"COVID-19 & CONSUMERS: AN EMPIRICAL STUDY ON THE IMPACT OF COVID-19 PANDEMIC ON CONSUMER’S BUYING BEHAVIOR TOWARDS ONLINE SHOPPING IN RAJASTHAN -PERMANENT OR TRANSIENT?"

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ABSTRACT

The coronavirus disease (COVID-19) pandemic, which originated in the city of Wuhan, China on 31 December 2019, is the first and prime human tragedy across the globe, affecting the lives of millions of people. As a result, almost every aspect of our lifestyle has been altered, thus many factors are shooting up in these difficult times which are governing the buying decisions and preferences of the people. Specifically, this outbreak has really brought an unexpected change to the Indian economy, having profound effects on consumer’s e-commerce experience. Today, consumers are very much busy and stressed out with their work-life schedule and do not have much time for shopping offline by standing for long hours in retail stores, so use the Internet not only to buy the products online but also to compare prices, product’s features and after-sales service facilities they will receive if purchased the product online. Hence, this cross-sectional study of established drivers of consumer’s buying behavior towards online shopping in Rajasthan, India is of great relevance during the COVID-19 pandemic, as e-commerce firms must anticipate consumer’s behavior and changing demands during this global crisis by providing them with the best of their services to maintain a competitive edge in the market. The findings and results of this investigation are supported by reliable secondary and primary data comprising of a total of 175 respondents from different age groups, conducted via google forms.

Index Terms: Covid-19, Pandemic, Consumer buying behavior, E-commerce, Online shopping, Rajasthan

1. INTRODUCTION

Severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2), which causes Coronavirus disease (COVID-19), was first identified on December 2019 at Wuhan city, China, and later transmitted to other parts of the world, greatly impacting the global economy [1]. On 30 January, 2020, this outbreak was declared a Public Health Emergency of International Concern by the World Health Organization (WHO) [2]. As of 11 March, 2020, WHO had documented more than 118,000 positive COVID-19 cases, and the death toll attributed to COVID-19 had reached 4,291 worldwide [3,4], characterizing it as a pandemic (WHO, 2020).
According to India Today report (2020), in India first confirmed positive case was reported on 27th January, 2020 in a student from Thrissur district, Kerala who had returned home for a vacation from Wuhan University, China, followed by two other cases on 2nd and 3rd February, 2020 [5]. To slow the rapid spread of the virus, national lockdown was announced on 25th March 2020 by Prime Minister of India [6] to maintain ‘social distancing’ as well as limit majority of business actions and mass gatherings with closures of educational and public institutions, thereby restricting social lives of people. Due to the closures of physical retail stores, online shopping has become the only means for consumers to satisfy their consumption needs. Reported by statista, in 2020 retail e-commerce sales worldwide amounted to 4.29 trillion US dollars, with a 24.1% growth rate from the previous year and e-retail revenues are projected to grow to 5.4 trillion US dollars in 2022 [7,8,9].

As consumers embrace new digital technologies in their sequestered lifestyles, their daily routines and habits are transforming the space of online shopping [10]. As a result, various types of businesses have been forced to find new ways to reach homebound consumers and to re-penetrate their markets. According to the survey conducted by UNCTAD and Netcomm Suisse eCommerce Association, in collaboration with the Brazilian Network Information Center (NIC.br) and Inveon, online purchases have increased by 6 to 10 percentage points across most product categories such as education and online courses, electronics, pharmaceuticals, digital entertainment, personal care and household products etc. [11,12]. Due to this increasing demand, e-commerce has been predominant during these times and retailers have invested into new technical solutions that enhances consumer’s e-commerce experience by building, improving, and promoting their online stores [13] which overall enable them to better manage their businesses on these platforms.

To ensure that these efforts succeed, it is important to examine consumer’s online purchase motives during this pandemic. Therefore, the study aims to investigate impact of lockdown and social distancing during COVID-19 pandemic on consumer’s buying behavior, especially in particular region of Rajasthan and whether these changes are actually permanent or will they go back to their old habits once the global crisis is over.

2. RESEARCH METHODOLOGY

To understand the consumer’s buying behavior towards online shopping in various cities of Rajasthan, I have undertaken a cross-sectional, empirical study. For this, snowball non-probability sampling method has been adopted to acquire data from respondents in Rajasthan. Primarily, for the data collection, a quantitative survey method was conducted through Google forms, by forming self-constructed questionnaires, comprising of both closed and open-ended questions. Further, a message was drafted containing the instructions of how to fill the survey, eligibility of the participant i.e., from Rajasthan and its purpose. After the completion, a link was created in Google form itself, which was then forwarded to consumers in various cities of Rajasthan through emails as well as social media like WhatsApp, Instagram and Facebook. Once they fill out the questionnaire form, the participants were requested to forward the message to as many consumers as possible residing in Rajasthan to have a much accurate result and findings due to larger sample size. After comprehensively analyzing the results, copies of the survey findings and responses were e-mailed to every participant.

This data was collected from 10 May 2021 5:00 P.M. IST to 25 May 2021 12:00 P.M. IST. However, as this was an online study, respondents with access to an internet connection and electronic devices were only able to participate. Additionally, only consumers who understood English could take part in this research.

Equally important, the demographic information asked from the participants are their age, gender and occupation as online shopping in India is extensively influenced by these factors. Apart from this demographic information, in order to obtain comprehensive results of the impact of COVID-19 pandemic on consumer’s buying behavior, this survey was divided into five areas of questions: changes in frequency and time spent on shopping online, expenditure made, e-shop experience and preferences, payment methods used and sales promotion offered by e-commerce firms. Overall, it has mandatory 18 multiple choice questions followed by 2 six-point Likert scales, along with an optional long answer type question to have additional consumer’s opinion or recommendations about the factors which influenced their satisfaction for online shopping due to the ongoing COVID-19 pandemic.
3. RESULT, FINDINGS AND DISCUSSION

An online observational survey assessing the impact of COVID-19 pandemic on consumer’s buying behavior towards online shopping in Rajasthan was conducted with a total of 175 respondents. However, only candidates who were residing in urban areas of Rajasthan could participate as they had access to electronic devices with sufficient internet and knew English.

This turbulent situation had a huge impact on everyday consumer’s life and forced them to change the way they preferred to shop i.e., there is a drastic shift in their buying behavior from traditional shopping from brick-and-mortar stores to online shopping via e-commerce platforms or websites. There is a significant transformation in society on how consumers are reacting, coping with the external environment and adapting themselves for the long-run. Thus, the aim of this research is not to identify the causes but to identify changes that consumers of Rajasthan had noticed about their behavior due to the present scenario.

Consumers from different demographics engaged in the study and the results obtained showed four main findings. Primarily, from the responses gathered it can be observed that due to the desire of staying at home during COVID-19 crisis and government restrictions, most of the consumers digitally purchased products at a higher frequency than they were previously buying. This was quite evident from the increased time and money with which they are now shopping online. Currently, they are prioritizing purchasing essential items such as pharmaceutical and health care products as well as food and beverages, followed by digital entertainment. Secondly, based on the results, e-commerce was affected by change in the payment methods used. Before the transmission, several respondents reported cash on delivery as the most preferred mode of payment for online shopping. However, now due to the pandemic digital payments have become major source for consumers such as credit, debit, ATM cards and net banking to keep themselves safe. Not only this, according to many participants sales promotion strategies used by e-commerce firms to attract consumers have also strengthened during this unprecedented situation, some of which that consumers are heavily availing incorporates discounts, price reductions and free gifts. Lastly, most consumers surveyed were wanting to continue online shopping even post-covid, emphasizing that its impact will be seen on consumer’s buying behavior even after the end of pandemic but consumers will still be more conscious about issues of cleanliness, health and safety and expect the same level of caution from the service providers. As one of the respondents even stated in the optional long answer type question of the survey, “During the ongoing COVID-19 pandemic, we are highly pleased with the cleanliness, health and safety offered to us as social distancing and appropriate hygiene with timely sanitization are some pre-eminent ways to limit the transmission of this infectious virus, but we desire this even post-covid”.

4. DATA ANALYSIS AND INTERPRETATION

4.1 Demographic characteristics of the participants

Even if the demographic orientation of the consumers like age, gender and occupation did not influence their behavior towards online shopping, it was imperative to comprehend the target market and gather meaningful results. Of the total 175 respondents who participated in this research, 54.3% were male, while remaining 45.7% were female. Besides this, majority of respondents i.e., about 40% were under 18 years, 20% were between 18 to 30 years, 13.7% were between 30 to 40 years, 17.7% were between 40 to 50 years and the rest 8.6% were 50 years or above. Consequently, 32% students have undertaken the survey, while only 16% candidates were in jobs, remaining homemakers and those in business were 28.6% and 23.4% respectively.
Figure 4.1: Demographic characteristics of the participants

![Demographic characteristics of the participants](image)

<table>
<thead>
<tr>
<th>S.N.</th>
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<th>Majority of participants responses</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td>Under 18 years</td>
<td>40.0%</td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td>Male</td>
<td>54.3%</td>
</tr>
<tr>
<td>3.</td>
<td>Occupation</td>
<td>Student</td>
<td>32.0%</td>
</tr>
</tbody>
</table>

Table 4.1: Demographic characteristics of the participants

4.2 Changes in frequency and time spent on online shopping due to COVID-19

In the survey, when asked about where are they spending most of their time during the COVID-19 pandemic, 37.1% participants responded Online shopping, hammering on the fact that now there is an increase trend in the society for purchasing products online. With this, 26.3% participants spent most of their time on internet. Nowadays, using the internet to shop online has become a primary reason for its growing demand, combined with searching of products and finding more information about them. Internet in these times is thus changing the way consumers buy goods and services, and has quickly evolved into a global phenomenon because of which they are wanting to spend less time with their friends and families, in health and fitness or even leisure, as demonstrated by the responses. It is observed that the frequency of online shopping has also increased drastically. Before the current situation, only a handful of participants i.e., about 13.1% purchased via online but due to the covid-19 outbreak now 44.0% consumers shop online very often and 28% every time, modifying the consumer’s experience as a whole. Overall, 72.6% of the surveyed candidates reported that this pandemic greatly increased their online shopping behavior and for other 26.9% participants it increased slightly. Presently, 24.0% of them daily spend time shopping online, while the majority 31.4% engaged in online shopping twice a week. To add up, 15.4% respondents shopped online 4 to 5 times a month and 13.7% every 2 or 3 months, rest 2.9% and 12.6% purchased via online either half-yearly or every 15 days respectively.
Figure 4.2: Changes in frequency and time spent on online shopping due to COVID-19

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</thead>
<tbody>
<tr>
<td>1.</td>
<td>In which of the following are you spending time the most because of COVID-19 pandemic?</td>
<td>Online shopping</td>
<td>37.1%</td>
</tr>
<tr>
<td>2.</td>
<td>Presently, how often do you spend time shopping online?</td>
<td>Twice a week</td>
<td>31.4%</td>
</tr>
<tr>
<td>3.</td>
<td>Before the current situation, how often did you shop online?</td>
<td>Sometimes</td>
<td>38.3%</td>
</tr>
<tr>
<td>4.</td>
<td>Due to the Coronavirus disease outbreak, how often do you now shop online?</td>
<td>Very often</td>
<td>44.0%</td>
</tr>
<tr>
<td>5.</td>
<td>Overall, how has COVID-19 affected your online shopping behavior?</td>
<td>Increased greatly</td>
<td>72.6%</td>
</tr>
</tbody>
</table>

Table 4.2: Changes in frequency and time spent on online shopping due to COVID-19
4.3 E-shopping experience and preferences during COVID-19

Due to the COVID-19 disease outbreak, preferences of the consumers have changed from having a world tour to safely staying at home and buying luxuries from physical brick-and-mortar stores to purchasing necessities online for survival because of which e-commerce firms also need to adhere to shifting of customer preferences and innovate their marketing strategies accordingly. As seen from the checkbox type question, 43 consumers mostly purchased essential pharmaceutical and health care products or food and beverages via online, while 20 of all surveyed to keep themselves safe and delighted bought digital sources of entertainment. This will lead to a long-run impact on consumer e-shopping trends, perception and preference behavior. Respondents were also asked to rate their overall online shopping experience during COVID-19 pandemic on six-point Likert scale with rating five being “Extremely satisfied” and zero being “Extremely dissatisfied”. Most candidates i.e., about 42.9% rated five and 24.7% rated four, while other 29.7% gave a rating of three, two or one respectively. None of the participants were extremely dissatisfied with the e-shopping experience. Not only this, 45.7% participants reported to extremely prefer online shopping over going physical to the stores in these difficult times, while 32.6% moderately preferred the same. Furthermore, at present social environmental factors such as crowdedness can highlight safety-related constructs, resulting in consumers’ greater preference for a safety-oriented option, hence majority 16.0% consumers surveyed in the study because of personal safety and social distancing norms chose to purchase products online, rather than physically buying from stores. Moreover, 65.7% respondents were certain about choosing to shop online even post-covid, while 28.6% were likely to prefer shopping online after pandemic ends. In this current scenario, 38.3% very often purchased products online that they were previously not willing to buy physically from the stores, while 11.4% participants every time did the same. Nevertheless, still many consumers are facing challenges while purchasing via online such as majorly 26.9% and 25.7% were concerned about the digital payment failure and privacy and security problem respectively, thus due to threat of cyber risks some of them are not preferring to frequently shop online during pandemic.

Figure 4.3.1: E-shopping experience and preferences during COVID-19
Figure 4.3.2: E-shopping experience and preferences during COVID-19

What type of products have you typically bought online since the start of this pandemic? (Select all that apply)

- Pharmaceutical and health care: 22 (12.6%)
- Cosmetics and personal care: 17 (9.7%)
- Digital entertainment: 20 (11.4%)
- Food and beverages: 21 (12%)
- Fashion and accessories: 6 (3.4%)
- Media and books: 13 (7.4%)
- Electronic gadgets: 9 (5.1%)
- Home furniture and household: 19 (10.9%)
- Education and online courses: 17 (9.7%)
- Gardening tools: 6 (3.4%)
- Tourism and travel (e.g., hotel): 14 (8%)
- Sports and fitness: 11 (6.3%)

How would you rate your overall online shopping experience during COVID-19?

- 1-2: 21 (12%)
- 3-4: 30 (17.4%)
- 5: 75 (42.9%)

How much would you prefer online shopping over going physically to the stores in these difficult times?

- 1-2: 38 (21.7%)
- 3: 57 (32.8%)
- 4: 31 (18.7%)

Currently, why are you choosing to purchase products online, instead of physically buying from stores?

- Payment safety: 11.4%
- Increased product information and relatable reviews: 10.3%
- Ease of return and refunds: 9.1%
- Convenient: 11.4%
- Low and affordable prices: 10.9%
- Faster deliveries: 12.0%
- More range of products: 12.0%
- Superior services: 12.0%
- Higher quality products: 4.0%
- Personal safety and social distancing norms: 16.0%
Table 4.3: E-shopping experience and preferences during COVID-19

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<tbody>
<tr>
<td>1.</td>
<td>What type of products have you typically bought online since the start of this pandemic?</td>
<td>Pharmaceutical and healthcare</td>
<td>12.6%</td>
</tr>
<tr>
<td>2.</td>
<td>Currently, why are you choosing to purchase products online, instead of physically buying from stores?</td>
<td>Personal safety and social distancing norms</td>
<td>16.0%</td>
</tr>
<tr>
<td>3.</td>
<td>Would you prefer to shop online even post COVID?</td>
<td>Certainly</td>
<td>65.7%</td>
</tr>
<tr>
<td>4.</td>
<td>In this present scenario, how often do you buy products online that you were primarily not willing to purchase physically from stores?</td>
<td>Very often</td>
<td>38.3%</td>
</tr>
<tr>
<td>5.</td>
<td>What is the biggest concern you are at present facing while buying products online?</td>
<td>Digital payment failure</td>
<td>26.9%</td>
</tr>
</tbody>
</table>

4.4 Expenditure made on online shopping during COVID-19

According to the survey conducted, due to the ongoing pandemic, consumers are spending a large proportion of their monthly incomes on online shopping. As of now, 20% of all the participants are spending more than 10000 INR on online shopping every month and 23.4% are spending between 7500 to 10000 INR. Not only this, 30.9% participants are spending between 5000 to 7500 INR, while only 13.7% and 12.0% candidates are spending between 2500 to 5000 INR and less than 2500 INR respectively.

Figure 4.4: Expenditure made on online shopping during COVID-19

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<tbody>
<tr>
<td>1.</td>
<td>Due to the ongoing pandemic, how much do you spend on online shopping every month?</td>
<td>Between 5000 to 7500 INR</td>
<td>30.9%</td>
</tr>
</tbody>
</table>

Table 4.4: Expenditure made on online shopping during COVID-19
4.5 Changes in payment methods used due to COVID-19

The increasing Internet penetration and availability of more payment options boosted the e-commerce industry during the COVID-19 pandemic. Before the transmission, nearly 48.6% consumers mostly preferred cash on delivery method of payment for e-shopping, rather than online payment methods such as Credit/Debit/ATM cards, UPI, net banking etc. However, to avoid contact now the digital sources of payment have become increasingly popular. Today, 40.6% consumers surveyed prefer payment through Credit/Debit/ATM cards, 18.3% through Paytm/PayPal, 13.7% through UPI/net banking, 11.4% through prepaid cards, 6.3% through Google pay, and the rest 9.7% respondents only via cash on delivery. This demonstrates that during the COVID-19 crisis, the consumers became more aware that card payments or bank transfers can be safe preventive measures against the COVID-19 epidemic. At the same time, this type of behavior is supported by the fact that over this period, buyers lack cash, since the regulations enforced by the state of emergency have greatly decreased ATM cash withdrawals. Government and Reserve Bank of India are also promoting digital and contactless payments with the wake of lockdown and social distancing.

Figure 4.5: Changes in payment methods used due to COVID-19

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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Before the COVID transmission, which payment method would you most prefer for shopping online?</td>
<td>Cash on delivery</td>
<td>48.6%</td>
</tr>
<tr>
<td>2.</td>
<td>Due to the COVID transmission, which payment method do you now most prefer for shopping online?</td>
<td>Credit/Debit/ATM cards</td>
<td>40.6%</td>
</tr>
</tbody>
</table>

Table 4.5: Changes in payment methods used due to COVID-19
4.6 Sales promotion offered by e-commerce firms during COVID-19

During the pandemic, due to the rapid development of the technologies surrounding the Internet, e-commerce firms selling products from their websites are constantly in lookout for an edge in the fierce competition by using electronic marketing and internet communication to help them in coordinating different marketing activities such as business research, improving their existing products and helping them know what and how to capture more market share, hence also impacting consumer’s behavior towards online shopping. It assists them to let consumers know about the new products and the features related to it and is a very good medium to do promotional activities, hence, helping them to analyze the customer’s feedback and searching for the loop holes to work upon improving them. In the survey conducted, 34.9% participants reported that sales promotion techniques by e-commerce firms certainly have increased during pandemic and attract them to buy their products via online. Majorly, 25.7% availed discounts while shopping, 22.9% received price reductions e.g., half price schemes, 18.3% got free gifts, and the remaining benefitted from coupons, samples, and bonus packs.

**Figure 4.6: Sales promotion offered by e-commerce firms during COVID-19**

![Pie chart showing sales promotion techniques](image)

<table>
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<tbody>
<tr>
<td>1.</td>
<td>Due to COVID-19, is there any increase in sales promotion techniques by e-commerce firms in online shopping?</td>
<td>Likely</td>
<td>41.1%</td>
</tr>
<tr>
<td>2.</td>
<td>What type of sales promotion did you avail while shopping online during pandemic?</td>
<td>Discounts</td>
<td>25.7%</td>
</tr>
</tbody>
</table>

**Table 4.6: Sales promotion offered by e-commerce firms during COVID-19**
5. CONCLUSION AND DISCUSSION

While the whole world has been hit hard by the devastating effects of the Coronavirus disease (COVID-19) pandemic, the consumer behavior is being enforced to change and consumers are progressively adjusting their spending and time towards online shopping. Additionally, the results of this research elucidated that these effects further for Rajasthan consumers led to changes in frequency and time spent on shopping online, expenditure made, e-shop experience and preferences, payment methods used and sales promotion offered by e-commerce firms. Previously, many consumers desired to purchase offline via physical brick-and-mortar stores so can examine and hold the possession of the product just after making the payment by cash. However, now due to the fear of getting infected by COVID-19, online shopping seems to be the only viable solution. Hence, the findings of this survey underscore the need for e-commerce firms to take the online market seriously as it highlighted a positive attitude and behavior towards online shopping even by those consumers who liked traditional stores. This study also revealed that how the preferences of consumers for digital instruments of gathering information, ordering, and payment proves that the changes in consumer buying behavior are not merely visible in the purchasing intention within this distribution system, but also in their desire for digital transformation of the Indian economy. I foresee that my findings will give a clear and wide picture to online marketers and will help them to understand the specific factors that influence consumers to shop online during these dreadful times, so they can build up their marketing strategies to cater the needs of online shoppers accordingly. Based on the research and its result, it can hence be concluded that there has been a significant change in consumer behavior towards online shopping in Rajasthan because of Lockdown and social distancing norms that have been introduced by the government to reduce the spread of COVID-19 outbreak and its impact will even be seen post-pandemic.

6. LIMITATIONS AND FUTURE SCOPE

Due to resources and time constraints, this empirical study was limited to impact of COVID-19 pandemic on consumer’s buying behavior towards online shopping in geographical area confined to urban areas of Rajasthan only. Thus, the information collected from the respondents may not be able to generalize due to the small sample size of 175 participants and if the study was conducted for whole population of Rajasthan the findings may have differed. Not only this, only candidates who had electronic devices and were able to understand English contributed in this research. In future, this proposed model can further be applied on all the factors to understand the consequences on this pandemic on consumers buying behavior at more granular level, which will provide an in-depth analysis of what exactly triggers them to change their buying behavior.

7. ACKNOWLEDGEMENT

Not Applicable

REFERENCES


