

TO STUDY THE IMPACT OF THE CORONAVIRUS PANDEMIC ON CONSUMER BEHAVIOR TOWARD ONLINE FOOD DELIVERY: A WEST BENGAL PERSPECTIVE

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Abstract: - *The outbreak of Coronavirus has shaken the whole world. India is not an exception. The pandemic has made a havoc impact on almost every industry. Online Food Delivery is perhaps one of the most affected sectors due to this pandemic. The overall aim of this research project was to study the impact of the Coronavirus Pandemic on consumer behavior toward online food delivery in West Bengal. To study its impact an instrument- a structured questionnaire was prepared to collect primary data from 500 respondents in West Bengal. The results indicated that the coronavirus pandemic has negatively impacted consumer buying behavior toward online food delivery. The study also found that people are more likely to consume homemade food during this pandemic and the online food delivery organization's/ restaurant's promotional campaign regarding the hygiene & sanitizations followed is considered the most important factor while ordering food online by the customers.*

Keywords: Consumer behavior, consumer habit, coronavirus, online food ordering, food delivery.

1. Introduction

After the first detection of Coronavirus on 8th December 2019 in Wuhan, China the virus traveled through Thailand, the USA, Europe, and Australia and reached India on 30th January 2020.

The rapid transmission of the disease accompanied by the death count made it declare a 'Global Emergency' by WHO and a "Pandemic" in no time. The Government of every country responded to this situation by putting several segments of lockdown to slow down the transmission process and or to break the chain.

We have witnessed economics slowed down globally, thousands of companies being shut down, and employees being fired, since the inception of the disease. Almost all sectors are affected by this situation. One such industry is Online Food Delivery (OFD). Although there is not enough evidence of transmitting this virus through food, still people are very much frightened and scared of ordering food from outside. As this deadly virus transmits through in-person contact, most people are taking appropriate measures to safeguard themselves.

Various online food aggregator companies have introduced contactless delivery to counteract the current situation. We are also witnessing a change in the advertising strategies of these

companies. Previously they used to focus on discounts, offers, food quality, and quick delivery in their advertisements but now their advertisements are focused on hygiene & sanitization practices followed by the food outlets, staff, and delivery boys.

Consumers are having a tough time during this period. On the one hand, the consumers didn't want to take the risk of having food outside during this time whereas, on the other hand, it's been a while since they satisfied their appetite for their favorite food from their favorite food joints & with the Governments loosening the lockdown guidelines and the food aggregator companies claiming about the safe & hygienic foods, they are now in a great dilemma.

This study examines how the coronavirus epidemic has altered people's attitudes and habits with regard to OFD in the Indian state of West Bengal.

2. Problem Statement

After several months of lockdown, the Government is loosening the lockdown guidelines. We are now witnessing offices, shopping malls, movie theatres departmental stores getting opened. It is expected that OFD services will operate at full capacity, in accordance with government regulations.

But at the same time, the virus has neither left nor been controlled, nor has any 100% clinically proven therapy been invented so far. After being confined to isolation in recent months, people are now preparing to leave their homes and do their normal work on a daily basis. One can anticipate that there will be some changes in their purchasing habits as the virus spreads rapidly through direct contact.

On the other hand, when they order food through popular delivery apps the probability of direct contact will be enhanced by manifolds. Moreover, they will be consuming those foods & beverages which are prepared & served by anonymous people whose travel history, medical history, or any kind of background information is not known by the consumer. It may also be possible that the person working in that outlet or the delivery boy delivering the food is a carrier of this virus which can be transmitted to the consumer.

At this time, we are currently unsure how this coronavirus pandemic has shaped the behavior of consumers toward OFD in West Bengal and how the online food industry can make the necessary changes to its operations and strategy to counteract those changes.

This research work attempts to respond to these unanswered questions.

3. Literature Survey

3.1 Confusion over OFD Safety

After the world was hit with an unknown virus, the confusion over what to do and what not to do during this period quickly increased. As people are getting exposed to different kinds of news from various sources, they're in a great dilemma about which news to trust and which not to. We have seen news with no evidence being circulated all over social media. Almost all people have their version of dealing with this coronavirus.

After being confined to their homes as a result of government-imposed lockdown, people are left with very little to do. As they cannot visit restaurants for having food, people started to eat at home. The tendency to eat at home was observed in the Nielsen study. In the Chinese mainland, Hongkong, South Korea, Malaysia & Vietnam, the tendency to eat at home has increased by manifolds after the pandemic outbreak (Asian Consumers Are Rethinking How They Eat Post COVID-19. Linkedin.com, 2021).

Seeing the confusion and panic of the people over the relationship between coronavirus and food, the World Health Organization (WHO) announced several guidelines. WHO (Coronavirus disease (COVID-19): Food safety and nutrition. Who.int., 2021) affirmed that no cases of COVID-19 were traced back to eating infected food. As the virus needs a live animal or human host to multiply and survive, the chances of transferring the virus from food packaging are also non-existent. Although it came as a sense of relief for OFD companies and restaurants, people are still very scared because of this pandemic. Furthermore, because the virus is new, no specific treatment is developed and research is still ongoing, everyday people are experiencing new characteristics of the virus that make them unwilling to take any risks.

3.2 Change in demand for OFD

The use of OFD apps on smartphones had decreased considerably throughout India. According to a survey (Diwanji, 2020), there has been a drop of 5% of users who have used smartphones for ordering food online post-pandemic (week starting on 28th March 2020). The effect of less use in OFD applications has been felt in the number of orders. Orders in popular OFD platforms like zomato and swiggy have dropped 60 percent in the middle of the pandemic (Coronavirus impact: Swiggy, Zomato orders drop 60%, 2020).

There has been a difference in other parts of the world though. Despite having a negative effect in the UK, the pandemic has had a positive net effect on the frequency and spending levels of OFD customers in Brazil and South Korea, but a net negative impact in the UK (How COVID-19 Is Impacting Online Food Delivery Platforms - CitiGPS. CitiGPS, 2021).

3.3 OFD selection factors

Once the customers have decided to order food online, the next important step is to select the OFD restaurants. There are many factors that a customer may take into consideration while selecting an OFD restaurant like price, quality, quantity, speed of delivery, offers & discounts. Due to the coronavirus outbreak, we are witnessing people are more concerned about the cleanliness, hygiene, and sanitization of restaurants, delivery boys, and delivery equipment.

According to an online survey (How COVID-19 Is Impacting Online Food Delivery Platforms - CitiGPS. CitiGPS, 2021), among 3,606 consumers (both users of online delivery services and non-users) in South Korea, Italy, U.K., Brazil, U.K., the key factors in selecting a platform are pricing, restaurant availability, and hygiene. Delivery speed, customer service, and app functionality are less important. A majority of non-users (64%), with the exception of Brazil (65%), are not inclined to utilize online meal delivery, mostly because they prefer to prepare for themselves and believe that the services are pricey. Another similar study (Dsouza &

Sharma, 2020) was undertaken to understand the behavior of the customer in the OFD services. The study examined various parameters such as e-services quality, food quality, safety measures, customer satisfaction, and customer loyalty using an online survey. This study examines several factors like the quality of e-service and food along with safety measures adopted, customer satisfaction, and loyalty using an online survey. The research indicated that the quality of food plays a critical role in satisfying customers, which may indirectly affect the loyalty of the customers. The study also reflected the safety measures implemented by a food chain or a restaurant in their delivery service will lead to a strong customer base, thereby developing customer loyalty.

A study (Zhao & Bacao, 2020) of 532 valid Food delivery Apps users It was found that satisfaction is the most important factor, and that perceived task-technology fit, trust, performance expectations, social influence, and confirmation all have a favorable impact, either directly or indirectly, on users' intention to continue using food delivery apps during the COVID-19 pandemic in China.

An empirical study (Mehroli et. al, 2020) was conducted among 462 OFDs customers to measure the distinguishing characteristics of customers who have or have not ordered food during the pandemic outbreak in India. The study was based on a binary logistic regression. The study determined six elements that could have an effect on the self-protective behavior of the customers which means did/didn't order the food. The six elements are perceived benefits, perceived threats, affective and instrumental benefits, cues to action and product involvement, and age and purchase frequency. The study ends by concluding that respondents exhibiting high-perceived threat, less product involvement, a less perceived benefit on OFDs, and less frequency of online food orders are less likely to order food through CFDs.

4. Research Gap

Though there are many news articles, research papers written, and press releases shared reporting the dropoff orders and users of online food ordering services, no research work has been published nor any work has been done to know the impact of the coronavirus pandemic on consumer behavior towards OFD in West Bengal. Moreover, all the application usage & order drop reported, are based on surveys done either outside India or taken pan India as the sample population. No research work has been done taking West Bengal as the sample population. The authors selected the state of West Bengal for the study as the state is easily accessible by all the authors which would help them to collect the data easily. Moreover, according to a survey (Biggest Online Food: Kolkata orders Fattest, Delhi second. (n.d.), 2021) by Zomato in 2016, West Bengal leads the country with the biggest online food orders, at an average order size of Rs 690.

This provides us with the gap as well as the opportunity to gain insights into the impact of coronavirus on consumer behavior towards online food ordering in West Bengal.

5. Objectives:-

- To study the impact of coronavirus on consumer behavior towards online food ordering in West Bengal.
- To suggest measures to the online food ordering industry and restaurants to combat the changing (if any) consumer habits due to the coronavirus.

This research is one of the foremost initiatives to study the impact of the Coronavirus pandemic on consumer behavior towards online food ordering in West Bengal, therefore, making it a significant contribution to the body of knowledge in the area of online food ordering & Indian & well as West Bengal consumer industry.

6. Conceptual Framework & Hypothesis

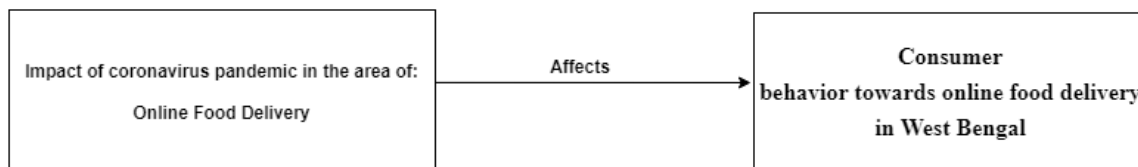


Figure 1: Conceptual Framework

Hypothesis 1: Coronavirus pandemic highly impacted consumer behavior in OFD.

7. Research Methodology

This research is a descriptive study with the goal of providing insight into phenomena by posing questions such as why, when, how, where, and what.

Simple random sampling was used as the sampling method for this study.

The sample size has been 500 customers in the age group of 18 years to 64 of different economic segments (a convenient number is chosen so that there will be enough responses to do the data analysis). The reason for choosing the above age group is because, at this age group, most people have the purchasing power & ability & to take decisions independently rather than depending much on other family members. The factor of the impact of Coronavirus on consumer habits is very subjective in nature & any error in selecting the sample size can result in erroneous results or conclusions.

The areas selected for the study are from tier II (Asansol, Durgapur) & III cities (Haldia, Kharagpur, Siliguri) of India with the only exception being Kolkata which is a tier I city. Data are collected through online mode (Google Forms) from 19th June 2020 to 18th July 2020.

In our study, we made an instrument- a structured questionnaire that has been served to a selective population of 500 & the selection has been made based on a simple random sampling method. To effectively examine the impact of the Coronavirus pandemic on the online food industry, we took responses from respondents who have used OFD services a minimum of 3 times in the past 6 months. Based on the responses, we tested the hypothesis.

8. Results & discussion

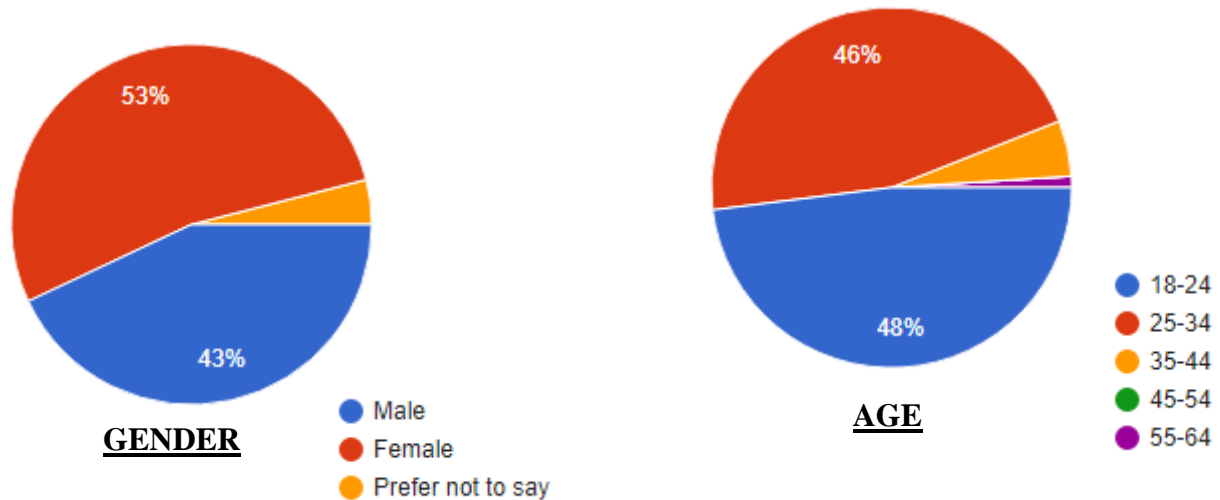


Fig 2: Demographic Profile

Since this research is not gender-specific, it is very important to have a proper gender mix for the population. The age profile we have is primarily the young people's section of society. (Fig. 2).

Validity and Reliability of Data

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.712
Approx. Chi-Square		81.109
Bartlett's Test of Sphericity	df	21.000
	Sig.	0.0000

Source: Validity Data

In order to measure the adequacy of data for factor analysis, Kaiser-Meyer-Olkin and Bartlett's testing was carried out. As we know, the KMO value of 0.7 to 0.8 suggests a good process of data representation. In our case, the KMO is 0.712. Next, the Bartlett sphericity test with an associated p-value is below 0.05, indicating strong evidence of the validity of the measurements. Cronbach's alpha was used to analyze the reliability of the questionnaire.

Table 2: Reliability Statistics

Cronbach's Alpha	No. of Items
0.677	10

Source: Regression Data

Cronbach's alpha value was 0.677 which is in line with the recommended value of 0.7.

Table 3: Multiple Regression Analysis

Variables	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
Online Food Ordering	0.550	0.369	0.292	8.119	1.804

a. Predictors: (Constant), Online Food Ordering

b. Dependent Variable: Consumer Behavior

Source: Regression Data

Table 4: Coefficients

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.211	0.648		6.349	0.000
Online Food Ordering	0.312	0.132	0.186	2.341	0.022

a. Dependent Variable: Consumer Behavior

Source: Regression Data

Multiple regression analysis was conducted to test the hypothesis. The results indicated that the coronavirus pandemic has impacted the consumer toward online food ordering.

9. Suggestions

Based on the results of the survey, the following conclusions can be made.

- Consumers are very much scared of this current situation
- Consumers are preferring home-made food over outside food

- The online delivery services & restaurants should try to gain the trust & faith of their customers by promoting intensively their hygiene & sanitization measures
- Today, customers are demanding transparency. The food delivery services & restaurants should communicate as much as possible regarding the safety measure they are taking.
- Where possible, the customers should be sent live pictures/videos of how the food is being prepared with appropriate measures to their customers.
- Online delivery companies & restaurants should try to contact with their old satisfied customers and pitch their products.
- Using testimonial propaganda can result in gaining customer faith.

10. Limitations of the Study

The conduct of the study is hindered by a variety of external conditions that are beyond the researchers' ability to control. Some of the constraints encountered include:

- Since there was a time crunch, we had to reduce the sample size and geographic coverage.
- Respondents were reluctant to share their feedback & opinions, and the authenticity of their statements can't be verified too.
- All the observations and recommendations are made solely on the feedback obtained from the survey.
- Analysis of changing consumer behavior with age towards OFD during this pandemic couldn't be considered as most of the responses are got from the age group of 18-34 years.

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