



Factors Influencing The Consumer Expenditure During Covid-19 By Using Garret Ranking Analysis



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Abstract

COVID-19 has changed nearly every aspect of our daily lives, and has forced people to change their consumption behavior thus, concentrating only on essential items. The present study analyses the influence of Covid-19 on consumer expenditure by using a structured questionnaire to collect data from 200 respondents of Telangana state. Garrett's ranking technique was used to rank the preference of the respondents by analyzing the most influential factor on the consumer. The results revealed that the respondents have encountered more expenditure after the pandemic due to the increase in prices of commodities when compared to pre lockdown period. It is also evident that people started consuming healthy and immunity-boosting products in order to enhance their health. They have also restricted themselves to essentials to keep expenditures in check. The overall study highlights that the expenditure of a household is majorly influenced by the rise in prices, unemployment and reduced income. Finding the study sample was challenging as the respondents had to be Covid infected people for current research.

Keywords: Essential food items, consumption pattern, Covid-19, Garrett Ranking

Introduction

COVID-19 has disrupted humankind in a manner not seen in recent times. In order to contain the spread of the virus, the lockdown was implemented across the countries which have disrupted the world economy by sending unprecedented shocks to producers and consumers. This has brought changes in both the demand and supply side which led to a major shift in consumer spending behavior as people faced layoffs and salary reductions due to the decisions made by external sources. As a result, huge changes were observed in the spending patterns of consumers. Consumer priorities have become centred on the most basic needs, sending demand for hygiene, cleaning and staples products soaring, while non-essential categories slump. This is due to the

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rise in prices of groceries and other essentials which led to an increase in the expenditure of a household, this caused the consumer to spend their income on only necessities and essential food items, which led to an increase in expenditure on food and decline in expenditure on other products.

There are several factors that resulted in an increase in the expenditure of consumers directly or indirectly. The factors that influenced consumer expenditure were unemployment levels, cost of living and consumer confidence [1]. Thus, the present study tried to analyze the effect of the pandemic on consumer spending behavior.

A study conducted on income losses analyzed that a certain set of households lost income from certain sources due to the pandemic. Income losses have been borne similarly across the rural and urban populations, both within and across countries.[2]

The results regarding the study on the rise in prices of essential food items to understand the difficulty faced by common people during the pandemic suggested that, compared to pre-pandemic, the prices of essentials increased by 40 to 100 percent after the pandemic, thus, making it difficult for households to

meet their daily needs.[3]

In a study related to the household spending patterns of the households (U.S. and Israel) during Covid-19 [4], it is observed that most of the respondents in both countries reported no change in expenditure but the spending on food is more volatile i.e., 36% in the U.S. and 46% in Israel reported an increase in expenditure on food and credit card debts.

Several researchers investigated the effects of the Covid-19 pandemic on the household economy in order to know the extent of change in income and expenditure. In a similar study conducted by [5], during the lockdown it is evident that there was a significant decrease in family income and an increase in family expenditures during the pandemic in which the income was spent more on nutrition, cleaning, communication, water-gas expenses and income is less spent on cultural activities and transportation.

Methodology

The present study was conducted in Jogulamba Gadwal and Wanaparthy districts of Telangana state. Primary data was collected from a sample of 200 respondents particularly infected with Covid-19. The study incorporated a questionnaire as a tool to conduct the survey. Keeping in mind the literacy gap of respondents, the questionnaire was used in the form of an interview schedule. For the present study, 8 factors were considered to analyze the impact of Covid-19 on consumers' expenditure. The ranking technique has been used to analyze the factor preference of the respondents. Each statement was rated by respondents on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". Garrett ranking technique was applied to study the preference. The prime advantage of this technique over simple frequency distribution is that factors were arranged based on the preference of respondents.

Application of Garrett's ranking technique

Garrett method is often used to complete the ranking of an alternative based on the ratings of respondents that are converted into certain ranks. This ranking is done to find the most significant factor which had influenced the respondent during the pandemic. These responses were ranked using the Garrett ranking technique based on their impact level such as "Strongly Agree" as rank-1, "Agree" as rank-2, "Neutral" as rank-3, "Disagree" as rank-4, "Strongly

Disagree" as rank-5. Garrett's formula for converting ranks into a percent is as below:

$$\text{percent position} = (100(\text{Rij}-0.5))/\text{Nj}$$

Where,

Rij = Rank given for the ith variable by jth respondents
 Nj = Number of variables ranked by jth respondents
 Each rank's percent position was converted into points using the table provided by Garrett and Woodworth [6]. The value of Rij is then multiplied by the Garrett Value to determine the total Garrett Score. The average Garrett Score is then calculated by dividing the Total Garrett Score by the number of alternatives. The alternative ranking is done based on the highest average value.

Percentage positions and their corresponding Garrett table values

Table-1: percent positions and Garrett values of the factors

Rank	Percentage position	Garrett Table
1	$100(1-0.5)/8$	6.25
2	$100(2-0.5)/8$	18.75
3	$100(3-0.5)/8$	31.25
4	$100(4-0.5)/8$	43.75
5	$100(5-0.5)/8$	56.25

Results

Respondents were asked to give their ranking between 1-8 regarding the factors influencing the consumption pattern during Covid-19.

Ranking of factors influencing the consumption pattern

From Table No.2 it is evident that, the factor that has the highest influence on consumers was high expenditure after the pandemic with an average of 7740 and a mean score of 77.40 followed by consumption of healthy products increased after the pandemic with a mean score of 68.23 and total score of 6823. Accordingly, reduced family income was ranked third with an average score of 67.65. Reduced family income after the outbreak of Covid 19, which has stood in fourth place with an average score of 57.64. However, factors like "expenditure was more before the pandemic" was ranked least with an average score of 50.79. The rise in expenditure was due to an increase in the price of commodities due to various factors like transportation and lack of labor,

respondents faced a reduction of income due to the lockdown. People have concentrated on boosting their immunity to prevent the spread of the virus. Thus, all these factors have directly or indirectly

influenced consumer expenditure.

From Table No.3 it is observed that, the highest influential factor on consumers was high expenditure

Table -2: Ranking of the factors influencing the consumer expenditure pattern in Jogulamba Gadwal district

s. no	Factors	Rank					Total number of respondents	Total Score	Total mean	Rank
		1	2	3	4	5				
1.	Reduced family income	105	1	32	3	51	100	6765	67.65	III
2	Faced food shortage	35	15	26	27	85	100	5764	57.64	IV
3	More expenditure before pandemic	7	7	9	6	163	100	5079	50.79	VIII
4	More expenditure after pandemic	180	1	7	4	8	100	7740	77.40	I
5	Decrease in Consumption of junk food after outbreak	26	11	121	15	3	100	5533	55.33	V
6	Consumption of healthy products increased after pandemic	136	3	21	2	15	100	6823	68.23	II
7	Expenditure on outside food decreased	22	20	86	29	3	100	5091	50.91	VII
8	Expenditure on EFI increased	43	17	47	18	33	100	5101	51.01	VI

Table -3: Ranking of the factors influencing the consumer expenditure pattern in Wanaprthy district

s. no	Factors	Rank					Total number of respondents	Total Score	Total mean	Rank
		1	2	3	4	5				
1.	Reduced family income	105	1	32	3	51	100	6557	65.57	III
2	Faced food shortage	35	15	26	27	85	100	5501	55.01	V
3	More expenditure before the pandemic	7	7	9	6	163	100	4803	48.03	VIII
4	More expenditure after the pandemic	180	1	7	4	8	100	7587	75.87	I
5	Decrease in Consumption of junk food after the outbreak	26	11	121	15	3	100	5628	56.28	IV
6	Consumption of healthy products increased after the pandemic	136	3	21	2	15	100	6561	65.61	II
7	Expenditure on outside food decreased	22	20	86	29	3	100	5048	50.48	VI
8	Expenditure on EFI increased	43	17	47	18	33	100	4978	49.78	VII

after the pandemic with an average of 7587 and a mean score of 75.87 followed by consumption of healthy products increased after the pandemic with a mean score of 65.61 and total score of 6561. Accordingly, reduced family income was ranked third with an average score of 64.56. Junk food consumption has decreased after the outbreak of Covid 19, which has stood in fourth place with an average score of 56.28. A similar trend of consumption patterns was observed in both districts despite varied cultures and concerns. This shows that Covid-19 has a similar kind of impact on each and every household regardless of location.

Conclusion

The present study aimed to identify the preference and rankings of factors affecting consumer expenditure and behavior during Covid-19. It is evident that the crisis created by the pandemic has had a major influence on the financial stability of families as many companies laid off their employees. It has created an economic and psychological impact on consumers as they struggled to survive the pandemic with major

setbacks. This impact caused people to shift their consumer behavior thereby, focusing only on the essentials throughout the pandemic. The results of the study found that the factors that had the most impact during the pandemic were having more expenditure and increased consumption of healthy products increased after the outbreak to boost their immunity. This study also highlighted that a reduction in family income has more influence on consumer expenditure as they faced difficulty to manage their expenses. Policies should be made in such a manner that they can help people to overcome financial crisis when such disasters occur in future.

Future scope of study

Consumption behavior and spending patterns post-pandemic can be studied in similar location
Change in expenditure patterns on non-essential goods during the pandemic can be studied for the same sample

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