

# FACTORS INFLUENCING CONSUMERS' BUYING PERCEPTION DURING COVID-19 PANDEMIC: AN INDIAN PERSPECTIVE

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**Abstract** *The aim of the research is to look into factors that influence consumers' online shopping behaviour in India during the COVID-19 pandemic. During the early stages of COVID-19, more cases were reported by international travellers. The unexpected lockdown impacted India's online shopping and marketing trends drastically. Consumers' shopping behaviour suddenly changed during the lockdown situation. The article's objective is to look into the elements that affect Indian customers' online purchase choices during the COVID-19 pandemic. The researchers investigated the impact of product, price, time-saving, payment, security, and administrative factors on consumers' online purchasing behaviour during COVID-19. The study used an online survey approach to gather data from 139 Indian online consumers using a standardised questionnaire with a three-point Likert scale. Non-probability sampling was the method employed. Descriptive statistics analysis, reliability analysis, and t-test were used to examine the data. In the end, the results revealed that payment, product, and administrative factors had an influence on improving consumer online purchase patterns during COVID-19.*

**Keywords:** COVID-19, Influential Factors, Consumer Behaviour, Online Shopping

## INTRODUCTION

In Wuhan, China, in December 2019, the first case of coronavirus disease was discovered. After that, it spread rapidly across the world, prompting the World Health Organization to declare it a pandemic. It does not suggest that the virus has become fatal, but it does indicate that the disease has spread worldwide. Through close interaction and contact with COVID-19 patients diagnosed, the virus spread to everyone else. Education, global trade, commerce, and all other operations have been disrupted as a result of the COVID-19 pandemic. As a result of the lockout, countries' international transactions have been interrupted. As a developing world, India has been continuously plagued by this pandemic. Sustainable casualties have been experienced by India's business and trade establishments. Import, exports, and exchange earnings are projected to be slow, affecting India's foreign reserves.

E-commerce is the practice of buying and selling items online via the use of information and communication technologies. It was basically a platform where all the physical products and services can be bought and sold

through an online platform, which makes the transactions convenient for both businesses and consumers. This can be done at any time and at any place. In B2C activities, online stores and services are an essential distribution channel. The most significant research agenda in e-commerce in recent decades has been to study customer online shopping behaviour (Chen, 2009). Consistently rising both before and after liberalisation, the country's foreign commerce increased, although post liberalisation saw a greater increase than before (Hari & Bhavani Prasad, 2018). According to Komal, Madan Lal (2020), considering the widespread belief that greater exports result in better GDP. Globalised commerce in goods could help India's poverty rate decline. Almost every type of company is attempting to implement online activities, and India has a bright upcoming future in e-commerce. Any aspects of the company, like finance, production, transportation, electronic data interchange, automated inventory management, online transaction processing, electronic fund transfer, and payment systems, have a huge influence on electronic-commerce in India. Electronic-Commerce contributes to lower manufacturing costs, increased efficiency, improved business connectivity, high quality goods and services, and improved overall

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business results. It assists in the creation of innovation concepts and provides a fresh approach to doing business. While the e-commerce industry began in the late 1990s, it faced numerous challenges in expanding rapidly across the country due to a lack of adequate instruments and required elements. After, a few years, India's banking sector, logistical relations, and payment procedures had established a solid base for developing and extending electronic-commerce. Mostly, every bank in India now accepts electronic fund transfers (EFT) and Internet payments, allowing customers to use debit and credit cards, digital wallets, COD, and other services that aid the growth of India's e-commerce market.

Compared to previous years, e-commerce in India is constantly growing because of major advancements in Internet access and information technology, providing the foundation for an online platform. The situation shows that India's e-commerce industry has improved over time. In India, the most common payment method for e-commerce businesses is cash on delivery. Cash on delivery accounts for nearly 70% of e-commerce transactions, while mobile payments account for 30% of all transactions. Online purchasing behaviour is the act of making purchases of products or services over the Internet. There are five steps in the process, which are close to those associated with conventional buying behaviour (Liang & Lai, 2000). When prospective clients identify a requirement for a product or service, they go online to look for information about the product or service. After weighing their options, they select the one that best satisfies their criteria for meeting the perceived need. Finally, a sale is made, and after-sales support is given. The words 'online shopping attitude' refer to a person's mental state when making an online purchase (Li & Zhang, 2002). Currently, everybody uses a digital wallet payment system such as Paytm, Google Pay, Bhim, and PhonePe. This has a major impact on the e-commerce market. Users benefit greatly from using the digital wallet payment system because they receive several cashback rewards, coupons, and gifts that are compatible with any mobile device. The e-commerce sector suffers some obstacles due to unstable Internet connections, slow speeds, and lack of transportation.

This article's objective is to examine the variables that affect Indian consumers' online shopping behaviour during coronavirus disease pandemic. The study's specific objectives are to classify the factors that influence online shopping behaviour and to investigate the influence of the coronavirus disease pandemic on Indian consumers' online shopping habits.

To meet the aim of the study, first, we start with the literature review on factors affecting consumers' online shopping behaviour; next is an overview of the methodology approaches, followed by reporting of the result of the research. Finally, the discussion, conclusions, and limitations are considered.

## LITERATURE REVIEW

### Online Shopping Behaviour

Consumers may obtain additional product and service details online, as well as costs and product quality with different sellers. Privacy visibility, rapid loading, sitemap, and validity are the most significant characteristics of online buying that inspire people to buy online. Online shopping, according to Monsuwe, Dallaert and Ruyter (2004), is faster and more efficient, requiring less work and time. Online merchants benefit consumers since they can readily access a variety of products. Transactions were always difficult, but now, they are easier than ever owing to e-commerce (Lim & Dubinsky, 2004; Prasad & Aryasri, 2009). Wang, Ye, Zang and Nguyen (2005) found that speed of accessing the network had a positive effect on consumers' decisions to make purchases online. Customers may generally obtain any data and information they need through the Internet. Most online platforms provide 24/7 customer service. The basic criteria for consumers' online shopping activity, according to the above details, is website consistency. It gives consumers who are considering making an online purchase a successful first impression.

### Product Factor

The product may be something that seeks attention and tries to meet a customer's needs, wishes, or expectations. The product's consistency can be enhanced. Product result, features, durability, confirmation, longevity, serviceability, aesthetics, and value perception are eight main dimensions that can be used to describe a defect-free product (Tjiptono, 2008). A product can only be called quality if it is able to fulfil the expectations and desires of its customers (Kotler & Armstrong, 2008). Quality of the product shapes a retailer's reputation, which in turn influences consumers' purchasing decisions. Due to the good level of goods and services offered, convenience stores attract a bulk of the customers. Similarly, commodity has an effect on customer buying

habits. It states that a quality of a product affects consumers' purchasing decision and satisfaction.

### Price Factor

When buying a commodity, consumers pay close attention to and carefully consider the price. According to Satit, Tat, Rasli, Chin and Sukati (2012), price is the only factor, among the product, price, place, and promotion factors, that influences consumers' buying decisions in a majority of cases. When choosing investment avenues, factors like attachment, source of information, risk, quality, and independent decisions have a huge impact (Pooja, 2021). To attract customers, businesses set a fair price for their products and services, as well as a special discount. A majority of the customers base their decisions on price. A majority of the consumers shop at grocery stores due to the extremely cheap prices they have, and this has a huge impact on the customers.

### Time-Saving Factor

Customers are more inclined to stay in stores longer if they are easier to navigate. On the one hand, convenience, prompt delivery, and time saving are the most crucial fundamental elements of online purchasing; on the other hand, branding is not a crucial feature in shopping online. Consumers can save time by taking advantage of simple purchases and services (Schaupp & Belanger, 2005). Time-saving, safety and the design of the website all affect consumers' decision to shop online.

### Payment Factor

Electronic payments or e-payments allow customers to make payments online from anywhere in the world (Humphrey, Pulley & Vesala, 1996). It enables people to pay for both domestic and international commerce transaction through the Internet at any time and from any location (Weir, Anderson, & Jack, 2006). The M-payment system is a type of e-payment program that enables smartphone users to perform international activities without the use of the Internet, with the use of their cellphones and communication technologies (Dahlberg, Mallat, Ondrus & Zmijewska, 2006). The electronic point of sale is another popular form of electronic payment system (e-POS), which has different characteristics.

### Security Factor

Shergill and Chen (2005) claim that the key elements of online shopping or e-commerce that influence consumers' decisions to shop online are website design, customer service, useability, and protection. Consumers' online shopping decisions are influenced by a variety of factors, including safety, personal interest, payment methods, fair pricing, confidentiality, social networking, and referral groups. A lack of safety or security may turn off customers. To compete in digital payments, businesses must secure the safety, privacy, trust, and consistency of their online clients.

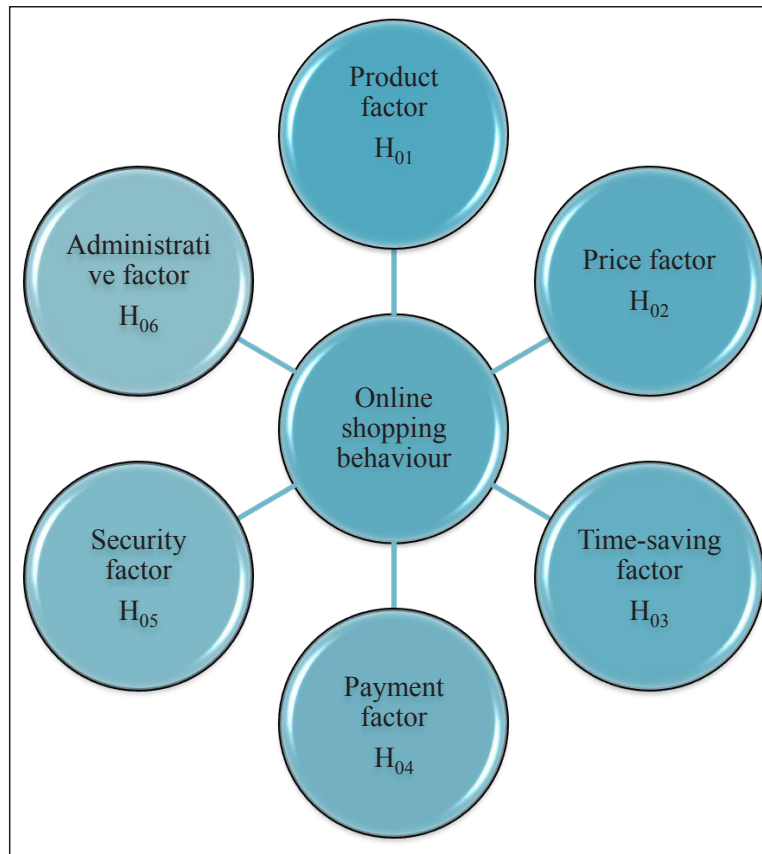
### Administrative Factor

In a developing nation, the government is crucial to the development and promotion of e-commerce websites. The government must make sure that ICT infrastructures are widely available and that online payments are secure. The government remains responsible in promoting online shopping (Licker & Molla, 2005). The administration is an external factor that influences customers' propensity to conduct business online and promote the expansion of the e-commerce platform. E-commerce will be aided by the government's implementation of fiscal and tax policies, as well as currency exchange policies, and supportive supervisions.

## CONCEPTUAL FRAMEWORK AND HYPOTHESES

The following hypotheses are formulated from the above discussions (Fig. 1).

- H<sub>01</sub>: Product factor has no significant impact on consumers' online shopping behaviour.
- H<sub>02</sub>: Price factor has no significant impact on consumers' online shopping behaviour.
- H<sub>03</sub>: Time-saving factor has no significant impact on consumers' online shopping behaviour.
- H<sub>04</sub>: Payment factor has no significant impact on consumers' online shopping behaviour.
- H<sub>05</sub>: Security factor has no significant impact on consumers' online shopping behaviour.
- H<sub>06</sub>: Administrative factor has no significant impact on consumers' online shopping behaviour.



**Fig. 1: Research Model of Online Shopping Behaviour during COVID-19**

## METHODOLOGY

### Type of Research Design

In the study, it was necessary to select the consumers' shopping habits in relation to an online perspective. As a conclusion, an exploratory analysis was carried out to first gain a core2 analysis of the variables that affect Indian consumers' decision to shop online, followed by a formal study. Afterwards, it was decided to perform descriptive research.

### Information Required

The content required for the study is mostly primary, and all the data was acquired using a questionnaire method from primary sources. Quantitative data is provided. We, on the other hand, compiled a literature evaluation from secondary sources that sheds light on the stated goals.

### Measurement Instruments

During the coronavirus disease (COVID-19) pandemic, the study employed six factors that have an impact on online shopping behaviour. Product factor includes fashion, brand, variety, cost, information, quality, and expectation. Price factor includes simple online payment, friendly interface, and diversified payment. Time-saving factor includes offer, price, quality, and online payment. Payment factor includes financial damage, risk, information, COD, Web interface, fear, and trustworthy. Security factor includes less time, needed item, and quality. Administrative factor includes lockdown, social distancing, COVID-19, government norms, and corona infection.

### Scaling Techniques

The researcher utilised a three-point Likert scale to generate replies. The point best demonstrates how the responder will identify the evaluated object that the respondents have marked. Respondents are asked to score their degree of

agreement or disagreement on a three-point Likert scale that ranges from strongly agree to strongly disagree. A preliminary test of 20 respondents was performed before the questionnaire was finalised.

### Questionnaire Development

All are close-ended questions. Close-ended inquiries are easy to understand, have the same meaning as other responses, and save effort for both the respondent and researcher. However, since the research questionnaire was translated into English, as non-native English speakers would have trouble interpreting the questionnaire, it was better to remove open-ended questions. Close-ended questions are the most accessible programme and examination for researchers.

### Sampling Technique and Sample Size

Since preparing a sampling frame is less expensive and time consuming, non-probability sampling was used. Since it is easily accessible and convenient, and it yields relatively low

cost, the convenience and judgmental sample methodology have been employed. A sample of 139 respondents is considered for the study.

### Data Collection

The data was gathered via an online survey approach using a structured questionnaire with a three-point Likert scale from 139 online consumers in India.

### Data Analysis

The information is gathered from Indian clients who have completed an online transaction and then processed in SPSS for analysis. The results are examined using descriptive research, reliability statistics, and the t-test.

## DISCUSSIONS AND FINDINGS

### Descriptive Statistics Analysis

Table 1: Descriptive Statistics Analysis

| Factors            | Items                 | N   | Maximum | Mean | Std. Deviation |
|--------------------|-----------------------|-----|---------|------|----------------|
| Product Factor     | Fashion               | 139 | 3       | 1.76 | .757           |
|                    | Brand                 | 139 | 3       | 1.48 | .674           |
|                    | Variety               | 139 | 3       | 1.14 | .391           |
|                    | Cost                  | 139 | 3       | 1.51 | .726           |
|                    | Information           | 139 | 3       | 1.93 | .822           |
|                    | Quality               | 139 | 3       | 1.59 | .679           |
|                    | Expectation           | 139 | 3       | 1.51 | .685           |
| Time-Saving Factor | Offer                 | 139 | 3       | 1.27 | .549           |
|                    | Price                 | 139 | 3       | 1.57 | .682           |
|                    | Quality               | 139 | 3       | 1.24 | .533           |
|                    | Online Payment        | 139 | 3       | 1.41 | .668           |
| Security Factor    | Less Time             | 139 | 3       | 1.37 | .592           |
|                    | Needed Item           | 139 | 3       | 1.45 | .704           |
|                    | Quality               | 139 | 3       | 1.12 | .370           |
| Price Factor       | Simple Online Payment | 139 | 3       | 1.31 | .635           |
|                    | Friendly Interface    | 139 | 3       | 1.29 | .544           |
|                    | Diversified Payment   | 139 | 3       | 1.22 | .482           |
| Payment Factor     | Financial Damage      | 139 | 3       | 1.24 | .509           |
|                    | Risk                  | 139 | 3       | 1.30 | .547           |
|                    | Information           | 139 | 3       | 1.35 | .574           |
|                    | COD                   | 139 | 3       | 1.71 | .766           |
|                    | Web Interface         | 139 | 3       | 1.28 | .511           |
|                    | Fear                  | 139 | 3       | 1.45 | .604           |
|                    | Trustworthy           | 139 | 3       | 1.89 | .831           |

| Factors               | Items             | N   | Maximum | Mean | Std. Deviation |
|-----------------------|-------------------|-----|---------|------|----------------|
| Administrative Factor | Lockdown          | 139 | 3       | 1.80 | .844           |
|                       | Social Distancing | 139 | 3       | 1.49 | .695           |
|                       | COVID-19          | 139 | 3       | 1.38 | .664           |
|                       | Government Norms  | 139 | 3       | 1.44 | .672           |
|                       | Corona Infection  | 139 | 3       | 1.40 | .666           |

Source: Authors' calculation.

Table 1 shows the main factors that influenced consumers' online buying behaviour during the coronavirus disease pandemic. Factors with a mean score of 1 or more appear in this table. A majority of respondents agree that information (product factor) is important (mean score 1.93). As a result, during coronavirus infection, information had a major impact on consumers' online shopping behaviour. In terms of being trustworthy, a majority of the respondents accept (mean score is 1.89) that it is important. As a result, during coronavirus disease (COVID-19) pandemic, consumers' online shopping behaviour was significantly influenced by e-commerce platforms being trustworthy. In addition, during the coronavirus pandemic, lockdown (mean score is 1.80), fashion (mean score is 1.76), and COD (mean score 1.71) had a significant impact on consumers' online shopping behaviour.

## Independent Samples Test

### Group Statistics

**Table 3: Independent Samples Test**

|                            | Gender of the Respondents | N  | Mean | Std. Deviation | Std. Error Mean |
|----------------------------|---------------------------|----|------|----------------|-----------------|
| Product Factor Fashion     | Male                      | 85 | 1.84 | .784           | .085            |
|                            | Female                    | 54 | 1.65 | .705           | .096            |
| Product Factor Brand       | Male                      | 85 | 1.52 | .683           | .074            |
|                            | Female                    | 54 | 1.43 | .662           | .090            |
| Product Factor Variety     | Male                      | 85 | 1.15 | .394           | .043            |
|                            | Female                    | 54 | 1.13 | .391           | .053            |
| Product Factor Cost        | Male                      | 85 | 1.56 | .747           | .081            |
|                            | Female                    | 54 | 1.43 | .690           | .094            |
| Product Factor Information | Male                      | 85 | 1.95 | .844           | .092            |
|                            | Female                    | 54 | 1.89 | .793           | .108            |
| Product Factor Quality     | Male                      | 85 | 1.64 | .670           | .073            |
|                            | Female                    | 54 | 1.52 | .693           | .094            |
| Product Factor Expectation | Male                      | 85 | 1.51 | .684           | .074            |
|                            | Female                    | 54 | 1.52 | .693           | .094            |
| Time-Saving Factor Offer   | Male                      | 85 | 1.25 | .554           | .060            |
|                            | Female                    | 54 | 1.31 | .543           | .074            |
| Time-Saving Factor Price   | Male                      | 85 | 1.52 | .629           | .068            |
|                            | Female                    | 54 | 1.65 | .756           | .103            |

## Reliability Statistics Analysis

**Table 2: Reliability Statistics Analysis**

| Cronbach's Alpha | Cronbach's Alpha based on Standardised Items | N of Items |
|------------------|--|------------|
| .808             | .816   | 30         |

Source: Authors' calculation.

To verify the internal consistency of the constructs, reliability analysis is calculated using Cronbach's coefficient alpha, as shown in Table 2. If the Cronbach's alpha value is greater than 0.700, there are no issues with reliability in any of the constructs (Hair, Rolph, Barry & William, 2010). Cronbach's alpha is 0.816 in this case. As a result, the survey instrument is trustworthy in measuring all factors consistently and without error.

|   | Gender of the Respondents | N  | Mean | Std. Deviation | Std. Error Mean |
|---|---------------------------|----|------|----------------|-----------------|
| Time-Saving Factor Quality              | Male                      | 85 | 1.28 | .590           | .064            |
|   | Female                    | 54 | 1.17 | .423           | .058            |
| Time-Saving Factor Online Payment       | Male                      | 85 | 1.40 | .694           | .075            |
|   | Female                    | 54 | 1.43 | .633           | .086            |
| Security Factor Less Time               | Male                      | 85 | 1.39 | .579           | .063            |
|   | Female                    | 54 | 1.33 | .614           | .084            |
| Security Factor Needed Item             | Male                      | 85 | 1.45 | .732           | .079            |
|   | Female                    | 54 | 1.44 | .664           | .090            |
| Security Factor Quality                 | Male                      | 85 | 1.15 | .394           | .043            |
|   | Female                    | 54 | 1.07 | .328           | .045            |
| Price Factor Simple Online Payment      | Male                      | 85 | 1.38 | .690           | .075            |
|   | Female                    | 54 | 1.20 | .528           | .072            |
| Price Factor Friendly Interface         | Male                      | 85 | 1.27 | .543           | .059            |
|   | Female                    | 54 | 1.33 | .549           | .075            |
| Price Factor Diversified Payment        | Male                      | 85 | 1.22 | .520           | .056            |
|   | Female                    | 54 | 1.22 | .420           | .057            |
| Payment Factor Financial Damage         | Male                      | 85 | 1.27 | .543           | .059            |
|   | Female                    | 54 | 1.20 | .451           | .061            |
| Payment Factor Risk                     | Male                      | 85 | 1.25 | .486           | .053            |
|   | Female                    | 54 | 1.39 | .627           | .085            |
| Payment Factor Information              | Male                      | 85 | 1.33 | .585           | .063            |
|   | Female                    | 54 | 1.37 | .560           | .076            |
| Payment Factor Reliability              | Male                      | 85 | 1.79 | .788           | .085            |
|   | Female                    | 54 | 1.61 | .763           | .104            |
| Payment Factor COD                      | Male                      | 85 | 1.71 | .769           | .083            |
|   | Female                    | 54 | 1.70 | .768           | .105            |
| Payment Factor Web Interface            | Male                      | 85 | 1.29 | .508           | .055            |
|   | Female                    | 54 | 1.26 | .521           | .071            |
| Payment Factor Fear                     | Male                      | 85 | 1.49 | .610           | .066            |
|   | Female                    | 54 | 1.37 | .592           | .081            |
| Payment Factor Trustworthy              | Male                      | 85 | 1.99 | .838           | .091            |
|   | Female                    | 54 | 1.74 | .805           | .110            |
| Administrative Factor Lockdown          | Male                      | 85 | 1.91 | .868           | .094            |
|   | Female                    | 54 | 1.63 | .784           | .107            |
| Administrative Factor Social Distancing | Male                      | 85 | 1.51 | .701           | .076            |
|   | Female                    | 54 | 1.46 | .693           | .094            |
| Administrative Factor COVID-19          | Male                      | 85 | 1.41 | .678           | .074            |
|   | Female                    | 54 | 1.33 | .644           | .088            |
| Administrative Factor Government Norms  | Male                      | 85 | 1.44 | .680           | .074            |
|   | Female                    | 54 | 1.44 | .664           | .090            |
| Administrative Factor Corona Infection  | Male                      | 85 | 1.42 | .661           | .072            |
|   | Female                    | 54 | 1.35 | .677           | .092            |

| Independent Samples Test             |                             |   |      |                              |         |                 |                 |                       |   |       |
|--------------------------------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
|                                      |                             | Levene's Test for Equality of Variances |      | T-Test for Equality of Means |         |                 |                 |                       |   |       |
|                                      |                             | F                                       | Sig. | t                            | df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|                                      |                             |   |      |                              |         |                 |                 |                       | Lower                                     | Upper |
| Product Factor<br>Fashion            | Equal Variances Assumed     | .462                                    | .498 | 1.425                        | 137     | .156            | .187            | .131                  | -.073                                     | .447  |
|                                      | Equal Variances Not Assumed |   |      | 1.460                        | 121.713 | .147            | .187            | .128                  | -.067                                     | .441  |
| Product Factor<br>Brand              | Equal Variances Assumed     | .566                                    | .453 | .781                         | 137     | .436            | .092            | .117                  | -.141                                     | .324  |
|                                      | Equal Variances Not Assumed |   |      | .786                         | 115.654 | .433            | .092            | .117                  | -.139                                     | .323  |
| Product Factor<br>Variety            | Equal Variances Assumed     | .380                                    | .538 | .341                         | 137     | .733            | .023            | .068                  | -.112                                     | .158  |
|                                      | Equal Variances Not Assumed |   |      | .342                         | 113.567 | .733            | .023            | .068                  | -.112                                     | .158  |
| Product Factor<br>Cost               | Equal Variances Assumed     | 1.820                                   | .180 | 1.099                        | 137     | .274            | .139            | .126                  | -.111                                     | .388  |
|                                      | Equal Variances Not Assumed |   |      | 1.119                        | 119.571 | .265            | .139            | .124                  | -.107                                     | .384  |
| Product Factor<br>Information        | Equal Variances Assumed     | .608                                    | .437 | .446                         | 137     | .656            | .064            | .143                  | -.220                                     | .348  |
|                                      | Equal Variances Not Assumed |   |      | .453                         | 118.108 | .652            | .064            | .142                  | -.216                                     | .344  |
| Product Factor<br>Quality            | Equal Variances Assumed     | .101                                    | .751 | .988                         | 137     | .325            | .117            | .118                  | -.117                                     | .350  |
|                                      | Equal Variances Not Assumed |   |      | .981                         | 110.070 | .329            | .117            | .119                  | -.119                                     | .353  |
| Product Factor<br>Expectation        | Equal Variances Assumed     | .019                                    | .889 | -.106                        | 137     | .916            | -.013           | .120                  | -.249                                     | .224  |
|                                      | Equal Variances Not Assumed |   |      | -.105                        | 111.765 | .916            | -.013           | .120                  | -.250                                     | .225  |
| Time-Saving Factor<br>Offer          | Equal Variances Assumed     | .783                                    | .378 | -.708                        | 137     | .480            | -.068           | .096                  | -.257                                     | .122  |
|                                      | Equal Variances Not Assumed |   |      | -.711                        | 114.636 | .479            | -.068           | .095                  | -.257                                     | .121  |
| Time-Saving Factor<br>Price          | Equal Variances Assumed     | 3.984                                   | .048 | -1.101                       | 137     | .273            | -.131           | .119                  | -.365                                     | .104  |
|                                      | Equal Variances Not Assumed |   |      | -1.057                       | 97.876  | .293            | -.131           | .123                  | -.376                                     | .115  |
| Time-Saving Factor<br>Quality        | Equal Variances Assumed     | 6.704                                   | .011 | 1.250                        | 137     | .213            | .116            | .093                  | -.067                                     | .299  |
|                                      | Equal Variances Not Assumed |   |      | 1.344                        | 134.887 | .181            | .116            | .086                  | -.055                                     | .286  |
| Time-Saving Factor<br>Online Payment | Equal Variances Assumed     | .128                                    | .721 | -.222                        | 137     | .825            | -.026           | .117                  | -.257                                     | .205  |
|                                      | Equal Variances Not Assumed |   |      | -.227                        | 120.517 | .821            | -.026           | .114                  | -.252                                     | .200  |



|                                       |                             | Levene's Test for Equality of Variances |      | T-Test for Equality of Means |         |                 |                 |                       |   |       |
|---------------------------------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
|                                       |                             | F                                       | Sig. | t                            | df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|                                       |                             |   |      |                              |         |                 |                 |                       | Lower                                     | Upper |
| Security Factor<br>Less Time          | Equal Variances Assumed     | .111                                    | .739 | .532                         | 137     | .596            | .055            | .103                  | -.149                                     | .259  |
|                                       | Equal Variances Not Assumed |   |      | .525                         | 108.043 | .601            | .055            | .105                  | -.152                                     | .262  |
| Security Factor<br>Needed Item        | Equal Variances Assumed     | .506                                    | .478 | .021                         | 137     | .983            | .003            | .123                  | -.240                                     | .246  |
|                                       | Equal Variances Not Assumed |   |      | .022                         | 121.004 | .983            | .003            | .120                  | -.235                                     | .241  |
| Security Factor<br>Quality            | Equal Variances Assumed     | 5.783                                   | .018 | 1.226                        | 137     | .222            | .079            | .064                  | -.048                                     | .206  |
|                                       | Equal Variances Not Assumed |   |      | 1.277                        | 127.159 | .204            | .079            | .062                  | -.043                                     | .201  |
| Price Factor<br>Simple Online Payment | Equal Variances Assumed     | 9.267                                   | .003 | 1.571                        | 137     | .118            | .173            | .110                  | -.045                                     | .390  |
|                                       | Equal Variances Not Assumed |   |      | 1.666                        | 132.206 | .098            | .173            | .104                  | -.032                                     | .378  |
| Price Factor<br>Friendly Interface    | Equal Variances Assumed     | .780                                    | .379 | -.661                        | 137     | .510            | -.063           | .095                  | -.250                                     | .125  |
|                                       | Equal Variances Not Assumed |   |      | -.659                        | 111.991 | .511            | -.063           | .095                  | -.251                                     | .126  |
| Price Factor<br>Diversified Payment   | Equal Variances Assumed     | .162                                    | .688 | .016                         | 137     | .988            | .001            | .084                  | -.165                                     | .168  |
|                                       | Equal Variances Not Assumed |   |      | .016                         | 129.293 | .987            | .001            | .080                  | -.158                                     | .160  |
| Payment Factor<br>Financial Damage    | Equal Variances Assumed     | 2.417                                   | .122 | .755                         | 137     | .452            | .067            | .089                  | -.108                                     | .242  |
|                                       | Equal Variances Not Assumed |   |      | .787                         | 127.473 | .433            | .067            | .085                  | -.101                                     | .235  |
| Payment Factor<br>Risk                | Equal Variances Assumed     | 7.875                                   | .006 | -1.496                       | 137     | .137            | -.142           | .095                  | -.329                                     | .046  |
|                                       | Equal Variances Not Assumed |   |      | -1.414                       | 92.616  | .161            | -.142           | .100                  | -.341                                     | .057  |
| Payment Factor<br>Information         | Equal Variances Assumed     | .063                                    | .802 | -.409                        | 137     | .683            | -.041           | .100                  | -.239                                     | .157  |
|                                       | Equal Variances Not Assumed |   |      | -.413                        | 116.714 | .680            | -.041           | .099                  | -.237                                     | .155  |
| Payment Factor<br>Reliability         | Equal Variances Assumed     | .013                                    | .909 | 1.307                        | 137     | .193            | .177            | .135                  | -.091                                     | .445  |
|                                       | Equal Variances Not Assumed |   |      | 1.317                        | 115.708 | .190            | .177            | .134                  | -.089                                     | .443  |
| Payment Factor<br>COD                 | Equal Variances Assumed     | .003                                    | .956 | .016                         | 137     | .987            | .002            | .134                  | -.262                                     | .267  |
|                                       | Equal Variances Not Assumed |   |      | .016                         | 113.053 | .987            | .002            | .134                  | -.263                                     | .267  |

|                       |                             | Levene's Test for Equality of Variances |      | T-Test for Equality of Means |         |                 |                 |                       |   |       |
|-----------------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
|                       |                             | F                                       | Sig. | t                            | df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|                       |                             |   |      |                              |         |                 |                 |                       | Lower                                     | Upper |
| Payment Factor        | Equal Variances Assumed     | .259                                    | .611 | .391                         | 137     | .697            | .035            | .089                  | -.142                                     | .211  |
| Web Interface         | Equal Variances Not Assumed |   |      | .388                         | 110.832 | .698            | .035            | .090                  | -.143                                     | .213  |
| Payment Factor        | Equal Variances Assumed     | 1.221                                   | .271 | 1.179                        | 137     | .240            | .124            | .105                  | -.084                                     | .331  |
| Fear                  | Equal Variances Not Assumed |   |      | 1.187                        | 115.413 | .238            | .124            | .104                  | -.083                                     | .330  |
| Payment Factor        | Equal Variances Assumed     | .046                                    | .831 | 1.723                        | 137     | .087            | .247            | .144                  | -.037                                     | .532  |
| Trustworthy           | Equal Variances Not Assumed |   |      | 1.738                        | 116.282 | .085            | .247            | .142                  | -.034                                     | .529  |
| Administrative Factor | Equal Variances Assumed     | 1.072                                   | .302 | 1.898                        | 137     | .060            | .276            | .146                  | -.012                                     | .564  |
| Lockdown              | Equal Variances Not Assumed |   |      | 1.941                        | 121.236 | .055            | .276            | .142                  | -.005                                     | .558  |
| Administrative Factor | Equal Variances Assumed     | .109                                    | .741 | .354                         | 137     | .724            | .043            | .121                  | -.197                                     | .283  |
| Social Distancing     | Equal Variances Not Assumed |   |      | .354                         | 113.940 | .724            | .043            | .121                  | -.197                                     | .283  |
| Administrative Factor | Equal Variances Assumed     | 1.021                                   | .314 | .678                         | 137     | .499            | .078            | .116                  | -.150                                     | .307  |
| COVID-19              | Equal Variances Not Assumed |   |      | .685                         | 117.178 | .494            | .078            | .114                  | -.148                                     | .305  |
| Administrative Factor | Equal Variances Assumed     | .017                                    | .895 | -.078                        | 137     | .938            | -.009           | .117                  | -.241                                     | .223  |
| Government Norms      | Equal Variances Not Assumed |   |      | -.078                        | 115.072 | .938            | -.009           | .117                  | -.240                                     | .222  |
| Administrative Factor | Equal Variances Assumed     | .282                                    | .596 | .617                         | 137     | .538            | .072            | .116                  | -.158                                     | .301  |
| Corona Infection      | Equal Variances Not Assumed |   |      | .614                         | 110.976 | .541            | .072            | .117                  | -.160                                     | .303  |

Source: Authors' calculation.

The independent sample t-test was conducted to find the impact of six factors – product, price, time-saving, payment, security, and administrative – on online shopping behaviour of male and female customers. From Table 3, we interpreted that all the hypotheses are rejected, as the sign value of all factors and their sub-factors are more than 0.05. It means that the null hypotheses were accepted. The result shows that all the six factors have a significant impact on online shopping behaviour.

## DISCUSSIONS AND CONCLUSION

India's e-commerce sector is expanding swiftly and becoming more competitive despite some challenges. International as well as domestic businesses are competing. The purpose of this essay is to investigate the elements that directly influence customers' online purchasing decisions. Product, timing, payment, and security considerations all had an impact on consumer online shopping behaviour. Simpler, more

practical, and secure payment methods are required. Since most online customers have trouble using online payment systems like card transactions and are unfamiliar with electronic banking, businesses can accept cash on delivery. Consumers' online shopping decision in India is influenced by a number of factors, including security, delivery, product availability, and product variety (Hossain, Rahman & Hasan, 2018). By giving access to a plethora of information about products and services, as well as pricing comparisons with other businesses, online shopping enables customers to save time shopping. Facilities, Internet security, transportation, time saving, and shipping all have been identified as key elements in luring customers into shopping online. This study also indicates that e-commerce platforms should safeguard clients' security and privacy, as well as prevent unauthorised access to or hacking of their data. To entice customers to use e-commerce and make purchases online, businesses should ensure quick delivery across the country. Consumers would benefit more if e-commerce is able to meet the challenges. Consumers will be more willing to make online purchases as a result, and e-commerce will grow in popularity in India. Despite a number of issues, the e-commerce sector has the potential to contribute significantly to India's GDP and to dominate the Indian economy. The e-commerce industry placed a strong emphasis on expanding business into the countryside, particularly in India's rural and remote areas. The government has undertaken a number of developmental initiatives to strengthen the e-commerce business. The global e-commerce industry is experiencing an unusual rise with COVID-19, and with the world on the verge of a global recession, the industry's growth is bound to be slow. Online shopping is rapidly expanding in this expanding market. During the COVID-19 pandemic in India, the study examines the factors that affect consumers' online shopping behaviour. The impact of six factors on consumers' online shopping behaviour during COVID-19 is investigated in this study: product factor, price factor, time-saving factor, payment factor, security factor, and administrative factor. The study's finding shows that product, time-saving, and security factor have a strong and significant relationship with customers' online shopping behaviour during COVID-19.

## LIMITATIONS

The study focused on India during the coronavirus disease pandemic, so the findings do not apply to circumstances that occurred after a pandemic or in other places or times. The statistics might not be reflective of the opinions of all Indian consumers due to the small sample size of only 139 respondents. The sample size should be increased to improve the applicability of the sampling. The research discovered that independent variables like product factor, price factor, time-saving factor, security factor, payment factor, and

administrative factor had only minor effects. With thorough research, researchers may look into other factors that influence online shopping behaviour.

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