“A study on buying behavior of consumers during COVID-19 with special reference to Online shopping”

(Mumbai Sub-urban region)

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ABSTRACT

The study endeavored to understand the cause of novel coronavirus disease (COVID-19) on the consumer’s buying behavior. The COVID-19 pandemic and the lockdown due to social distancing mandates have interrupted the consumer’s habits of buying as well as shopping. Consumers are acquiring knowledge to improvise and learn new buying habits. Due to the pandemic and its consequences, online shopping is nowadays considered to be the most convenient medium of shopping to get away free from the spreading virus and keep ourselves in a completely safe and secure environment. Consumers cannot go to the store, so the store comes home. To know and understand the buying behavior of consumers during the COVID-19 pandemic towards online shopping a survey has been conducted with a random sampling of 151 consumers belonging to the Mumbai suburban region. The findings highlighted that the main components like mode of shopping, delivery pattern, Availability of product, Brand, safety, price, social media, panic situation, the product description on the internet, payment methods, Advertisement, internet literacy, and so on. Significantly influenced the consumer’s buying motive during the lockdown due to COVID-19 pandemic. The findings of the study will help to identify the changes which have occurred in consumers’ buying behavior during COVID-19 pandemic.

Key Words: COVID-19 disease, Social-distancing, Consumer behavior, Online shopping.
Introduction:

On February 11, 2020, World Health Organization officially declared COVID-19 or Novel coronavirus as a deadly virus. World Health Organization on 11th March 2020 confirmed COVID-19 as a global pandemic. A pandemic is a widespread infectious disease across a large region, for instance, multiple continents. A fight against coronavirus was started by the government and the public. To control the infectious spread of COVID-19 the government took some corrective and preventive measures such as lockdown, social distancing, wearing the mask, use of sanitizer, avoiding social gatherings, etc. Meanwhile, Section 144 was imposed taking into consideration rapid growth in the number of cases. All this resulted in fear among the people.

When the first lockdown was declared by the government rush in the market was suddenly increased. The panic situation was raised all of a sudden. The stocks of essential goods in shops were remarkably at the lowest level. Resulting in black marketing of essential and medical goods. Overall, the uncertainty and unpredictability of the situation made consumers buying behavior influential during the COVID-19 pandemic. The pandemic sparked a meteoric rise in online sales. As the visit to physical stores was restricted and many were running low on money, consumers, nevertheless, were directed towards online shopping, causing online buying to grow higher and higher. Ultimately, the corona crises accelerated the development of digital e-commerce and also enhanced internet literacy.

Mumbai, the financial capital of India witnessed a behavioral change in consumers buying behavior towards online shopping even though their preferred shopping method before the COVID-19 pandemic was Offline. That indicates how well consumers responded to the situation arising due to pandemics.

Consumers buying behavior is the total of a consumer’s attitude, preferences, intentions, and decisions taken both during online and offline shopping by consumers before buying a product or service. The process may include consulting search engines, engaging with social media posts, or a variety of other actions. Well, the influence of social media remarked more during COVID-19 resulted in behavioral change in consumers buying.

Factors Influencing or affecting consumers buying behavior are:

**Cultural Factors:** Cultural factors have their significance in buying behavior of consumers. Culture is not always defined by a person’s nationality. It can also be defined by their associations, their religious beliefs, or even their location.

**Social Factors:** Do influence buying behavior of consumers it could be in terms of wealth, status, education level, family size and structure, population density, and so on. That influences someone’s buying behavior.

**Personal Factors:** Also play a vital role towards buying behavior include someone’s age, marital status, budget, personal beliefs, values, and morals.
Psychological Factors: Consumer’s state of mind when they are approached with a product will often determine how they feel not only about the item itself but the brand as a whole.

Review of Literature

**Bharat Patil and Nerita Patil, (2020)**

This paper is entitled A study on impact of COVID-19 Pandemic on consumers behavior in India. Observed that consumers behavior has suddenly changed in lockdown situation created by COVID-19 Pandemic. The message from social channels and various media drastically effected to change behavior of people. In this research researchers used an empirical investigation conducted through google form. The researchers had selected 33 respondents for their study purpose. They concluded that Buying behavior of majority of the consumers effected by lockdown and also, that tendency of the consumers to store more essential goods during lockdown period is enhancing.

**Bharti Aggarwal and Deepa Kapoor (2020)**

studied on Influence of COVID-19 Pandemic on customer’s online buying behavior in India. In this study they have applied descriptive research. It is observed that people are changing their buying behavior from conventional buying to online shopping. It has also increased the shopping through websites and mobile apps. Due to increasing risk of corona virus customers are avoiding public places which increasing customers attraction towards online shopping. E-Commerce companies have to make better policies to meet changing needs of shoppers. After COVID-19 in India, attitude towards online shopping is getting better. They concluded that COVID-19 pandemic has encouraged online shopping activities of consumers more active and also, E-retailers supply products that are normally purchased in the supermarket by consumers.

**Thiyagarajan (2021)**

studied on impact of COVID-19 on the customer buying behavior. In this paper they have mainly discussed about the digitalization and its impact on the buying behavior of the customer. Digital platforms help the customers to get the products and services by staying inside the home.

Scope of the Study

This study would be undertaken to analyse the impact of COVID-19 on buying behavior of consumers towards online shopping. It would also be helpful to us to understand the factors that has influence consumers buying behavior during COVID-19 pandemic and also to understand how well consumers responded to the uncertainty event arises due to COVID-19.

Research Methodology

It’s a specific procedure used to identify, select, process and analyze the information used in the research paper. In order to present the accurate fact. It also helps the researcher to evaluate over all reliability and validity of the research paper. In short research methodology emphasis on systematic way or method of doing research.
Problem of the study: The study is based on impact of COVID-19 on buying behavior of consumers and what are the problems face by the consumers during the uncertain situation.

**Research Objective:**

1) To Study the impact of COVID-19 pandemic on the consumer's buying behavior.

2) To identify the problems faced by consumer's during online shopping due to COVID-19.

3) To identify the factors that has influenced consumer’s buying behavior towards online shopping.

4) To find the preventative measures taken by consumers during COVID-19.

**Hypothesis**

In light of the discussion in preceding sections, the following hypotheses are proposed:

H0: There is no major impact of pandemic on consumers behavior with respect to online shopping.

H1: There is a major impact of pandemic on consumers behavior with respect to online shopping.

**Research Design**

The research design provides guidelines about the data element. The study is based on both primary data and secondary data. The convenient sampling method was used in the present study. The primary data was collected through structured questionnaire which was distributed through Google form for which the sample size was 151 respondents (consumers) were selected from different areas of the city. Secondary data gathered from different database sites; articles and journals written by various authors also referred.

**Area of the Study**

The study is undertaken in and around the Mumbai city and its suburban areas.

**Research Approach**

The questionnaire method of survey is used for collecting primary data from consumers belonging to Mumbai region. Researcher appealed all respondents to fill in the questionnaire, by themselves by self-explaining the various aspects mentioned in it. It contained both open ended and close ended questions in the structured form which is very easy to understand at a glance.

**Sample Technique**

A convenient sample (Probability sampling method) of 151 consumers belonging to Mumbai region shared their information regarding the study. They were requested to complete the questionnaire on voluntary basis. The study was done in January 2022.
Data Usage

The analyses and interpretation are done on the basis of primary data. However, for conclusion and recommendation both primary and secondary data is used along with the verbal knowledge and information obtained from respondents. The data collected from these sources were analysed using tools like chi-squared test methods.

Data Analysis and Interpretation

<p>| Table-1: Age, Gender and Occupation wise Demographic Pattern of Individual Consumer |
|-----------------------------------------------|---------------------|---------------------|</p>
<table>
<thead>
<tr>
<th>Demographic Category of Consumer</th>
<th>Parameters</th>
<th>Number of Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Total (151)</td>
<td>Percentage</td>
</tr>
<tr>
<td>Male</td>
<td>75</td>
<td>49.7%</td>
</tr>
<tr>
<td>Female</td>
<td>76</td>
<td>50.3%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Age</td>
<td>125</td>
<td>83%</td>
</tr>
<tr>
<td>18-29 YEARS</td>
<td>125</td>
<td>83%</td>
</tr>
<tr>
<td>30-44 YEARS</td>
<td>19</td>
<td>13%</td>
</tr>
<tr>
<td>45-59 YEARS</td>
<td>6</td>
<td>4%</td>
</tr>
<tr>
<td>60 &amp; ABOVE</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Employment</td>
<td>86</td>
<td>57%</td>
</tr>
<tr>
<td>Student</td>
<td>86</td>
<td>57%</td>
</tr>
<tr>
<td>Self-Employed</td>
<td>20</td>
<td>13%</td>
</tr>
<tr>
<td>Private Service</td>
<td>29</td>
<td>19%</td>
</tr>
<tr>
<td>Public Service</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>Business</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: compiled from questionnaire

In the present study 75 respondents were male (49.7%) and 76 respondents were female (50.3%). 125 respondents were belonging from the age group of 18-29 years (82.7). 19 respondents i.e. 13% belongs from 30-44 years and remaining 6 respondents belongs from 45-59 years and 1 respondents were above 60 years. Majority of the respondents were students i.e. 86 (57%) respondents. 29 respondents were working with private companies and 20 were self-employed. In public service and business 4 respondents each and 8 respondents were doing other job.

Table-2: What was your preferred Shopping method before COVID-19?

<table>
<thead>
<tr>
<th>Mode of Shopping</th>
<th>Total (151)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>68</td>
<td>45.0%</td>
</tr>
<tr>
<td>Offline</td>
<td>83</td>
<td>55.0%</td>
</tr>
</tbody>
</table>

Table 2 indicates preferred shopping method of consumers before COVID-19 was more towards offline shopping i.e., 55 % and less towards online shopping with 45 %.
Table-3: What did you prefer more during the COVID-19 Pandemic?

<table>
<thead>
<tr>
<th>Mode of Shopping</th>
<th>Total (151)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>127</td>
<td>84.1%</td>
</tr>
<tr>
<td>Offline</td>
<td>24</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

Table 3 indicates during COVID-19 pandemic consumers preferred more Online shopping which is 84.1% and less preference towards offline shopping which is 15.9% due to safety purpose.

**Results and Discussion**

Chi-square method used to find out the preferred shopping method of consumers before and during COVID-19 pandemic.

The formula for Chi-square ($\chi^2$) is: $\sum \frac{(\text{Observed values} - \text{Expected values})^2}{\text{Expected values}}$

<table>
<thead>
<tr>
<th>Mode</th>
<th>Before Covid 19</th>
<th>During Covid 19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>68</td>
<td>127</td>
<td>195</td>
</tr>
<tr>
<td>Offline</td>
<td>83</td>
<td>24</td>
<td>107</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>151</td>
<td>302</td>
</tr>
</tbody>
</table>

E = Expected values

All Expected values are greater than 5 may proceed with Chi square test

$$\chi^2 = \frac{(68 - 97.5)^2}{68} + \frac{(127 - 97.5)^2}{127} + \frac{(83 - 53.5)^2}{83} + \frac{(24 - 53.5)^2}{24}$$

$$\chi^2 = 12.7978 + 6.8523 + 10.4849 + 36.2604 = 66.3954$$

df = (Number of rows – 1) (Number of Column – 1)

df = (2 - 1) (2 - 1)
df = 1
5% Critical value = 3.841

\[ \chi^2 \text{ Critical Value} \]
\[ 66.3954 > 3.841 \]

**Interpretation:**

In the above study we investigated \( \chi^2 \) is greater than the critical value therefore our Null hypotheses rejected and alternative hypothesis accepted that clearly indicates there is a major impact of COVID-19 pandemic on consumers behavior with respect to online shopping.

**Conclusion:**

- It is concluded that there was shifting of preference of shopping from offline to online shopping.
- The consumers were finding difficulty to do offline shopping during pandemic situation.
- The consumers preferred online shopping as it was easy, convenient and comfortable to all specially with zero touch.
- Thus, COVID-19 influence buying behaviour of consumers more towards online shopping.

**References**

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