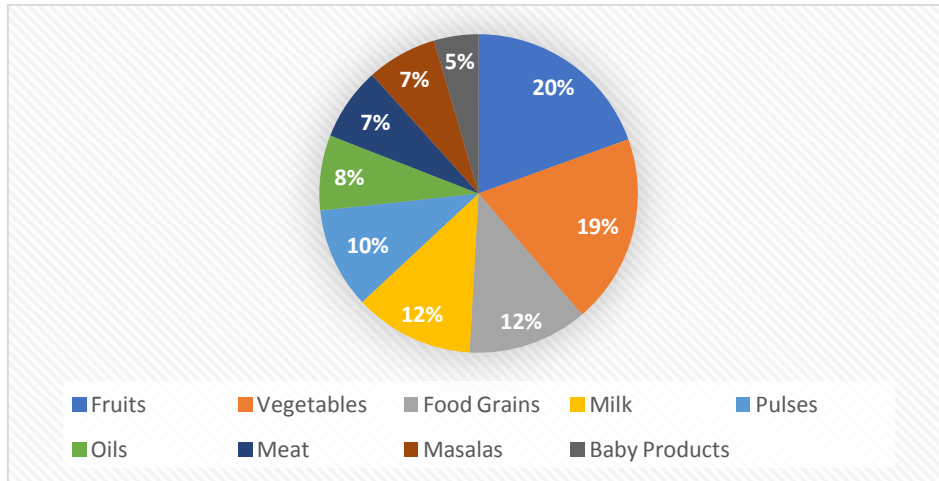


Fig 3.0. Preferred categories in organic products

4.1.4. Constraints faced by the Consumers in Selecting the Organic Products

Table 3. Constraints in selecting the organic Products

Response	Number	Per cent
Price	123	24.0
Difficult to identify	156	30.4
Non-Accessibility	97	18.9
Regular availability	74	14.4
short shelf life	63	12.3

The above table gives information about the various constraints faced by the consumer when selecting organic commodities. Nearly 30.2 per cent of the respondents informed that it is very difficult to identify the true organic products while purchasing. The next important constraint is the high price (24 per cent) of the organic products which are not affordable to their budget. About 18.9 per cent of the respondents agreed that they could not get access to organic products since it is not sold in all the markets/shops. Certain respondents expressed their concern that even in the special organic shops the products are not supplied regularly. So, they are forced to buy normal products due to the non-availability of organic products. Very few respondents (12.3 per cent) said the short shelf life was one of the constraints. But the majority of consumers understood that the short shelf life is the nature of the organic commodity.

4.2. Consumption of Organic Products During Covid-19 Pandemic:

The figure 2.0 shows the status of the purchase of organic food during lockdown. It can be inferred that 54.8% of respondent's organic products consumption has increased, 32.0% has remained static, whereas 13.2% informed that their consumption has decreased. It is very evident that people awareness about health and diet has increased due to the impact of the covid-19. The major reasons for reduction in consumption were not having access due lockdown, increased prices.

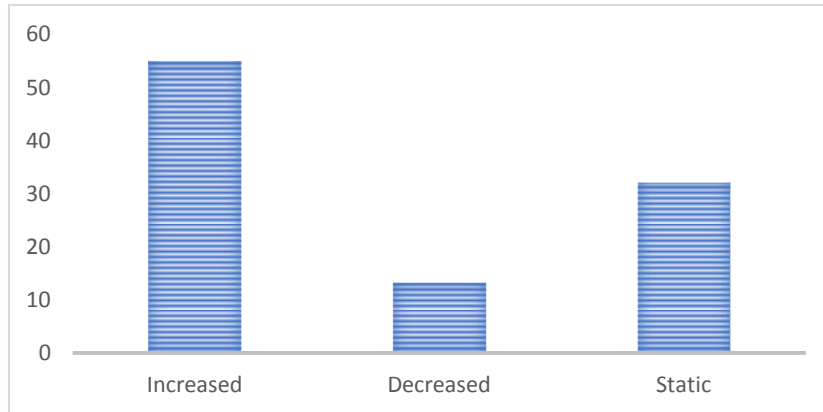


Fig 4.0: Status of organic food consumption during lockdown.

4.2.1. Willingness to Pay for organic products

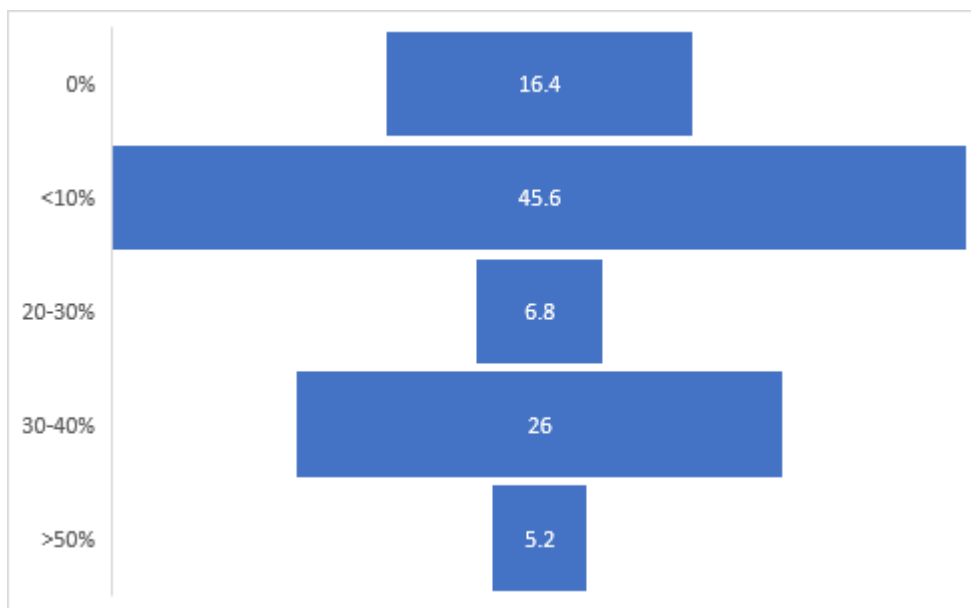


Figure 5.0: Willingness to Pay Excess Amount for organic products

The figure (4.0) illustrates about the excess amount a consumer is willing to pay for the goodness of the organic commodities. Majority (45.6%) of the respondents prefers to pay 10% excess amount for the organic than the normal commodities. About 26% of the respondents ready to pay 30-40% more for the organic products. Some consumers (16.4) expressed their interest that the price of the organic commodities should be same as normal commodities so that all people can afford those. It is inferred that nearly 83% of the respondents are ready to pay excess rupees for the true organic products. This result represents the preference and willingness of the organic commodities among the consumers. Such study encourages more cultivation of organic commodities and proper marketing of the true organic products.

4.2.2. Sources of Organic Product Purchase

The figure 6.0 help us to know the various sources of organic markets from which consumer buy the products. The consumer used to buy the organic commodities in the special organic shops at normal times. But during the pandemic the accessibility to such shops were restricted. And majority of the consumers bought the organic commodities in the local shops where there is no assurance about the originality. Next choice was the supermarkets who did the door delivery to the customers. This result shows that since due to the increase in the demand for organic products many super market may initiate supplying organic products by reaching the farmers directly.

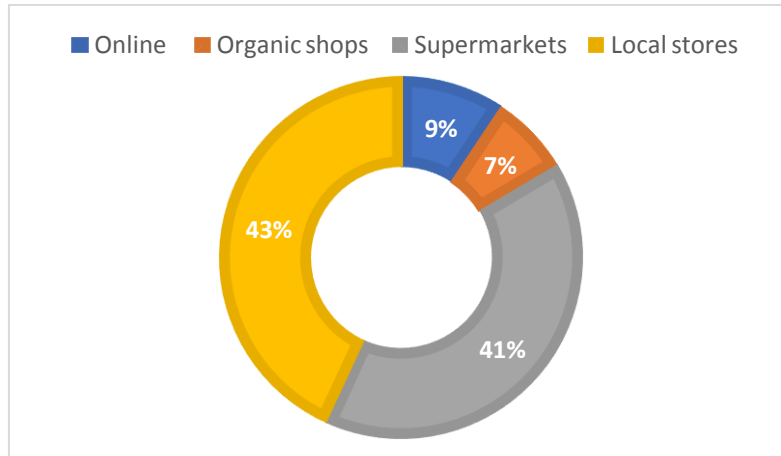


Figure 6.0: Different type of markets sources

4.2.3. Increase in Expenditure due to Lockdown

Table 4.0. Increase in the Expenditure

Response	Number	Percentage
0%	43	17.2
10-19%	102	40.8
20-30%	15	6
30-40%	78	31.2
>50%	12	4.8

Around 57.2% of consumers responded yes when they asked about the increase in expenditure during the pandemic period. Among them 40.8% of the respondents revealed they should spend up to 20% more for consumption during lockdown and 31% of the respondents which is 78 members out of 250 informed that their budget on food consumption got increased during covid nearly 30-40%. The reason for this expenditure increase is mainly due to the demand and supply gap which roused because of the logistic restricts imposed during lockdown.

V. CONCLUSION AND SUMMARY

Pandemic hit global economies adversely - Many industries took a heavy blow on their operations and a large number of companies shut-shop due to the lockdown. However, owing to the health benefits of organic foods, the consumption levels are believed to have increased. With the absence of the vaccine in earlier stages, people recognized and understood immunity as ammunition against coronavirus. This has resulted in a sudden rise in the organic food industry over the country. Indian consumerism had a great demonstration effect from western countries in recent decades. But the onset of the Covid-19 pandemic had made the consumers realise the importance of a healthy and balanced diet system. The chemical-free, nutritious diet which improves our health and the immune system is the need of the hour. Organic food products play an important role in satisfying such needs.

The results of the study on the high level of awareness among the majority of the respondents reveal that most of the consumers are well aware and prefer organic commodities over non-organic products. About 66 per cent of the respondents are educated and 39 per cent are found to be in the high-income category. It concludes that the majority of organic food customers are educated youth and have high paying capacity. Even though low-income consumers are very conscious about the price of the products middle- and high-income people are ready to pay 10-40 per cent excess amount for healthy organic products. Despite many customers prefer to get organic products, the supply could not meet the demand. Respondents wish to get a regular supply of truly organic products throughout the year. For attaining such a state, the production and supply of organic products should be increased. That is possible only by ensuring the remunerable price for the farmers. It suggests that more farmers can go for organic cultivation and certification of their products which enables them to market their products effectively.

SCOPE OF FURTHER RESEARCH

This study is based on the online survey and the responses obtained from the respondents in the state of Andhra Pradesh only and is based on the assumption that all the responses given by the respondents were true. Studies on the awareness level of consumption of organic products even in rural and semi-urban and urban areas may be conducted and the level of satisfaction derived by the customer on various products may also be focused in further studies.

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