Research Article

COVID-19 and Shopping Trends: A Study of How the Pandemic Affected Consumer Behaviour in Vadodara

Nikita Chandola, Nidhi Shendurnikar*

Department of Journalism and Communication, The Maharaja Sayajirao University of Baroda, Gujarat, India

ARTICLE INFO

ABSTRACT

The internet has become an essential and inseparable component of our daily life. This is particularly apparent in the way we currently consume, shop, and make purchases. India quickly and successfully adopted the concept and practice of internet shopping. Nevertheless, the country still sees a healthy amount of traditional consumer buying behavior. Consumers' buying habits and preferences underwent a significant change as a result of the COVID-19 epidemic, with a shift to online shopping that was both voluntary and compulsive. The present study aims to understand the changes and influences on consumer behavior in Vadodara city (Gujarat) in the context of the pandemic. It also seeks to understand future online shopping prospects in the post-COVID scenario. An exploratory research design was employed, and a consumer survey was conducted to understand the effect the pandemic had on young shoppers (20-45 years) and their buying behavior in general. We recorded 140 responses from young adults residing in Vadodara with respect to their shopping habits, spending capacity, purchasing priorities, etc. The findings in the study show that the pandemic has not drastically influenced purchasing frequency and shopping priorities. However, COVID-19 has affected consumers' shopping habits to some degree, especially during the lockdown period. Though old purchasing habits have started to re-emerge, from the study results, it can be inferred that some shopping behavior acquired during the pandemic is here to stay. In conclusion, the study found that despite the challenges faced, consumers have switched to online shopping mode, and this behavior learned during COVID is likely to continue even post-pandemic.

INTRODUCTION

E-Commerce and Consumer Behaviour

"E-commerce, commonly known as electronic commerce, is the exchange of goods and services between (usually) independent organizations and/or persons supported by comprehensive usage of powerful Information and Communication Technology (ICT) systems and globally standardized network infrastructure (Kutz, 2016, p. 19). E-commerce businesses employ Business-to-Business (B2B) buying and selling. E-commerce provides scope to participate in online marketplaces, which results in third-party Business-to-Consumer (B2C) or Customer-to-Customer (C2C) sales (Kutz, 2016, p. 16). E-commerce was introduced decades ago, and since then, it has wdeveloped and grown immensely, with the added security of payment gateways, new technologies, improvement in internet connectivity, and much more. E-commerce first came into existence in 1969 with the invention of CompuServe, established by Dr. John R. Goltz and Jeffry Wilkins, which was built utilizing a dial-up connection. Then, in 1979 the earliest form of e-commerce, *i.e.,* "electronic shopping," was invented by Michael Aldrich (Bhalla, 2018). Later, in 1989, the World Wide Web (WWW) was invented (or proposed) by Tim Berners-Lee while working at CERN (Clarke, 2014). Further, in 1991, Berners-Lee created and made available the first webpage, which was a summary of the WWW project. This marked the first

time a website was published publicly (Blum, 2011). But it was not until the release of "Mosaic" (web browser) in 1993 (Grossman, 2018) that CERN made the source code of WWW available to the public on a royalty-free basis, making it a free software (CERN, n.d.). In 1995, Amazon (e-commerce for books) by Jeff Bezos was launched, along with eBay. Later, in 2000, Google introduced Google ads, and in 2005, Etsy (an e-commerce marketplace) was launched (Bhalla, 2018). Further, in 2011 Google Wallet was introduced for online payments (Ang, 2021). Thus, e-commerce has made significant progress since its launch on CompuServe, facilitating many aspects of daily human life, including food, entertainment, travel, and knowledge. E-commerce has opened global windows for consumers to the convenience of shopping from home.

E-commerce in India had come a long way since its origins in 1991, when the internet was relatively little known and less accessible. However, in 1995 people in India became more aware of the internet and thus began the wave of e-commerce. India's first interaction with e-commerce happened in 2002 with Indian Railway Catering and Tourism Corporation (IRCTC) (Patel, 2015). However, the first major milestone for Indian e-commerce was when in 2007 "Flipkart" launched by Sachin and Binny Bansal, came into existence as an online bookstore (Dudhewala, 2014). Then came another famous e-commerce website "Myntra," established in 2007 by three IIT alumni - Mukesh Bansal, Ashutosh Lawania, and Vineet Saxena (Bhagat). Subsequently, top e-commerce brands like 'Jabong' (2012) [Flipkart acquired Jabong through its unit Myntra; however, Jabong was shut down in 2020] (IndiaTV, 2020), 'Nykaa' (2012), and 'Amazon' (2013) were launched in the country (Tazim, 2022). The e-commerce market is growing and is expected to reach US$ 111.40 billion by 2025 from US$ 46.20 billion in 2020. It is further expected to grow to US$ 350 billion by 2030 (India Brand Equity Foundation, 2022). The growth of this industry has been triggered by a phenomenal increase in internet and smartphone penetration over the last decade, with a total of 5.16 billion people around the world using the internet at the start of 2023, which is equivalent to 64.4 percent of the world's total population.

As a rapidly growing area of research, consumer behavior is more than just how a person buys. It is a complex and multidimensional process that includes everything a consumer does, from the acquisition, and consumption to disposal. As defined by Kotler & Keller, "Consumer behavior is the study of how people and groups decide what they want and how they get it (Kotler et al., 2018). Blackwell et al. (2006) define consumer buying behavior as a very complex, dynamic issue. Solomon et al. (1995) and Schiffman and Kanuk (2000) defined consumer behavior in very similar terms stating that "consumer buying behavior is a process of purchasing, using, evaluating, and disposing of products or services by individuals and groups in order to satisfy their needs/wants" (Soloman, 1995; Schiffman *et al.,* 2012). It is a process that changes over time depending upon the consumer's physical and psychological needs. The utility of a typical consumer depends on the consumption of agricultural and industrial goods, services, housing, wealth, etc. Everyone is different because each is influenced by internal and external factors, forming consumer behavior (Mehta, Saxena, and Purohit, 2020). Understanding and operating in tandem with consumer behavior becomes important in a dynamic marketing environment.

Impact of COVID-19 on E-Commerce and Consumer Behaviour

The pandemic greatly impacted the global economy due to lockdowns and self-imposed social distancing. Many (OECD) The Organisation for Economic Co-operation and Development countries implemented strict confinement measures and self-imposed social distancing, which temporarily halted a significant share of traditional brick-and-mortar retail. In the United States, retail and food services sales decreased by 7.7% from February to April 2020, when compared to the same period in 2019. But the year 2020 saw an increase in sales for grocery and non-store retailers (mostly e-commerce providers) by 16% and 14.8% respectively (OECD, 2020). As per OECD "official statistics are not available for many countries, but estimates suggest that online orders were up in the first quarter of 2020. This includes Europe, North America, and Asia Pacific countries." Just like brick-mortar stores, COVID-19's impact on e-commerce could be seen in terms of how online demand increased for essential product categories like groceries, personal protection (masks, hand gloves), and medicines, whereas demand dropped for formal or sports clothing, travel, and luxury items. Many countries like the United States, Germany, Korea, & China witnessed a surge in demand for groceries, medicines, and household goods through e-commerce (OECD, 2020).

In India's case, the pandemic severely impacted the economy. Financial and stock markets suffered greatly due to the lockdown (Reuters, 2020; BusinessToday, 2020). Indian economy is primarily based on agriculture, although half of it also depends on exports, industries, and tourism. According to a report by Unicommerce, the Indian e-commerce industry has experienced a shift ever since COVID-19. E-commerce witnessed volume growth of 17% as of June 2020. Many brands have witnessed significant growth in terms of developing their own website, self-shipped orders, etc. The number of consumers buying directly from the brand's website also increased significantly (Express Computer, 2020). However, the percentage of self-shipped orders declined from 35% in February 2020 to 30% in June 2020. E-commerce brands like Myntra witnessed a marked increase in first-time customers across regions during their End of Reason

sale in 2021 (The Hindu, 2021). Unicommerce CEO Kapil Makhija stated, "E-commerce industry in India has seen a major boost since the beginning of this year (*i.e.*, 2020). With changing buying patterns and preferences, increased focus on digitization by retailers, and rise of first-time online users, the e-commerce industry will emerge as the most promising market with tremendous growth potential in the future" (Nasscom, 2020). Thus, retail brands are now strengthening their online capabilities and opting for different approaches to connect with consumers.

In times of crisis, new trends emerge in consumer behavior and result in a shift in buying patterns and preferences. Consumer behavior during a crisis is primarily shaped by two important factors – the consumer's attitude toward risk and perception of risk (Mehta, Saxena, and Purohit, 2020). In a study conducted by Flatters & Willmott (2009), it was observed that buying trends during a crisis include the simplification of demand because of limited offering and the same continues post-crisis when consumers buy things with great value. In India, COVID-19 impacted consumer buying behavior and altered purchasing decisions, shopping preferences, and spending attitudes. Surveys conducted by Mckinsey & Co found that 91% of Indians had changed their shopping behavior due to the crisis, especially many urban consumers who moved online for their shopping needs. Financial issues led the Indian consumer to spend more on essentials like groceries and household supplies. The 61% of Indians reported that they were more mindful in terms of spending and 45% said that they had shifted to less expensive products. It was expected that consumers will continue these practices even when things go back to routine (Gupta, 2020).

Statement of Research Problem

The COVID-19 pandemic has impacted various aspects of people's lives in major ways. It has left an indelible impression on global economies, especially in sectors like tourism, manufacturing, hospitality, and e-commerce. In particular, the e-commerce industry was impacted due to a shift in shopping behavior from offline to online owing to lockdowns and social distancing measures implemented by governments across the world. Based on these developments, the present research examines how the pandemic influenced consumer behavior in Vadodara (a non-metro, cosmopolitan town in central Gujarat). Of specific interest to the researchers was consumer behavior before, during, and after the first phase of the pandemic in 2020. To understand how the pandemic affected consumer behavior, the research focused on shopping trends, preferences, and consumer behavior in Vadodara by means of a survey conducted with 140 respondents in the age bracket of 20 to 45 years. The study also attempted to find out if COVID specific shopping behavior is here to stay in the near future.

Rationale and Significance

India is a country of 1.3 billion (The World Bank, 2019) and there are a total of 658 million active internet users in India (Statista, 2022). With so many internet users, e-shopping has become common, but until the pandemic, it was not a necessity. COVID-19 changed the scenario wherein the pandemic turned out to be more of an advantage for the digital sector. Increasingly, consumers are buying products online due to health risks associated with shopping in stores.

The pre-COVID era was about both traditional as well as e-shopping, but the post-COVID era is about adapting to changes induced by a global pandemic. Thus, it is important to study the impact induced by the pandemic on consumer behavior. Consumer behavior has seen a shift from the time e-commerce stepped into the market. Despite of the arrival of e-commerce, consumers preferred traditional brick-mortar stores over online shopping (Sheth, 2020; Columbus, 2020). The growing popularity of e-shopping also makes this theme relevant for research. Understanding consumer opinions and attitudes towards e-shopping in an unusual situation like a pandemic will contribute to a better scholarly understanding of how the pandemic has shaped an important aspect of our lives. The study aims to contribute relevant literature to e-commerce, consumer behavior, and pandemic studies. Our industry-centric research will help retailers, industries, and businesses understand the emerging dynamics of consumer behavior in the post-pandemic scenario.

Literature Review

Since research on consumer preferences and COVID-19 is quite contemporary, the researchers attempted a brief literature review to elicit the research gap and chart out further courses of academic contribution to the subject. The literature reviewed for the study includes academic papers, web articles, conference papers, and reports.

Sheth (2020) focuses on immediate and long-term consequences of COVID-19 on consumer behavior consumption. His research reveals COVID-19 lockdown and social distancing has disrupted consumer habits. However, he notes that consumers have developed new habits over time and wh,ile it is expected that old habits will be retained, but theill be modified by new habits, regulations and pr,ocedures in the way consumers shop. He also delves into 8 immediate effects of COVID-19 on consumer behaviour. These are hoarding, improvisation, pent-up demand, embracing digital technology, store comes home, blurring work-life boundaries, discovery of talent, and family, friends reunion. Consumers are likely to adopt new technologies which will likely modify existing habits (Sheth, 2020). Juyal's study on the factors influencing shoppers' online buying behaviour compares the behavior of internet and non-internet buyers based on their attitudes towards purchasing products on

the internet. Using different hypotheses based on past literature, an exploratory survey of 500 respondents from January to February 2017 was conducted in Uttarakhand's Haridwar and Dehradun districts. This study aimed to help e-tailers develop more effective e-tail outlets. An empirical model partially based on Fishbein and Ajzen's 'Theory of Reasoned Action' (1975) and Cowles, Kieker, and Little's 'E-tailing Theory' (2002) was used in the research. In the study, three consumer groups were examined 'web-store visitors with no intention of purchasing,' 'internet browsers with an intention to purchase,' and 'internet buyers.' Based on these three consumer groups, three factors were identified–"consumer, marketing and technological," to help understand how these factors shaped consumers' online shopping attitudes (Juyal, 2018). The study findings indicated that consumer attitude was a more significant predictor of internet purchasing than demographics. Besides, internet browsers (consumers with an intention to purchase) have positive attitudes toward using the internet as an alternative shopping tool.

A case study paper (2020) highlights COVID-19's impact on grocery purchasing habits and its implications on food retail in New Zealand. The study discusses patterns of consumer behavior and the shift in the grocery shopping experience prior to the lockdown and following the outbreak. Through the study, the authors emphasize that panic buying from customers caused shortages of products, a shift in shopping experiences were seen, and implications of constraints on the shopping process were also visible. They point out that demand for online shopping has increased, and new world supermarkets have started contactless deliveries. Furthermore, the study implies that retail shops are expanding their capabilities with e-stores. The authors also pointed out that brands that are easily visible and well-established will have an advantage over less prominent brands. Besides, to survive the competition, food companies must provide a customer-centric experience without compromising safety (Martin-Neuninger and Ruby, 2020).

Gligorijevic (2011) observes that according to past literature, consumers preferred retailing channels more than online shopping or online searches. However consumers use the online medium for information, but when it comes to buying, they shift between online as well as traditional stores. Through in-depth interviews with twenty-two shoppers in Australia, the author found out how consumers choose the channels, and the influence information sources have on them, and the importance of products' attributes in their shopping decisions. The findings convey that convenience is not the key factor for purchasing decisions; secondly, the price difference is correlated with the purchasing decision; and lastly, e-tailers are better than traditional stores when it comes to the availability of products (Gligorijevic, 2011). In an article titled Smartphones as an opportunity to increase sales in

Brick-and-mortar stores: Identifying sales influencers based on literature review (2019), the authors discuss the impact of smartphones on traditional store sales. For the study, 26 papers from 2007-2018 were analyzed, and the review results were discussed. Sales influencers were categorized into three sales drivers Hedonic driver, Utilitarian driver, and Cost and Time reduction driver. The findings indicated that many sales influencers (like information search, mobile payment, and scan and pay) positively influence sales more. Besides, smartphones have increased sales in brick-and-mortar stores (Zimmermann *et al.,* 2019).

Popular discourse on the web points out the fact that COVID-19 has not only impacted the retail industry but also created challenges for e-commerce. One of the key challenges is the security of e-commerce, as it is now more important than ever to customize e-commerce consumers' experiences. Besides, consumers' focus on time-saving and convenience has also strained e-commerce. However, consumers are motivated to bring stores home, and e-commerce sales may stabilize post-lockdown. (Columbus, 2020). It is observed that the COVID-19 situation is an indication of the new world order, thereby creating a new retail environment wherein supply chain and e-commerce will be the key for retail and consumer goods companies to meet specific consumer demands (Ayer and Gurman, 2020).

COVID-19 has created a paradigm shift in consumer behavior. Indian e-commerce, which was expected to grow to US$ 200 billion by 2026, is said to hit the mark early owing to the pandemic. The result of the pandemic is that retailers will have to embrace an omnichannel environment to be survivors as well as leaders of this new world. For instance, it is already predicted that in the post-COVID phase, consumers will buy groceries and personal care products online. Though this is not the end of offline retail, it will be required to develop modified and innovative consumer experiences (Reddy, 2020). Labor shortages induced by the pandemic are also one of the prime reasons behind stores shutting down, due to which brands had to look to newer ways of adapting to changed market circumstances (Krishnankutty, 2020).

Research Question

How did COVID-19 affect shopping preferences and patterns among young people in Vadodara (specifically regarding attitudes toward online shopping)? As shown is Table 1.

METHODOLOGY

The research design adopted for this study is exploratory. This approach was used because COVID-19 and discourse about its influence on shopping patterns is a contemporary theme, and people, businesses, and markets worldwide are still trying to grapple with it. An exploratory approach

was also best suited to understand if there were any significant changes in shopping trends to be seen post-COVID and examine the effects of a global crisis on buying behavior. A survey with consumers in Vadodara city was conducted to answer the above research question. An online survey questionnaire created through google forms comprising 25 close-ended questions was administered to 140 young adults residing in different parts of the city. The questionnaire was divided into three sections– questions about 1) general shopping behavior, 2) shopping patterns–pre-COVID as well as during the pandemic, and 3) post-COVID shopping behavior. The questions aimed to understand shopping patterns before, during, and after the pandemic, attitudes toward online shopping, and traditional buying behavior. To ensure diversity in the sample, simple random sampling technique was employed to recruit participants to the survey. Age and gender were chosen as variables for the purpose of analysis. Young adults aged 20 to 45 years were chosen as participants because they are active internet users and are known to be more active online shoppers than any other age group (Statista Research Department, 2022; Eira, 2023). A pilot survey was conducted with 10 respondents to test the research tool and implement necessary modifications in the questionnaire before the final data collection.

Study Limitations

- The study was limited to Vadodara city as the researchers were located there.
- Only one data collection method, i.e., a survey, was employed by the researchers, which meant that results of the survey could not be corroborated with results derived from any other data collection method.
- The sample size of the study was limited to 140 respondents.
- Since this was an academic research project, the study was limited to the pre and post-COVID period from December 2019 to March 2020 and June to September 2020.

Data Analysis

The demographic profile of respondents who participated in the study is as follows – 38.6% of respondents were male, and 61.4% were female. Thus, more female respondents participated in the study, thereby leading us to infer that women are more frequent and ardent shoppers than men. Age-wise, most respondents (65.7%) fell between 20 to 25 years, whereas 20.7 and 13.6% belonged to the age bracket 36 to 45 and 26 to 35 years, respectively. This demonstrates that young adults in the 20 to 25 years age group are more active shoppers (particularly online shoppers). Seventy percent of the respondents reported living in a nuclear family, as against 23.6% who lived in a joint family set-up. The annual income of more than 38% of respondents was more than five lac rupees, while 22%

1. Has COVID-19 affected your shopping habits? (choose only one option)
140 responses
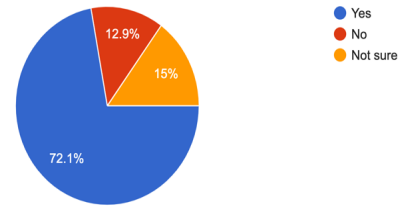
Figure 1: Has COVID-19 affected your shopping habits?

stated their annual income to be between 1 to 3 lac rupees. These demographic details were key to understanding how shopping behavior is affected based on variables such as gender, age, family type, and income.

Analysis of Key Responses

A total of 72.1% of respondents agreed that the pandemic affected their shopping habits, whereas 12.9% replied negatively. The remaining 15% expressed uncertainty about changing their shopping habits due to the pandemic (Figure 1).

When asked to describe the pandemic's impact on their shopping behavior, 52.1% said that they spent comparatively less time in shopping than they used to. This was followed by 32.1% who shared that they had started purchasing products online which they usually would not. 31.4% reported compromising product availability and quality because of the pandemic. A 25% of respondents admitted to spending consciously and rationally, which otherwise they would not have (Figure 2).

Because of the pandemic, the spending capacity of 47.1% of respondents has decreased slightly, while 29.3% reported no effect of the pandemic on their spending power. 15.7% reported a drastic decrease in their spending capacity, whereas 7.9% reported a drastic increase. In terms of how capable consumers found themselves to be able to spend money both during and after the pandemic, a variety of factors such as their economic, social, and health status (individual as well as familial) could provide insights (Figure 3).

The online spending of 40% of respondents increased moderately, and 23.6% reported no significant change. However, 12.1% of respondents experienced a drastic

4. From the statements given below, which describes COVID-19's impact on your shopping behavior? (can choose multiple options)
140 responses
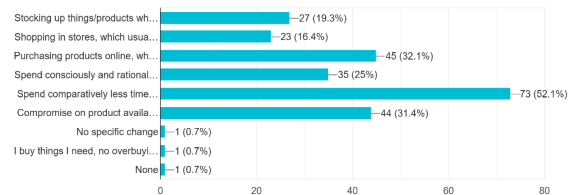
Figure 2: COVID-19's impact on shopping behavior
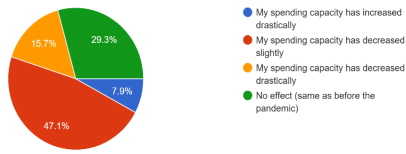
Figure 3: Impact on spending capacity.
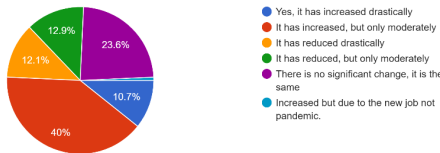
Figure 4: Online spending pattern.

Figure 5: Purchasing priorities pre-COVID.

Figure 6: Purchasing priorities post-lockdown.

Figure 7: Change in shopping methods.

Figure 8: Reasons for switching brands during COVID.
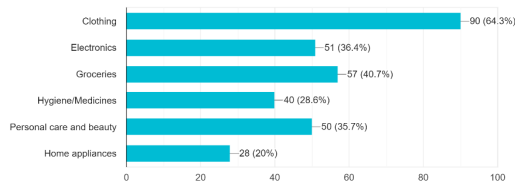
reduction in their online spending (Figure 4). These findings indicate that while a change is observed in the online spending pattern of consumers, many of them were engaged in online shopping in different capacities even before the pandemic struck.

The Figure 5 demonstrates that the top five purchasing priorities (online) before the pandemic were clothing (64.3%), groceries (40.7%), electronics (36.4%), personal care and beauty products (35.7%), and medical products (28.6%). Post the lockdown, no stark change in online purchasing priorities is observed (see Figure 6) as clothing and groceries continued to be at the top of the consumer's mind. However, it is to be noted that hygiene and medical products move to fourth in the order. In contrast, the priority for electronic goods slips to the fifth position in the post-lockdown scenario. Therefore, purchasing priorities were not significantly affected due to COVID-19. However, unlike pre-COVID purchasing priorities, people's online shopping priorities post-lockdown focused highly on self-care & beauty along with hygiene/medicines.
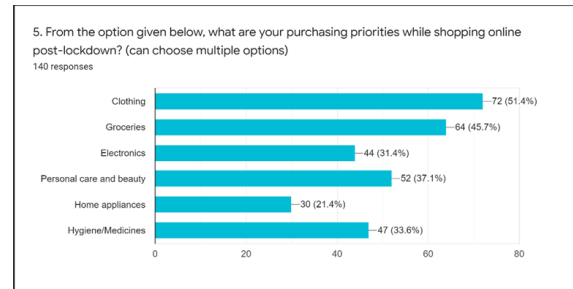
Participants were asked to respond to whether they had changed their shopping method/s or tried a different brand/store since the pandemic. 55% reported to changing the shopping method for grocery items, followed by 45.7% for household supplies 37.9%. For food take-out/delivery, 32.1% tried a different method/brand/store for personal care products (Figure 7).

While only 48.6% of respondents affirmed becoming more brand conscious post-COVID (as against 51.4% who denied turning more brand conscious), the main reasons behind switching to other brands were safety measures (48.6%), product quality (38.6%), and product availability (32.1%) (Figure 8). This demonstrates that consumers were cautious about their safety, and safety concerns influenced their shopping decisions. In tandem with the concern for safety, 50.7% of respondents admitted to contactless delivery/safety/adherence to hygiene measures as the single most influential factor driving their online purchases in COVID-19 (see Figure 9).

When asked what services and COVID time habits respondents most likely retain, 55% opted for contactless doorstep delivery, 42.9% chose pre-order and pick-up of
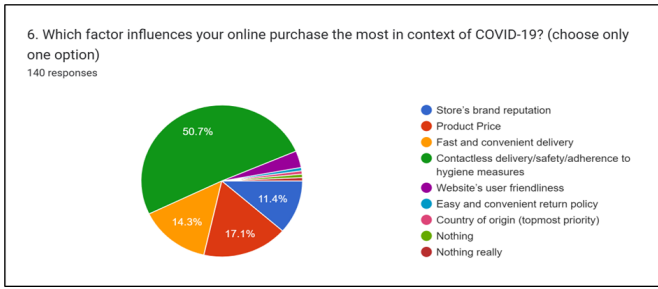
Figure 9: Factors influencing online purchase

groceries, and 29.3% said they would prefer to continue with take-outs/drive-through for food.

Finally, the challenges identified with respect to online services in the post-COVID period were needed products were out of stock (42.9%), delivery delay (40.7%), no cash-on-delivery option available (35.7%), dissatisfactory product quality (19.3%), and delivery of the wrong product (17.9%) (Figure 10, 11 and 12).

Results and Discussion

The key findings of the study are stated below:

- Out of 140 respondents who participated in the study, only 13.6% indicated their preference for the online mode of shopping, whereas 67.9% said they generally prefer the traditional shopping method. 18.6% chose both online and offline shopping modes (Amazon, Flipkart, and Myntra emerged as the top three platforms for online purchases).
- Product quality (87.9%), value for money (79.3%), brand (57.9%), and utility/need (49.3%) emerged as the significant factors influencing shopping decisions irrespective of an offline or online purchase.
- It is seen that while shopping habits were certainly affected by the pandemic, consumers (67.1%) chose to practice calm and practical purchases as well as rationing of essentials, while others (27.9%) decided to use whatever was available at home when the lockdown was announced.
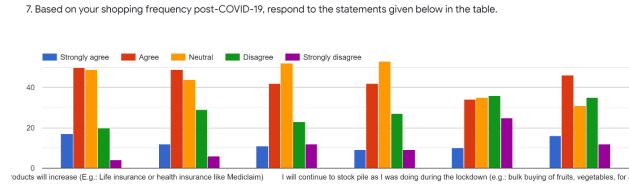

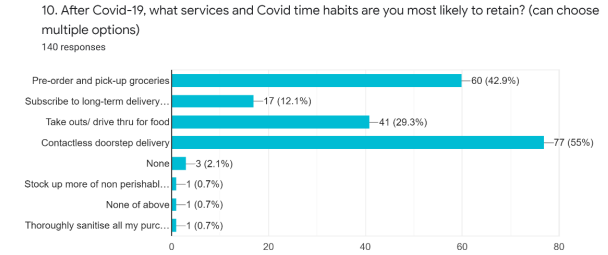**Figure 10:** Shopping frequency post-COVID.

Figure 11: Habits likely to be retained post-COVID.

- Among the main concerns expressed by shoppers with respect to COVID-19 were – fear of contracting the virus due to physical shopping (65%), limited opportunities for physical shopping (44.3%), and unreasonably high product prices (42.1%).
- The results also show that consumers reported a slight decrease in their spending capacity, which could be attributed to the comparatively less time that they spent shopping during the pandemic than they would usually, among other factors which may have impacted them during the crisis (job loss, spending on health, home isolation, reduced income, etc.). The pandemic and its circumstances may have reduced the extent to which consumers indulge in impulsive purchases.
- Even as a paradigm shift in consumer behavior was observed during and after the lockdown with increased online shopping and the rise of e-commerce (United Nations Conference on Trade and Development, 2022), only a moderate increase in online spending is reported.

Table 1: Patterns in shopping behavior post-COVID

Statement	Agreement	Disagreement	Neutral
Number of respondents			
My purchase of unsought products will increase (e.g., life insurance or health insurance like Mediclaim)	67	24	49
I will buy groceries online more often than before (e.g., vegetables, fruits)	61	35	44
My tendency to shop in-store will remain the same as before the pandemic (e.g., malls, stores, local stores)	53	35	52
I will be buying sports accessories and nutritional supplements more frequently now (e.g., Yoga mat, fitness wear, vitamins tablets)	51	36	53
I will continue to stockpile as I was doing during the lockdown (e.g., bulk buying of fruits, vegetables for a week or more)	44	61	35
I will prefer take-outs/drive-thru more often now (e.g., purchasing items while driving by MC Donald's)	62	47	31

11. What challenges, if any, have you faced with online services post Covid-19? (can choose multiple options)
140 responses

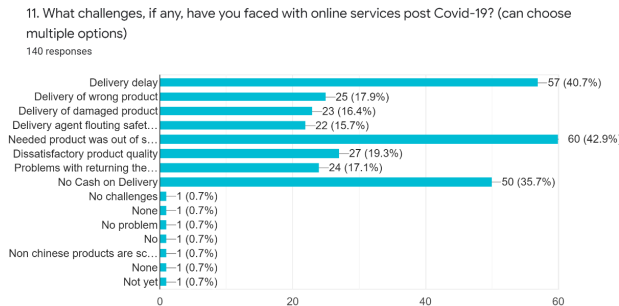| Challenge	Value
Delivery delay	57 (40.7%)
Delivery of wrong product	25 (17.9%)
Delivery of damaged product	23 (16.4%)
Delivery agent flouting safet...	22 (15.7%)
Needed product was out of s...	60 (42.9%)
Dissatisfactory product quality	27 (19.3%)
Problems with returning the...	24 (17.1%)
No Cash on Delivery	50 (35.7%)
No challenges	1 (0.7%)
None	1 (0.7%)
No problem	1 (0.7%)
No	1 (0.7%)
Non chinese products are sc...	1 (0.7%)
None	1 (0.7%)
Not yet	1 (0.7%)

Figure 12: Online service challenges.

- Clothing remained the topmost purchasing priority for online shoppers (64.3%) and post-lockdown (51.4%). Personal care and hygiene products emerged as a major online purchase priority post-lockdown.

Despite the challenges faced due to the pandemic, the shopping frequency is reportedly unchanged in the pre-and post-COVID scenario, i.e., once a month. However, preferences in terms of brands have been affected as consumers acknowledged turning brand conscious and shifting to other/newer brands. These shifts were prompted by safety as well as quality concerns which signifies that safety remained at the top of the consumers' minds while shopping during and after the pandemic. The demand for unsought products such as health insurance will likely increase post-COVID-19. It depicts the importance given by consumers to their present and future needs in terms of health and well-being. Notably, 53.6% of respondents said they were likely to return to their pre-COVID shopping behavior, and some (23.6%) had already returned to their old shopping methods. However, there is a willingness to retain some practices adopted during COVID, such as contactless doorstep delivery, online grocery shopping, or take-outs/drive-through. We can conclude that changes in shopping behavior due to a crisis are natural and evident as consumer attitudes undergo major shifts during an emergency situation, and external factors which are generally not in control of the consumer (such as lockdowns) also play an important role in how their shopping behavior evolves. Additionally, social groups and colleagues also play a role in determining the kind of shopping behavior at the time of crisis.

Future Research

Future research on the pandemic and consumer behavior could be carried out with a larger sample size for the generalization of trends and patterns. Such studies can be conducted in multiple cities using cluster or multi-stage sampling. Since the study was executed right during the pandemic, the researchers encountered constraints in data collection at a large scale. In-depth interviews with consumers could also be done to better understand the preferences, attitudes, and behaviors demonstrated during and after a pandemic. Doing interviews would also help probe into reasons for what factors drive consumer behavior during a health crisis. A comparative research approach is useful in investigating the shifting trends in consumer behavior in a pre-and post-pandemic context. This study was carried out from an audience perspective; future research can explore the retailer's point of view regarding offline and online business. The researchers focused on consumer behavior in an urban location, specifically inquiring about online shopping tendencies. The same can be attempted in rural and semi-urban settings for a more comprehensive understanding of the subject.

ACKNOWLEDGMENT

CONFLICTING OF DECLARATION

The authors declare no potential conflict of interest with respect to the research, authorship, and/or publication of this paper.

REFERENCES

1. Ang, C. (2021). Timeline: Key events in the history of online shopping. Retrieved from Visual Capitalist. https://www.visualcapitalist.com/sp/history-of-online-shopping/
2. Ayer, A., & Gurman, S. (2020). COVID-19: It is all about the baseline for retail and CPG. Retrieved from WNS. https://www.wns.com/perspectives/articles/articledetail/112/COVID-19-it-is-all-about-the-baseline-for-retail-and-cpg
3. Bhalla, P. (2018). The history of e-commerce and its evolution – A timeline. Retrieved from Shiprocket. https://www.shiprocket.in/blog/ecommerce-history-evolution-timeline/
4. Blackwell, R. D., Miniard, P., & Engel, J. (2006). Journal of Consumer Behaviour (international student ed). Thomson Higher Education.
5. Blum, M. (2011). 20 years ago today: The first Website is published. Retrieved from Wired. https://www.wired.com/2011/08/world-wide-web-20-years/
6. Burgess, J., Marwick, A., & Poell, T. (Eds.). (2017). The SAGE handbook of social media (1st ed). SAGE.
7. Business today. (2020). Coronavirus lockdown: Sensex logs biggest loss ever, ends 3,934 points lower; Nifty down 1,110 points. Retrieved from Business Today. https://www.businesstoday.in/markets/market-perspective/story/share-market-live-sensex-nifty-dalal-street-stock-outlook-news-on-march-23-yes-bank-aster-dm-healthcare-welspun-torrent-power-252839-2020-03-23
8. CERN. (n.d.). A short history of the Web. Retrieved from CERN - European Organization for Nuclear Research. https://home.cern/science/computing/birth-web/short-history-web
9. Clarke, S. (2014). Links to the past: A history of the World Wide Web – Timeline. Retrieved from The Guardian. https://www.theguardian.com/technology/2014/mar/12/history-world-wide-web-timeline

10. Columbus, L. (2020). How COVID-19 is transforming e-commerce. Retrieved from Forbes. https://www.forbes.com/sites/louiscolumbus/2020/04/28/how-COVID-19-is-transforming-e-commerce/?sh=646f9baf3544

11. Dudhewala, A. (2014)/e-commerce-in-india-past-present-future/27805. E-commerce in India – Past, present and future. Retrieved from iamwire. http://www.iamwire. Com.

12. Eira, A. (2023). Number of digital shoppers in the US 2022/2023: Demographic, statistics, and predictions. Retrieved from Finances Online. https://financesonline.com/number-of-digital-shoppers/

13. Express computer. (2020). https://www.expresscomputer.in/internet/e-commerce-witnesses-17-growth-post-COVID-19-65-growth-in-brands-establishing-own-website-report/62652/. E-commerce witnesses 17% growth post COVID-19; 65% growth in brands establishing own website [Report]. Retrieved from Express Computer

14. Gligorijevic, B. (2011). Online retailing versus traditional stores in the purchasing decision making process. In Marketing in the age of consumerism: Jekyll or Hyde? Proceedings of the 2011 Australian and New Zealand Marketing Academy Conference (pp. 1–8). School of Marketing. Faculty of Business and Law, Tourism and Leisure, Edith Cowan University.

15. Grossman, D. (2018). On this day 25 years ago, the web became public domain. Retrieved from Popular Mechanics. https://www.popularmechanics.com/culture/web/a20104417/www-public-domain/

16. Gupta, S. (2020). Explained: How the COVID-19 pandemic has changed consumer behaviour. Retrieved from The Indian Express. https://indianexpress.com/article/explained/explained-how-the-COVID-19-pandemic-has-changed-consumer-behaviour-6510354/

17. Brand, I., & Equity Foundation. (2022). Indian e-commerce industry analysis. https://www.ibef.org/industry/ecommerce-presentation. Retrieved from India Brand Equity Foundation.

18. India, T. V. (2020). Flipkart shuts down Jabong. Here's why I. T. Desk (Ed.) Retrieved from India TV. https://www.indiatvnews.com/business/news-flipkart-shuts-down-jabong-here-s-why-586211

19. Jachak, S., Phansopkar, P., & Waqar Naqvi, M. (2020). Impact of COVID-19 in India, a disastrous pandemic outbreak. International Journal of Research in Pharmaceutical Sciences, 11(SPL1), 399–402. https://doi.org/10.26452/ijrps.v11iSPL1.2735

20. Juyal, S. A. (2018). An empirical study on factors influencing shoppers' online buying behavior: A study in Dehradun and Haridwar districts of Uttrakhand, India. International Journal of Online Marketing, 8(1), 55–79. https://doi.org/10.4018/IJOM.2018010104

21. Kemp, S. (2023). Digital 2023: Global overview report. Retrieved from DataReportal. https://datareportal.com/reports/digital-2023-global-overview-report

22. Kotler, P., Keller, K. L., Ang, S. H., Tan, C. T., & Leong, S. M. (2018). Marketing management: An Asian perspective. Pearson.

23. KrishnanKutty, P. (2020). Cutting costs to trimming their losses: India's garment industry is hanging by a thread. Retrieved from The Print. https://theprint.in/features/cutting-costs-to-trimming-their-losses-indias-garment-industry-is-hanging-by-a-thread/440919/

24. Kutz, M. (2016). Introduction to e-commerce: Combining business and information technology (1st ed). http://bookboon.com/. Bookboon.

25. Martin-Neuninger, R., & Ruby, M. B. (2020). What does food retail research tell us about the implications of coronavirus (COVID-19) for grocery purchasing habits? Frontiers in Psychology, 11, 1448. https://doi.org/10.3389/fpsyg.2020.01448

26. Mehta, S., Saxena, T., & Purohit, N. (2020). The new consumer behaviour paradigm amid COVID-19: Permanent or transient? Journal of Health Management, 22(2), 291–301. https://doi.org/10.1177/0972063420940834

27. Nasscom. (2020). Conversation with Kapil Makhija, CEO UniCommerce. https://community.nasscom.in/communities/leader-talk/indias-e-commerce-sector-registered-20-growth-driven-by-consumers-in-tier-ii-rising-adoption-of-d2c-platforms.html

28. Organization for Economic Co-operation and Development. (2020). E-commerce in the time of COVID-19. OECD policy responses to coronavirus (COVID-19). OECD Publishing. https://doi.org/10.1787/3a2b78e8-en

29. Patel, S. (2015). Evolution of Online shopping in India and its Unparallel Growth. International Journal for Research in Management and Pharmacy, 4(3), 24–33.

30. Reddy, A. (2020). COVID-19 impact: Consumers move more towards digital. Retrieved from The Hindu. https://www.thehindubusinessline.com/opinion/COVID-19-impact-consumers-move-more-towards-digital/article31337127.ece

31. Reuters. (2020). Indian stocks suffer worst day in history as coronavirus shuts businesses, cities. Retrieved from Reuters. https://www.reuters.com/article/india-stocks-idUSL4N2BG3C9

32. Schiffman, L. G., Kanuk, L., & Hansen, H. (2012). Consumer behaviour: A European outlook. Harlow, UK.

33. Sheth, J. (2020). Impact of COVID-19 on consumer behavior: Will the old habits return or die? Journal of Business Research, 117, 280–283. https://doi.org/10.1016/j.jbusres.2020.05.059

34. Solomon, M. R. (1995). Consumer behaviour (3rd ed). Prentice Hall.

35. Statista. (2022). Digital population across India as of February 2022. Retrieved from Statista. https://www.statista.com/statistics/309866/india-digital-population-by-type/

36. Statista Research Department. (2022). Preferred channels for online shopping India 2022, by age. https://www.statista.com/statistics/1324686/india-online-purchasing-channels-by-age/

37. Tazim, M. (2022). E-commerce in India. Retrieved from Medium. https://bootcamp.uxdesign.cc/e-commerce-in-india-8a32ed96832c. Hindu, 2021(June 23). Myntra hopes to attract 50 million visitors to its 'End of Reason Sale'. Retrieved from The Hindu. https://www.thehindubusinessline.com/info-tech/myntra-hopes-to-attract-50-million-traffic-to-its-end-of-reason-sale/article34931882.ece.

38. The World Bank. (2019). Population of India. The World Bank organisation.

39. Kumar, S. U., Kumar, D. T., Christopher, B. P., & Doss, C. G. P. (2020). The rise and impact of COVID-19 in India. Frontiers in Medicine, 7, 250. https://doi.org/10.3389/fmed.2020.00250

40. United Nations Conference on Trade and Development. (2022). COVID-19 boost to e-commerce sustained into 2021, new UNCTAD figures show. Retrieved from UNCTAD. https://unctad.org/news/COVID-19-boost-e-commerce-sustained-2021-new-unctad-figures-show#:~:text=The%20average%20share%20of%20internet,66%20countries%20with%20statistics%20available

41. Uran, M. N., Fanggidae, R. P. C., & Nyoko, A. E. L. (2021). The effect of consumer behavior on consumer's interest to buy products Mr. Beta pomade in UMKM in south Oesapa village. In. Advances in Economics, Business and Management Research 6th International Conference on Tourism, Economics, Accounting, Management, and Social Science (TEAMS 2021). Atlantis Press, (673–677). https://doi.org/10.2991/aebmr.k.211124.097

42. Zimmermann, R., Auinger, A., & Riedl, R. (2019). Smartphones as an opportunity to increase sales in brick-and-mortar stores: Identifying sales influencers based on a literature review. In F. H. Siau & K. (Eds.) HCI in Business, Government and Organizations. eCommerce and Consumer Behavior. Nah, F. Lecture Notes in Computer Science. HCII 2019, 11588. Springer. https://doi.org/10.1007/978-3-030-22335-9_6