# PalArch's Journal of Archaeology of Egypt / Egyptology

# A STUDY ON THE IMPACT OF PANDEMIC ON THE CONSUMER BEHAVIOR OF CONSUMERS IN BANGALORE

Mr Sam Stanley<sup>1</sup>, Ms Jhumur Samaddar Roy<sup>2</sup>

<sup>1</sup>PG Student, Department of Commerce, St Joseph's College of Commerce <sup>2</sup>Assistant Professor, Department of Commerce, St Joseph's College of Commerce

Mr Sam Stanley<sup>1</sup>, Ms Jhumur Samaddar Roy<sup>2</sup>, A STUDY ON THE IMPACT OF PANDEMIC ON THE CONSUMER BEHAVIOR OF CONSUMERS IN BANGALORE,-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(9). ISSN 1567-214x

Keywords: Consumer behaviour, Income, Goods, Savings, expenditure, Online purchasing, Pandemic.

#### ABSTRACT

Introduction: In light of the recent pandemic situation that arose, the entire lifestyle of a common man has changed. It is moved from luxury to convenience, from wants to needs. The government has restricted movement from one place to another, stopped public transport like busses, metro and trains. It also shut down many private and public offices. There are many jobs lost. There was a high chance for the country to face a job recession with the slowdown of the economy. For the jobs that have survived, it comes with heavy pay cuts. The cost of everyday goods has gone above and beyond. The current pandemic has affected the whole world and consumer purchasing behaviour has been affected during this pandemic. This has led to numerous choices that a consumer has to make. To choose a product or to prefer a different product over a previously essential product

Consumer preference is changing overnight in the light of all these events. This study was conducted to determine if there is a change in the consumer purchasing behaviour with the change in their income level, savings percentage and the savings and expenditure ratio and the study also tries to find out if there is a change in the mode of shopping.

Purpose: The purpose of the research is to identify the change in consumer behaviour due to pandemic in the city limits of Bangalore.

Methodology: This study is descriptive as it tries to only analyse the shift in consumer purchasing behaviour and the mode of shopping during the pandemic. The source of the data is from a primary source, through a structured questionnaire. The sample size was drawn from the city limits of Bangalore, convenience sampling was used to select the sample size of two hundred and fifty respondents. The statistical tools used were simple percentage analysis, paired sample t test and the one-way ANOVA. The reliability test was conducted to understand the reliability of the data collected.

Findings: The Cronbach's alpha test was 0.728 which tells that the responses and acceptable. The

demographic analysis showed that majority of the respondents were young adults, with education qualification up to postgraduation with an average monthly income of Rs 30000 to Rs 50000. The paired sample t test provided a result that the savings percentage and the savings and expenditure ratio has not changed from what was before the pandemic to what it is during the pandemic. But the items bought during the pandemic has significantly changed from that which was bought before the pandemic. The one-way ANOVA was used to understand if there is any shift in the mode of purchase and it was seen that the frequency of shopping online has significantly changed during the pandemic but the good bought online has not has a significant change during the pandemic.

#### Introduction

The COVID-19 is one of the biggest tragedies that brought the whole world to a standstill, in modern years. The World Health Organisation (WHO) has declared the novel coronavirus a pandemic as it has been present in more than 200 countries. India being in the stage of developing economy is hit as well, both in terms of health and economy India has taken a blow. The countrywide lockdown which was initiated to curb the disease has left a lot of individuals unemployed and numerous others had forced pay cuts and are still worried about this trend's presence to be continued, with more layoffs and pay cuts. The lockdown also interrupted the supply chain completely. At this time of a new normal and a time of doubt, the consumers have changed their behaviour towards buying products or services. Consumers have to think twice before buying products. Sudden purchases without proper research have reduced drastically. According to the numerator (Numerator Intelligence, 2020) during the early March of 2020 among every four consumers, one consumer has felt that there is an impact of a pandemic on consumer behaviour. In the mid-week of March among three consumers one consumer suggested that their consumer's behaviour has been impacted, and during April around nine consumers out of ten consumers said that their consumer behaviour has been affected by the pandemic. Consumers started shifting from value or status products to essential products, preferring cheaper products.

Consumers are trying to evolve and get adapted to the new normal, since the outbreak of the pandemic, a lot of things have changed. Product demands vary depending on the nature of the infection. The change pre- and post-pandemic are different, as per a blogger Gregory (Gregory, 2020) there are three major shifts in buying behaviour which are as follows:

#### 1. Home

The customer often plays the part of an employee; worker and their routine have shifted to the point that they are now limited to their home. As a result, shoppers are looking for more effective goods these days. Consumers shopping for a washing machine, for example, are now looking for a peaceful viewing match that won't disrupt a staff meeting or an online lesson.

#### 2. Self-reliance

Due to the risk of a pandemic and the uncertain nature of whether an individual is sick or not, customers are attempting to take initiative and perform duties that were formerly performed by employing others, such as minor plumbing that can be completed by themselves, and men shaving their hair to be self-sufficient. Customers are becoming more self-sufficient.

#### 3. Nostalgic

There is apprehension about the future, which leads shoppers back to the past and encourages them to buy things they haven't bought in a long time. Because of online grocery shopping apps and readymade fast food, most customers have forgotten about Maggi noodles. But, after the outbreak of the pandemic, consumers have purchased packaged food, which has enabled them to relive their history.

# **Literature Review**

Cambefort, 2020 The paper focuses on the question that how the pandemic has affected consumption around the world. The researcher tries to find out the relationship that COVID-19 and the reduction in consumption. Social distancing and lockdown due to the pandemic made consumers change their pattern of consumption, and on the other hand, many shops were temporarily closed through these factors the pandemic inevitably led to a general decrease in consumption. The tourism sector suffered the most with negative spending of almost –57 per cent, led by –38 per cent for lodging. Since China was the epicentre of COVID 19, other countries began to reject Chinese goods.

Andersen et al., 2020 This study examines how the pandemic and government shutdown impacted consumer spending, as well as the changes that occurred as a result of social isolation and decreased physical interaction within a person. This paper aims to highlight the impact of social distance on consumer buying. The paper also attempts to examine the virus's symptoms as well as the laws in place to combat it. The paper also attempts to establish a connection between the outbreak and the age group of customers who attempt to spend during the outbreak. This paper aims to examine the purchasing patterns of people who are less likely to be influenced by COVID-19 and those who are more likely.

Makwana, 2020 With a particular connection to Gujarat, India, this research paper helps to explain the purchasing crisis that was triggered by the pandemic and the compulsory lockdown that was in place during an emergency. The key goal of this research was to see if there was any panic buying among shoppers, and if so, how widespread was this behaviour and what goods were associated with panic buying. The researcher concentrated on the necessities, such as food and medications. According to the author, an effective supply chain highlighting in the food supply was needed to handle the accelerated demand generated by the abrupt lockout and subsequent lockdowns that were declared during the outbreak, the researcher indicates certain shocks due to panic buying could be variation in the buying pattern, unable to meet the labour-power needed for matching the demand by the supply. The variables used for the research is "supply disruption", the number of times or frequency of shopping, consumers' overall expenditure, what are the products that are avoided by consumers and overstocking of essential goods.

Liu et al., 2020 talks about how the novel coronavirus has affected household consumption and the use of mobile payment during the pandemic. The novel coronavirus which had started at the end of 2019 was also the time of the traditional festival of the Chinese and hence there was a direct impact on the consumption of household commodities, where the consumption in usual years was high due to the lockdown and the fear of widespread of the infection there was a drastic decline in the consumption. The main objective of the paper is to find out the response of

consumption pattern at the household level, the reaction of the household consumers towards pandemic, and if there is an impact of mobile payment on the consumption pattern during the pandemic. In conclusion, the researcher finds that the only way to increase household consumption during the outbreak is through mobile payments but this is not an effective solution in rural China. The major scope of the study could be on how these mobile payment platforms can be used, even after a pandemic and how government can develop policies to promote mobile payment which is the need of the hour.

# Methodology

#### **Statement of Problem**

The coronavirus has changed the entire way we deal with things. In the modern history of the planet has not seen such a devastating crisis that brought the entire world to a standstill. No matter how much research might go into investigating the post-COVID-19 there might not be a reliable conclusion for an accurate measure about how the Post COVID-19 world would turn out to be. The pandemic has bought a drastic change in the decision-making process in a patriarchal society like India, where the oldest male member of the family makes every decision. However, in a situation where many family members have lost their livelihood, the family must work together and make the decision based on their wealth and needs rather than their wishes and wants. The pandemic has caused widespread devastation in the metropolitan areas disrupting the daily lives of urban consumers. This research aims to determine consumer's behaviour shifts due to factors such as income, hygiene, mode of shopping for consumer products for basic commodity consumption patterns.

### **Objectives**

The primary objectives of this study are to find the impact of COVID-19 19 on the purchasing behaviour of consumers in Bangalore.

Subsequently, other objectives are tested in this study which is as follows:

- > To study the relationship between income and consumption pattern of consumers before and during the pandemic.
- > To understand whether consumers preference has shifted from offline to the online platform.

#### **Variables**

Income, the shift in the mode of purchases, Consumer purchasing behaviour, COVID 19.

#### Sampling

The study of 250 respondents as the sample size who are a resident of Bangalore was collected using a convenience sampling method.

#### Data & Statistical tests used

The research is conducted based on the primary data collected from the respondents. Statistical Package for Social Science (SPSS) is the statistical tool used for the study. Paired sample T-test and Analysis of Variance (ANOVA), is the test applied

to test the hypothesis

# **Hypothesis**

Two hypotheses are being tested

# **First Hypothesis:**

- $H_1^0$  (Null hypothesis): There is no significant change in consumer purchasing pattern before and after the pandemic.
- $H_1^A$  (Alternate hypothesis): There is a significant change in consumer purchasing pattern before and after the pandemic.

# Second Hypothesis:

- $H_2^0$  (Null hypothesis): There is no significant shift in consumer preference from offline to online platform.
- $H_2^A$  (Alternate hypothesis): There is a significant shift in consumer preference from offline to online platform.

# **Results**

Table 1.1 Paired difference between saving percentage before and during pandemic

Pair	Variable	Mean	Std Deviation	t	Sig	Correlation		
1	Saving percentage before pandemic -	0.012	1.300	0.146	0.884	0.460		
	Saving percentage during pandemic							
Source: Computed from primary data								

**Result:** In table 1.1 the t value is not significant at 0.05 level of significance and can be concluded that there is no change in the savings percentage of the consumers and that they saved the same percentage before the pandemic and during the pandemic.

Table 1.2 Paired difference between the saving and expenditure ratio before and during pandemic

Pair	Variable	Mean	Std	t	Sig	Correlation	
			Deviation				
2	Saving to Expenditure ratio before pandemic & Saving to Expenditure ratio during pandemic	-0.004	1.103	-0.057	0.954	0.416	
Source: Computed from primary data							

**Result:** In table 1.2 the t value is not significant at 0.05 level of significance and can be concluded that there is no change in the savings and expenditure ratio of the consumers and that there is a similar type of saving and expenditure ratio before the pandemic and during the pandemic.

Table 1.3 Paired difference between items bought before and during the pandemic

Pair	Variable	Mean	Std Deviation	t	Sig	Correlation	
3	Items before & Items	0.500	1.495	5.288	(0.000)**	0.289	
	after						
** Significant at 0.01 level of significance							
Source: Computed from primary data							

**Result:** In table 1.3 the t value is significant at 0.01 level of significance and can be concluded that there is a negative change in the items bought by the consumers before the pandemic and the items bought during the pandemic and that there is a significant level of change in the goods bought before the pandemic and that of items bought by the consumers during the pandemic.

# **Interpretation:**

From the above tables, it can be interpreted that there has not been any significant change in saving pattern and the ratio between savings and expenditure from the total disposable income of the consumer however there has been a significant difference in the goods that have been purchased before the pandemic and during the pandemic. This might be because that the consumers would have used the same money that they used to save to purchase the other products that are needed during the pandemic, for instance, the consumers who would have thought of saving more would have ended up buying electronics such as a laptop, and other computer accessories, buying a lot of medical and essential commodities such as hand satirizers, health monitoring devices such as an oximeter or anticipating that the restrictions on the current situation might continue they would buy fitness commodities as going to a gym, or even walking out would expose them to the virus.

When the savings were intended to be high, initially when the lockdown and the pandemic had set in, consumers would have used the extra saving in the extra goods bought because of the pandemic bringing their savings percentage, and the savings and expenditure ratio back to the same level. Hence it is seen that the is a significant change in the consumer purchasing behaviour and thereby rejecting the null hypotheses and accepting the alternate hypothesis.

Table 2.1 Analysis of variance of purchasing goods online with the frequency of purchase and goods purchased before pandemic

Variable		Sum of	df	Mean	F	Sig.	
		Squares		Square			
How often	Between	15.800	1	15.800	14.378	(0.000)**	
did you	Groups						
shop online	Within	272.524	248	1.099			
before	Groups						
pandemic	Total	288.324	249				
	Between	18.340	1	18.340	15.977	(0.000)**	
Goods	Groups						
	Within	284.684	248	1.148			
before	Groups						
	Total	303.024	249				
** Significant at 0.01 level of significance							
Source: Computed from primary data							

**Result:** Table 2.1 shows the variance between the respondent shopping online or not before the pandemic to the frequency of shopping online before the pandemic and the goods that are bought before the pandemic. The F value of the reoccurrence of shopping online before the pandemic is 14.378 and for the goods bought before the pandemic is 15.997 both of these variables are significant at 0.01 level of significance.

Table 2.2 Analysis of variance of purchasing goods online with the frequency of purchase and goods purchased during pandemic

Variables		Sum of	df	Mean	F	Sig.	
		Squares		Square			
How often	Between	12.263	1	12.263	9.482	(0.002)**	
did you	Groups						
shop online	Within	320.733	248	1.293			
during	Groups						
pandemic	Total	332.996	249				
	Between	1.530	1	1.530	1.577	.210	
	Groups						
Goods after	Within	240.694	248	.971			
	Groups						
	Total	242.224	249				
** Significant at 0.01 level of significance							
Source: Computed from primary data							

**Result:** Table 2.2 shows the variance between the respondent shopping online or not during the pandemic to the frequency of shopping online during the pandemic and the goods that are bought during the pandemic. The F value of the reoccurrence of shopping online during the pandemic is 9.482 and for the goods bought during the pandemic is 1.577. Only the first variable (reoccurrence of shopping online during the pandemic) is significant at a 0.01 level of significance. The goods bought during the pandemic is not significant.

# **Interpretation:**

The one-way ANOVA was performed to derive if the respondents shopped online before and during the pandemic and to understand if there is any change in the frequency of shopping online and the goods bought during the pandemic. From tables 2.1 and 2.2 it is inferred that the frequency of respondents who had shopped online before the pandemic and during the pandemic has an f value of 14.378 and 9.482 respectively with a significance level of 0.01 per cent with a probability value of 0.000 and 0.002 (p<0.01). This indicates that the respondents have continued to shop online with the same frequency during the pandemic, because of the fear of getting exposed. It is also found out that the goods bought from that of before pandemic is different from that bought during the pandemic with f value 15.997 being statically significant at 0.01 level of significance with a probability of 0.000 (p<0.01), however, the goods bought during the pandemic is not similar with that of goods bought before the pandemic because of the change in the needs and wants that the new normal has bought in. hence the null hypothesis is rejected and the alternate hypothesis is accepted.

# **Findings**

- It is evident from the analysis that there is no change in the saving percentage of the consumers. This means that the people save the same percentage as they did before the pandemic.
- The saving to expenditure ratio was analysed to know the shift in expenses, the results are that there is no change in saving and expenditure ratio.
- However, there is a major shift in the number of items bought during the pandemic and before the pandemic. This means that the expense has not changed but the products or items affected by that expense is has changed. Like for example, the consumers of the middle class would have had a budget of saving more to come up with the unforeseen circumstances of the pandemic but the new normal of work from home, the online classes would have forced them to use the extra saving on buying the extra products such as a new laptop, mobile phone, furniture for the laptop to work from home etc and due to this their saving percentage would have dropped down to be the same to that was before the pandemic. And it can also be explained as transportation, take out and other expenses that have reduced and shifted towards other essential products.
- There has not been any significant change in the saving pattern. And the ratio between savings and expenditure from the total disposable income of the consumer, however, there has been a significant difference in the goods that have been purchased before the pandemic and during the pandemic.

- There is a shift in the preference of consumers from offline platforms to the online platform. They perceive it to be much safer compared to offline shopping, where the risk of contact is extremely high.
- On comparing the results of the one-way ANOVA before the pandemic and during the pandemic the frequency of shopping online has had a significant change among the respondents but the items bought online during the pandemic has not changed significantly.
- The results also say that the respondents have repeatedly shopped online during the pandemic.
- Consumer preference towards online shopping is on the positive side. As the respondents feel that the necessary precautions about safety it is most important and consider it safer to shop online.

### **Suggestions**

The respondents were asked an open-ended question to know how they managed their savings and expenditure during the pandemic and some of the suggestions that were received are as follows:

- By keeping the accounts of all the monthly expenses, a budget could be prepared and the unwanted or least important expenses can be eliminated.
- The pandemic being uncertain itself there need to be preparations made beforehand and cutting down on many non-essential expenses is the need of the hour.
- Having a clear list of what needs to be purchased would help in the reduction of impulsive buying and through this, a lot of unwanted expenses can be reduced.
- Considering the present form of the country's economy when it is recovering from the pandemic and the lockdown that was imposed saving income is a major way to move to a better future.

Other than the above suggestion given by the respondents some of the suggestions that can be taken are as follows:

- The study is only taken up within the city limits of Bangalore and for further research, the researcher can increase the scope and cover a wider area.
- Consumers are preferring in buying more bulk products of essential commodities and hence the companies should concentrate on marketing bulk products and move from non-essential goods to goods that are need of the hour.

# **Conclusion**

COVID-19 is one of the worst tragedies of recent times that has taken the whole world to a halt. The new coronavirus was declared a pandemic by the World Health Organization (WHO), as it has been found in over 200 countries. India is a developed world in terms of both health and economy, the world's most hit countries have been India's economy took a blast. The national lock-out to curb the effects. A lot of people have been unemployed and forced to pay and still are concerned about the virus. With more layoffs and salary cuts, this pattern is continuing. The supply chains were interrupted on a larger scale. Consumers have modified their way of purchasing goods or services at a moment of new standard and confusion. Before consuming goods, customers must consider twice. The pandemic has brought about a change in the buying behaviour of consumers.

Although there is not much change in the savings and expenditure, there is a significant shift in the types of items that expenditure is on. This clearly shows that people's priority has changed about the products they invest in. a further study can be done to establish what kind of products consumers are interested in. it is also evident that there is the shift from offline to online platforms for shopping. This is due to the concerns about safety and hygiene among the respondents. Above all online shopping is convenient and it is the new future. The pandemic has normalised the fact of wearing masks and sanitising often, online shopping will also become prominent shortly.

#### Reference

Andersen, A., Hansen, E., Johannesen, N., & Sheridan, A. (2020). *Pandemic, Shutdown and Consumer Spending: Lessons from Scandinavian Policy Responses to COVID-19* \*. https://arxiv.org/pdf/2005.04630.pdf

Cambefort, M. (2020). How the COVID-19 Pandemic is Challenging Consumption. *Markets, Globalization & Development Review, 5*(1). https://doi.org/10.23860/mgdr-2020-05-01-02

Liu, T., Pan, B., & Yin, Z. (2020). Pandemic, Mobile Payment, and Household Consumption: Micro-Evidence from China. *Emerging Markets Finance and Trade*, 56(10), 2378–2389. https://doi.org/10.1080/1540496x.2020.1788539

Makwana, K. (2020, August 5). *A Study of Consumers' Panic Buying Behavior During Pandemic Coronavirus (COVID-19) and Consequent Lockdowns With Special Reference to Gujarat, India.* Papers.ssrn.com. <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3667582">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3667582</a>

Nandakumar, A., & Stanley, S. (2020). Chatbot Technology -A panoramic view towards customer satisfaction. *Humanities and Social Science Studies*, 8(2).