Antecedents of Buying Behavior Patterns of E-Consumers: Lessons Learnt From the COVID-19 Pandemic

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ABSTRACT

In the new digitalized era, seller and buyer interact at the market space whereby the market space is provided on a different digital platform. Gradually, consumers are transforming into e-consumers. The COVID-19 pandemic has changed consumers’ purchasing patterns. During the lockdown, e-commerce firms expanded at a breakneck rate. It becomes crucial for e-commerce companies to analyze the buying behaviour pattern of e-consumers during this phase. So, a study is needed to analyze the changing buying behaviour of consumers towards online shopping. A structured questionnaire was designed to collect the data from 400 respondents. SPSS 20 and AMOS 20 were further used for the analysis of data. Findings indicate important antecedents of the buying behaviour pattern of e-consumers. The proposed model represents the buying behaviour pattern of e-consumers during the COVID-19 pandemic, which may help e-commerce companies to acquire new consumers and retain the existing ones.

KEYWORDS
Antecedents, Consumer Behaviour, COVID-19, E-Consumers, Online Shopping, Structural Equation Modeling

1. INTRODUCTION

The outbreak of the covid-19 pandemic in 2020 has completely altered consumer purchasing patterns. Customers’ shopping preferences changed as a result of social distancing and lockdown (Hall et al., 2020). During the lockdown, goods and services availability was in limited quantity and duration due to various constraints (Sheth, 2020). People’s way of thinking, analysing, and behaving are no longer the same as they were before the pandemic (He & Haris, 2020; Bag et al., 2021). Since the lockdown, the majority of Indian customers also chose to buy goods online. Therefore, customers’ attitudes toward e-commerce websites must be understood by businesses. As a consequence, a study is required to examine the effect of consumers on e-commerce websites (Hollebeek et al., 2020). The e-commerce industry has seen a surge in business as a result of the covid-19 pandemic. People began panic buying as a result of the uncertainty during this pandemic (Dodds and Hess, 2020). Pandemic has changed the traditional way of shopping and consumers became more inclined towards the digital platform to purchase the products and services. In the past few decades, the traditional style of shopping has changed into a new and improved way through the development of information and communication technologies. It does not mean that the traditional shopping method is not prevalent.

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A lot of consumers still opt for the traditional method of shopping. But the people are now shifting towards a new trend to do shopping on the internet by using digital marketing (Flavian & Guinaliu, 2005). Consumers can be engaged with the products and brands (Rupini & Nandagopal, 2015), and social connections can be mapped (Kukar-Kinney et al., 2016). It has helped in the introduction of a new revolution in the field of digital marketing. As a result of globalization, the companies are now focusing on e-consumers through a broad category focusing on marketing, advertisement and conducting marketing research (Jocz, & Quelch, 2008). Research conducted by Miller et al. (2013) declared that digital marketing is playing an important aspect in influencing the purchasing decisions of e-consumers. Miller et al. (2013) found that nearly 70% of e-consumers usually consult digital marketing to get information about various products. Among them, 40% of e-consumers purchase the product, and around 60% of e-consumers share useful information about a particular product online so that others can also take advantage.

In the past few years, it has been noted that consumer behaviour is highly influenced through digital marketing which is helping e-consumers to express their attitude towards certain products or services. People are using their mobile phones to purchase items that they get to know through digital marketing. Digital marketing has helped the business to add significant business models (Flavian & Guinaliu, 2005). Digital marketing has gained popularity as people can make a comparison of the features of the product, its price, read reviews, and can express their thoughts regarding the product in a single window. Consumer behaviour is influenced by those individuals and groups who are active on the different online platforms and have influencing power over the other e-consumers (Solomon, 2010). Heinrichs et al. (2011) also advocated that digital marketing is also popular because of its various features like sharing information and interacting with one another, accessing information, rating of the product, and giving reviews and comments. The relationship between e-consumers and companies has built up through digital marketing. The market coverage has extended and the companies can now focus upon the potential e-consumers and a healthy conversation can be developed between both (Davis et al., 2010). According to Gnanaasambandam et al. (2012), the companies are using digital marketing platforms for going digital so that they can easily reach large customers and the cost incurred is minimal. Digital marketing is a platform that is very useful for e-consumers as well as for companies. Digital marketing is providing a new digitalized platform to seek information about the products and services. It also enables e-consumers to discuss the feedback of the products and brands on a different digital marketing platform (Éthier et al., 2006). The marketers do not have any control over the conversation among e-consumers on the digital marketing platform (Mangold & Faulds, 2009). In the 21st century, e-consumers utilize the available resources in an optimum way while doing online shopping. This process is a part of digital marketing where buyers and sellers interact with each other on a digitalized platform (Lee et al., 2017). India’s e-commerce sector is expanding at an unprecedented pace. The online market has enormous potential. Consumers like to buy online because it is more convenient and less expensive. Foreign direct investment (FDI) in e-commerce businesses has increased competition, which is good for consumers in the sense that they will get better rates (Garg et al., 2021). Digital marketing acts as an umbrella for marketers to understand and analyse the buying behaviour of e-consumers. Also, digital marketing is acting as an influencing way to use word-of-mouth marketing to large users, enhancing and encouraging the communications between consumer to consumer and also accelerating brand awareness through a mediating platform of social network (Kozinets et al., 2010). In the present digitalized world, most companies are facing the problem of e-trust among consumers (Gefen & Straub, 2004). Covid-19 pandemic has disrupted the buying habits of the consumers. Due to social distancing and lockdown, the consumption pattern of the consumers is location and time-bound. In most countries, people are working from their homes and they prefer to purchase products and services through a digital platform (Sheth, 2020). New dynamic and agile retailing strategies need to be developed to handle the new demand from the customers and new government rules and regulations due to pandemics. Retailers must rethink the evolving business models. They need to employ digital technology to deal with the
new digitalized challenges (Pantano, et al., 2020). Lack of right delivery of products is the major cause of losing e-trust among the consumers. Apart from it, some other factors need to be identified that influences e-trust among the consumers. Digital marketing is the new platform for the consumers who perceive the risk to attract the consumers, so research is needed to predict the buying behaviour pattern of e-consumers (Pappas, 2016). Psychological factors have a significant positive impact on the e-consumers which changes their perceptions towards online shopping (Zhou et al., 2020) but there is a lack of research to determine the important antecedents having a significant impact on buying behaviour intentions of the consumers. Retailers need to know the changing buying behaviour of the consumers to develop their retailing strategy. Hence, our first research question is as under.

RQ1: How did the covid-19 pandemic impact e-consumer buying patterns?

The buying behaviour of e-consumers towards online shopping varies from country to country. For attracting consumers, e-trust is required between vendors, the internet, and third parties. There should be proper coordination among all these e-commerce parties. Consumers are very much aware of the security of online transaction. Ensuring consumers towards the online platform is essential to change the traditional consumers into e-consumers (McCole et al., 2010). During the pandemic, the usage of the internet has increased, the online shopping is also increasing which continuously changes the buying behaviour of consumers (Overby & Lee, 2006). Consumer behaviour is dynamic, so research is needed to determine the buying behaviour pattern of consumers. Understanding the online shopping environment perceived by the consumers is crucial for an effective marketing strategy. Online shopping is more attractive for consumers in comparison to traditional buying habits (Demangeot & Broderick, 2007).

Customers are turning to digital platforms to buy their goods and services as a result of the covid-19 pandemic (Zwanka, & Buff, 2021). An increasing number of online stores are getting the attention of consumers. The pandemic has drastically transformed consumer perceptions (Rather, 2021). The online retailing environment is different from a traditional store. Convenience in online purchasing is a major attribute in online shopping (Eroglu et al., 2001). Security, delivery, trust and product value are some important attributes that influence consumers towards online shopping (Chen et al., 2010). Consumer’s perception of online shopping changes from product to product. Positive perception towards online transactions significantly affects the attitude of consumers towards online shopping (Lian and Lin., 2008). E-consumers recognize the crucial and effectiveness of B2C websites. Improvement in the online platform is vital to fulfilling the needs and expectations of consumers (Ranganathan & Ganapathy, 2002).

During the covid-19 pandemic, determining the purchasing behaviour trend of e-consumers is critical for online retail business sustainability Hence,

RQ2: How covid-19 pandemic has broadened online shopping in India?

The sections of this manuscript are organized as follows: Section 1 presents the introduction followed by a literature review in section 2. Section 3 presents the hypothesis development. Section 4 presents the methodology. 5 and 6 comprise data analysis and discussion. Section 7 covers the conclusion of the study.

2. LITERATURE REVIEW

2.1 Theoretical Underpinning

The Covid-19 invasion, which happened at the beginning of the year 2020, has had a global effect. The bulk of people on the planet are affected both physically and psychologically by this pandemic. It has spread to every nook and cranny of the globe (He and Harris, 2020). Buying habits are changing as a result of covid-19. Post pandemic, customers’ spending intentions have shifted as a result of the
lockdown and market turmoil (Sheth, 2020). In this century, people are grappling with one of the most serious issues in human history. It is becoming more difficult for businesses to sustain a positive client relationship with their customers (Donthu & Gustafsson, 2020). The customer’s path map has dramatically improved. Consumers have followed a modern shopping strategy for goods and services. Consumers are becoming more aware of the risks of impulse purchases. Consumers continue to buy only important/necessary goods and services due to job insecurity (Naeem, 2021). Companies are using information technology-enabled tools and tactics to influence consumers and raise sales volume. In India, online shopping increased by up to 30% during the lockdown. The majority of e-commerce businesses were unable to supply goods on schedule (Sirkeci, 2020).

Digitalization has further helped e-commerce businesses in adopting advanced ICT for boosting sales. The modern industrial revolution has ushered in a new age built on robotics and focused on smart factories (Chiarini et al., 2020). Industry machine learning model 4.0 can be used to profile customers, and assists in the implementation of successful digital marketing strategies (Chiarini & Kumar, 2020). Industry 4.0 is having a huge effect on the digital revolution, which is reshaping business practices. Adoption of industry 4.0 is essential for sustainability and social welfare development (Ghobakhloo, 2020). Customers who were formerly resistant to internet purchases have learned about and begun e-purchasing as a result of the pandemic. Customers are becoming less interactive in conventional physical stores. Customers are increasingly drawn to digital stores. E-commerce firms’ markets have exploded in recent years (Mehta et al., 2020). Many small businesses have turned to the internet to expand their reach. The rise of online shopping has a major positive influence on digital transactions, accelerating the trend of digitalization. Companies are offering internet resources that do not necessitate human contact (Iivari et al., 2020). Consumers are increasingly becoming e-consumers. Consumers purchasing motivations have shifted as a result of the pandemic. Customers now make internet purchases based on a variety of factors that they did not consider before the pandemic (Jeżewska-Zychowicz et al., 2020). Consumers’ eating patterns have changed in this pandemic. Marketers are on the lookout for new metrics to use in the creation of their marketing campaigns. Marketers are adopting novel approaches to create demand for their goods and services. Consumers are at the forefront of both stores and businesses (Zwanka & Buff, 2021). On the internet platform, the demand for different goods is growing at an exponential pace. The selection, consistency, and value of the items are the three most important considerations for online grocery stores (Nagurney et al., 2020). Maintaining the freshness of perishable goods is the most difficult task for e-commerce firms, but customers want products to arrive at their doorstep in the shortest possible time. As a result, businesses need to reduce delivery times. Big firms can handle turnaround times, but small businesses are unable to do so due to a shortage of funding (Nicola et al., 2020). As a result, small e-commerce businesses are finding it more difficult to compete in the long term. Following the lockdown, predicting customer purchasing patterns has been more complex. The criteria for predicting consumer buying intentions and behaviour have shifted dramatically. Online shopping has seen a large increase in order size and sales in India (Fabeil et al., 2020). Consumer behaviour consists of various ways the customers select and buy the products and services and share their ideas and experiences to fulfill their needs and demands. It is a very complex and influential process that guides consumer buying habits. Consumer behaviour and preferences keep on changing due to the continuous change in technology due to globalization. Before 10 years the customers were able to communicate through word-of-mouth to other customers and the number remains confined to say 10 persons but the digital platform has helped in providing reviews and information to an unlimited number of people through digital media. Surprisingly the customers are willingly trusting strangers (Ling et al., 2010). Consumers benefit from e-commerce because it allows them to get a better shopping experience. E-commerce is rapidly infiltrating the developing world’s economy (Yadav & Maharj, 2020). Consumers are inclined towards digital media and their buying behaviour has drastically shifted towards digital media. Digital media does not affect consumer decision-making directly but it acts as a mediator in determining the consumer decision-making process. In the past few decades, various practitioners and researchers have presented their
views regarding the issues of marketing through digital marketing. The researchers have also worked towards studying consumers behaviour and their preferences and also its impacts on the marketers too. According to Bhatnagar & Ghose (2004), the top ten digital marketing sites have developed tremendously during the past few years and their usage has increased from 46.8 million people to 68.8 million people. Hensel & Deis (2010) have advocated that digital marketing should be used positively by marketers to modify consumer behaviour. Diffley et al. (2011) propounded that the companies must ransack to accommodate advertising and engaging e-customers rather than annoying the customers by entering into their privacy. If a company uses the responses given by e-consumers then they can utilize it to enhance their products. The unrealized potential of digital marketing can be used efficiently and effectively for making e-consumers take active participation in defining the behaviour of e-consumer through the scheme of digital marketing and networking sites. The most common digital marketing platforms are Facebook, YouTube, blogs, search engine optimization, etc. which act as a mediator between the people who have shared areas of interest and communicate with each other (Berman & Katona, 2013). Casteleyn et al. (2009) are also of the same view and advocate that digital marketing can be used to target the focus groups. This feature of digital marketing and its reachability has become a trendsetter and has reformed various practices of marketing like promotion and advertising (Hanna et al., 2011).

The buying behaviour pattern of e-consumers can be defined as a sum of the expectation of the e-consumer from a particular product and the experience which they gain from using the product. The e-consumer buys the product to fulfill his needs and wants through it. E-consumer experiences more satisfaction from those products from which he has the least expectation (Wil et al., 2019). E-commerce is gaining traction in developing countries such as India. Affiliate marketing on social media boosts e-commerce (Zhu et al., 2020). The e-marketing techniques vary based on cultural distinctions. The market’s demographic, economic, and cultural considerations should all be considered in designing an e-marketing strategy (Liao et al., 2020). Consumer attitudes toward online shopping are influenced by three major factors: customer experience, confidence, and comfort (Raman, 2020). Now, e-consumers have become more eager to gain satisfaction from the products which they use. In fact, in research, it was concluded that 88% of the e-consumers have a higher level of expectation from the companies which they want to be fulfilled soon. They want the companies to provide them with better and better products by the passing time so that they can have world-class facilities for which they are paying. India has the second-largest population and the sixth-largest economy in the world. The growth of the Indian economy is accelerated by its young population, IT infrastructure, and growing economic capability. India also has the world’s cheapest internet services. These internet services provide a digital platform to the young Indian youth to purchase products by sitting at their homes and offices. This has exponentially increased online shopping due to which there is a huge scope in India for e-marketing (Yasmin et al., 2015). During the covid-19 pandemic, a report focusing on significant antecedents of customers is missing. In the next section, we present the theoretical framework for this study.

2.2 Theoretical Framework

The stimulus-response theory is one of the important models used in the area of human psychology. The stimulus-response model is widely used to determine the behaviour and response of the people. Stimulus is the factor that evokes a specific reaction of the people. External factors are treated as a stimulus (Islam et al., 2018). The stimulus-response theory could be used to measure the response of the consumers on irrefutable factors (Lu et al., 2018). Stimulus-response theory observed the response of the human as a result of the stimulus. It analyzes consumers’ impulse buying habits. It explains changes in consumer behaviour as a result of external factors (Huang, 2016). The stimulus-response theory states that in the presence of the stimulus, the response occurs more frequently. Stimulus is certain factor that occur due to environmental effects. The stimulus triggers the response of the people (Wang & Lee, 2020). The marketer may use stimulus-response theory to measure the behavioural changes in consumers due to certain external factors. Stimulus-response theory helps to determine the factors responsible for the impulse buying behaviour of the consumers. Internal and external factors
have a greater influence on consumers purchasing decisions (Liu et al., 2020a). Stimulus-response assists to develop the model which measures the dynamics of buying behaviour of the consumers. The stimulus-response model translates the consumer behavioural response which leads to the buying behaviour of the consumers (Malanda, 2020).

3. HYPOTHESES DEVELOPMENT

3.1 Factors Influencing Buying Behavior Pattern Of E-Consumers

3.1.1 Buying Motives and Buying Behavior Pattern of E-Consumers

Buying motive is an urge which motivates the customers to buy the products or services (Yoon, 2002). Whenever a customer purchases any product there is a buying motive behind that purchase. It includes the action and also determines the choices of the customers. Buying motive is the reason behind the need, desire, feeling, and emotion to buy products and services. Hassle-free and secure payment also attract consumers towards online shopping (Park & Kim, 2008). Buying motive is the strong stimuli that influence the buying behaviour pattern of the consumers (Vieira, 2013). The verbal meaning of motive is a thought or action which takes the form of any decision. The reason behind making a purchase decision is not the salesman who influences the buying decision but it is the urge of the customer which helps in making a buying decision (Paesbrugghe et al., 2020). The buying motives are highly influenced by the extreme desire for the financial benefits which are behind the purchase of the products and services. The advertising service pays off soon. Another variable that is attached to the buying motive is the convenience to purchase the products (Kaura, 2013). Those products which provide comfort and convenience to the users also influence the buying motives. The buying motive is also influenced by the emotional satisfaction which is achieved by the purchase of the product or services. Whenever the customer buys the product based only on the emotional factor and does not use his senses to make the buying decisions are termed as an emotional factor for buying motives (Christodoulides & Michaelidou, 2010). The last variable which determines the buying motive is the owner’s pride in the products. Sometimes consumers buy the product to satisfy the pride which

![Graphic 1. Theoretical framework]
is attached to the products. In a nutshell, the buying motives of consumers are dependent upon the personal, social, psychological and cultural factors (Kotler & Armstrong, 2010).

H1: Buying motives have a significant impact on buying behavior patterns of e-consumers.

3.1.2 Consumer Preferences and Buying Behavior Pattern Of E-Consumers

The preference of consumers may be defined as the choices, likes, and dislikes of the products (Font-i-Furnols & Guerrero, 2014). Consumer preferences help in identifying consumer behaviour. The major variables which affect consumers are the preference towards the digitalized platform to purchase the products. Consumers prefer the digital platform due to lack of time mostly in the urban areas and metropolitan cities (Williamson, 2021). Another variable that determines customer preference is the digitalization in the payment system. Consumer preferences are changing according to the payment system available to them as the online payment system is safe and secure (Padashetty & Kishore, 2013). The stimulus-response theory could be used to measure the impact of consumer preferences on buying behaviour patterns of e-consumers. Consumers have a significant response to the preferences of the consumers (Giacalone, et al., 2014).

H2: Consumer preferences have a significant impact on buying behavior patterns of e-consumers.

3.1.3 Purchase Intention and Buying Behavior Pattern Of E-Consumers

Purchase intention is defined as buying the same product every time without any change. It is also the need of the customers which drives them to purchase the products or services. The variables which define consumer preference are that the customers develop a sense of satisfaction by buying the same product online. As they get the product easily at their doorstep (Brown et al., 2012). Another influencing factor is that the customers are satisfied with the product or services which they are purchasing over and over again of a particular brand which is also treated as the brand image (Huang et al., 2004). The customer’s purchase intention is also influenced by the perceived value is better than the quality and the value which is expected by the customers (Wani et al., 2016). Sometimes the customers get better quality than they expected. Another factor that helps in determining the purchase intention is the attitude of the customers towards the products (Aliyar & Mutambala, 2015). Purchasing intention is one of the most important external factors having an impact on consumer behaviour. Purchase intention acts as a stimulus to change the behaviour of the consumers (Chiu et al., 2012).

H3: Purchase intentions have a significant impact on buying behavior patterns of e-consumers.

3.1.4 Buying Habits and Buying Behavior Pattern Of E-Consumers

The buying habits of consumers can be defined as consumers’ behaviour of buying the same brand only. The reason behind this habit is that the product or services fulfil all the requirements of the customers without any fail. Brand loyalty is not the reason, rather customer satisfaction is the main cause. The variable which affects consumer buying habits is the preference of consumers towards purchasing the products online (Padashetty & Kishore, 2013). As many customers stick to purchasing products from only a few sites as the product they receive is up to their level of expectations and they do not get any flaws in it. This interprets that the psychological mindset of the consumers is one of the factors which is crucial in the buying behaviour of the consumers (Heinrichs et al. 2011). Buying habits stimulate the response of the consumers towards online shopping. Online shopping is changing the buying habits of consumers (Van’t Riet et al., 2011). The consumer’s economic condition is also equally important in deciding and influencing buying habits. The social and cultural factors like
family members, friends, and family and cultural factors like religion, class, etc. are deciding factors in determining the buying habits (Elhoushy & Lanzini, 2020).

H4: Buying habits have a significant impact on buying behavior patterns of e-consumer

4. RESEARCH METHODOLOGY

4.1 Operationalization of Constructs

Buying motive is an urge that forces the people to purchase the products and services. Due to intense competition in the market, people prefer to purchase a good quality of products at the least possible price. Financial benefits motivate the consumers towards purchasing. Apart from financial benefits, online shopping is convenient for consumers. People get the products at their doorstep. The satisfaction level of the consumers in e-shopping also motivates the consumers towards online purchasing. Hassle-free online shopping influences the buying motives of the consumers (De Ferran and Grunert, 2007).

Consumer preferences are defined as the tastes of the consumers measured by the utility of goods and services. In today’s world, consumers prefer online shopping in comparison to the traditional way of shopping. Shopping on the digital platform is safe and secure for the customers. In online shopping, consumers can easily return or exchange products which is a little bit difficult in traditional shopping. So, consumers are more satisfied by e-shopping. Consumers like online shopping because it is economical for them. Doing digital payment is hassle-free and easy for consumers (Alemu et al., 2017). Purchase intentions are defined as the intentions of the consumers towards the decision of purchasing products or services. Online shopping has multiple options which enhance the satisfaction level of the consumers. The big e-commerce companies deliver the products as per the expectations of the consumers. Most e-commerce companies provide higher perceived value than expected. Consumers have positive attitudes towards online shopping (Dharmesti et al., 2019).

Buying habits of the consumers can be measured by observing the buying behaviour of the consumers. Now, online shopping is becoming a habit of consumers. Consumers prefer to do online shopping. Online shopping is convenient for the consumers and they get the products at their doorstep. Browsing products on the digital platform becomes the routine habit of the consumers. Online shopping is easy purchasing for consumers (Ayuni, 2019). Online shopping has transformed the psychological mindset of the consumers and they are moving towards e-consumers. Online shopping is economically viable for e-consumers. Online shopping is socially influencing people. Online shopping is changing the traditional culture of shopping and converting consumers into e-consumers (Penz and Hogg, 2011).

The items used for measuring each of the constructs are adapted from past studies and presented in Annexure I. We used four items to measure buying motives; three items to measure consumer preferences; three items to measure purchase intentions; four items to measure buying habits, and three items to measure buying behaviour of e-consumers.

4.1 Data Collection

A pilot study was conducted and data was collected from 40 samples. We checked the reliability, validity, and model fit and found everything satisfactory. For instance, the reliability of the instrument was checked using Cronbach’s alpha coefficients of all the items and found to be higher than 0.60. Further, we went ahead with the main survey.

400 respondents were randomly selected from the Delhi region for the main survey. The standard sample size of 400 generally gives more accurate responses (eg., Elhoushy & Lanzini, 2020; Trivedi & Sama, 2020; De Mooij & Hofstede, 2011).

The questionnaires of the survey were classified into two parts. The first part contains the demographic information of the respondents. The second part contains the questions related to buying motives, consumer preferences, purchase intentions, and buying habits. All the five items
were measured by using five-point Likert scaling where “1” stands for strongly disagree and “5” stands for strongly agree.

4.2 Descriptive Statistics

Table 1 represents the demographic profile of the respondents. Primary data was collected from 400 respondents. Out of 400 respondents 51.25% were male whereas 48.75% were female. 38.75% of respondents fell in the age group of 20-40 years, 43.25% fell in 40-60 years whereas the remaining 18% were aged above 60 years. 28.25% were having an income between 20000 – 40000 INR, 26.75% were 40000 – 60000 INR, 30.25% were 60000 – 80000 INR and 14.75% were above 80000 INR.

4.3 Common Method Bias

Some essential precautions have been taken to avoid common method bias. Common method bias arises when variations occur in the responses collected by the respondents due to the instrument. The simple language was used in designing the questionnaire. While doing the survey, it was communicated to the respondents that the study is for academic use only, not for commercial purposes. The personal details of the respondent will be kept confidential. Harman’s single factor test was used to determine the presence of common method bias. The total variance accounted for by the first factor was found to be 27.92% which is less than 50%, hence common method bias does not have any impact in this study.

5. DATA ANALYSIS

Structural equation modelling was used to analyze the hypothesis. Structural equation modelling is a multivariate technique that is the combination of factor analysis, path analysis, and regression analysis. Structural equation modelling is used to develop the relationship between the latent variables and observed variables. Structural equation modelling is a convenient framework for statistical analysis which includes multivariate analysis. Structural equation modelling is the combination of the measurement model and structural equation modelling. The measurement model must have a sufficient level of reliability and validity. The structural model measured the relationship between latent variables and observed variables and the direction of the path (McQuitty, 2004).
5.1 Measurement Model

The confirmatory factor analysis was conducted using Amos 20.0 version to test the measurement model. Reliability and validity were checked by using the measurement model. The values of Cronbach’s alpha were checked to establish the reliability of the data.

Table 2 shows the reliability of the items. All the values of Cronbach’s alpha are above 0.60. Hence all the items are reliable. The validity is measured by testing discriminant and convergent analysis. The convergent analysis shows the proportion variance is common in the construct. Factor loading is used to measure the validity of the construct. The value of standardizing regression weights proved that observed variables are significant and they can measure the latent variables. The factor loading of all the observed variables is shown in Table 3. The values of all the observed vary from 0.59 to 0.95. This proved that all the observed variables are good enough for convergent validity. Discriminant analysis is used to measure
the difference between different antecedents. Generally, two methods are used to measure the discriminant analysis. The first one is the correlation between the antecedents which should not be very high. Second, the average variance of the antecedents should be greater than the average shared variance.

Table 2. Factor loadings and reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Motives</td>
<td>B11</td>
<td>0.77</td>
<td>0.82</td>
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<tr>
<td></td>
<td>B12</td>
<td>0.83</td>
<td></td>
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<tr>
<td></td>
<td>B13</td>
<td>0.78</td>
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<td></td>
<td>B14</td>
<td>0.91</td>
<td></td>
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<tr>
<td>Consumer Preferences</td>
<td>C11</td>
<td>0.67</td>
<td>0.87</td>
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<td></td>
<td>C12</td>
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<td></td>
<td>C13</td>
<td>0.80</td>
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<tr>
<td></td>
<td>C14</td>
<td>0.95</td>
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<tr>
<td>Purchase Intentions</td>
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<td>P12</td>
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<td></td>
<td>P14</td>
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<td></td>
<td>H12</td>
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<td>E- Consumers Buying Behaviour Pattern</td>
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</tbody>
</table>

Table 3 represent that all the antecedents have a low correlation with each other. This shows that all the antecedents are independent of each other. The values of the average variance extracted of each antecedent are greater than the value of shared variance between the antecedents. The square roots of

Table 3. Correlation matrix and root of average variance extracted

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
<th>NT</th>
<th>PFT</th>
<th>EE</th>
<th>TA</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Motives</td>
<td>0.823</td>
<td>0.725</td>
<td>0.534</td>
<td>0.274</td>
<td>0.879</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Preferences</td>
<td>0.872</td>
<td>0.674</td>
<td>0.341</td>
<td>0.174</td>
<td>0.143</td>
<td>0.675</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>0.880</td>
<td>0.786</td>
<td>0.282</td>
<td>0.252</td>
<td>0.268</td>
<td>0.623</td>
<td>0.815</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buying Habits</td>
<td>0.912</td>
<td>0.527</td>
<td>0.315</td>
<td>0.215</td>
<td>0.548</td>
<td>0.517</td>
<td>0.562</td>
<td>0.974</td>
<td></td>
</tr>
<tr>
<td>E- Consumers Buying Behaviour Pattern</td>
<td>0.817</td>
<td>0.645</td>
<td>0.537</td>
<td>0.341</td>
<td>0.742</td>
<td>0.715</td>
<td>0.587</td>
<td>0.626</td>
<td>0.759</td>
</tr>
</tbody>
</table>
average variance extracted are higher than the value of diagonal value in the corresponding columns and rows and greater than the value of the correlation between the antecedents. This shows that the antecedents have a higher correlation with their observed variables in the measurement model. It proves that the model is satisfactorily at the construct level.

5.2 Model Fit

The model fit was tested by using the trucker levis index (TLI), comparative fit indices (CFI), the goodness of fit indices (GFI), normed fit indices (NFI), and root mean square approximation (RMSEA). For the model fit, the value of the square test should be less than 3. The value of TLI, CFI, GFI, and NFI should be greater than 0.90. The value of the root means square approximation should be less than 0.08.

Table 4 represents a summary of the measurement model. The value of GFI, CFI, TLI, and NFI are 0.97, 0.92, 0.93 and 0.94 respectively. The value of the chi-square test is 2.387. The value of RMSEA is 0.053. Table 4 shows that the measurement model is good to fit so we can proceed with the structural model.

Table 5 represents a summary of the structural model. The value of GFI, CFI, TLI, and NFI are 0.91, 0.95, 0.97 and 0.91 respectively. The value of the chi-square test is 2.246. The value of RMSEA is 0.058. Table 5 shows that the structural model is a good fit; so, we can proceed for the hypothesis testing. The full structural model is presented in Figure 2.

Table 4. Measurement model: goodness of fit indices

<table>
<thead>
<tr>
<th>Model Fit Indices</th>
<th>Chi-Square</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2.387</td>
<td>0.97</td>
<td>0.92</td>
<td>0.93</td>
<td>0.94</td>
<td>0.053</td>
</tr>
</tbody>
</table>

Table 5. Structural model: goodness of fit indices

<table>
<thead>
<tr>
<th>Model Fit Indices</th>
<th>Chi-Square</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2.246</td>
<td>0.91</td>
<td>0.95</td>
<td>0.97</td>
<td>0.91</td>
<td>0.058</td>
</tr>
</tbody>
</table>

Figure 2. Full structural model
We presented the result of hypothesis testing (refer to Table 6) and it shows that buying motive, consumer preferences, purchase intentions, and buying habits have a significant impact on e-consumers buying behaviour pattern.

Table 6. Hypothesis testing results

<table>
<thead>
<tr>
<th>Hypothesis (H)</th>
<th>Estimates (β)</th>
<th>Unstandardized Regression Weight</th>
<th>S.E.</th>
<th>C.R.</th>
<th>p-Value</th>
<th>Squared Multiple Correlation (R²)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>0.25</td>
<td>0.25</td>
<td>0.030</td>
<td>2.43</td>
<td>0.003</td>
<td>0.82</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>0.59</td>
<td>0.54</td>
<td>0.040</td>
<td>3.67</td>
<td>0.021</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H3</td>
<td>0.45</td>
<td>0.36</td>
<td>0.025</td>
<td>2.15</td>
<td>0.055</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H4</td>
<td>0.44</td>
<td>0.41</td>
<td>0.023</td>
<td>1.88</td>
<td>0.042</td>
<td>Supported</td>
<td></td>
</tr>
</tbody>
</table>

6. DISCUSSION

Personal values are the buying motives for an individual online shopper. Customers’ motivation towards online shopping depends upon three factors i.e., happiness, matured society and esteem life (Koo, 2006). Figure 2 shows that the correlation coefficient between buying motives and e-consumer buying behaviour pattern is 0.78 which indicates that buying motives have a significant positive impact on e-consumer buying behaviour. Customer interface quality can enhance the consumer perceptions towards online platforms (Chang & Chen, 2009). Results indicate the positive correlation between consumer preferences and e-consumer buying behaviour which is 0.84. Perceived justice plays an important role in the post-recovery satisfaction of consumers (Kuo & Wu, 2012). Product attributes and product involvement have a positive impact on the purchase intention of online shoppers (Lee et al., 2017). This study further proved that purchase intention has a significant impact on the e-consumer buying behaviour pattern. The correlation coefficient between purchase intention and e-consumer buying behaviour pattern is 0.79. Consumer buying habits are changing due to online shopping. Now, consumers want products at their doorstep. This study further identified that purchase intention has a positive impact on e-consumer buying behaviour (Close & Kukar-Kinney, 2010). The output of this research shows a positive correlation (r = 0.88) between buying habits and e-consumer buying behaviour patterns. Table 6 shows the different properties like standard error, standard path coefficient, hypothesis result, and critical ratio. The hypothesis is tested at a 5 percent level of significance. The value of R² represents the coefficient of determination and it measures the strength of the model. The value of squared multiple correlations shows that antecedents can explain 82 per cent of the e-consumers buying behaviour pattern. Table 6 also represents the result of the hypothesis testing. The relationship of all the antecedents is found to be positive with e-consumers buying behaviour patterns. The most significant antecedent of e-consumers buying behaviour patterns is consumer preference (β = 0.50, p < 0.05) which states that consumer preferences have a significant impact on e-consumers buying behaviour patterns. The second important antecedent of e-consumers buying behavior pattern is purchase intentions (β = 0.45, p < 0.05). The other two antecedents of buying behavior patterns of e-consumers are buying habits (β = 0.44, p < 0.05) and buying motives (β = 0.25, p < 0.05).

6.1 Theoretical Implications

Consumer behaviour has changed as a consequence of the pandemic. The pandemic has changed the way people live, work, and shop. The long-term effect of Covid-19 on an individual is rapidly accelerated. The study shows that the buying motives have a significant impact on buying behaviour...
patterns of e-consumers. Hence H1 is accepted. The research focuses on improvements in customer purchasing behaviour. Consumers are highly motivated to buy goods online due to various reasons such as convenience, time savings, and price (Rohm & Swaminathan, 2004). Panic purchasing during the covid-19 pandemic resulted in unusual market behaviour. As a result, the market decision-making process has shifted (Laato et al., 2020). This study proved the argument of previous research that buying motives of the consumer change their buying behaviour. Consumer preferences have a significant impact on buying behaviour patterns of e-consumers. Hence H2 accepted. The consumer preferences towards products and services have changed due to lockdown and social distancing. Social isolation, safety issues and safety concerns are the major issues that force consumers to purchase products and services through e-commerce websites. These are the new factors that are influencing consumer buying decisions (Liu et al., 2020b). The findings revealed that customer preferences towards online shopping have changed drastically, with a substantial effect on consumer behaviour. Purchase intentions have a significant impact on buying behaviour patterns of e-consumers. Hence H3 is accepted. Consumers’ willingness to shop online is influenced by their purchasing intent. Intentions of the consumers’ willingness depend upon various factors like extraversion, cognitive effect, conscientiousness etc. The intention of the customers may be influenced by emotion rather than reasoning (Bosnjak et al., 2007). Consumers’ mindsets and buying intentions have altered as a result of the Covid-19 pandemic. Construal mindset and regulatory focus transformed the purchase intentions of the customers (Cai & Leung, 2020). According to the research team, consumer purchase intentions play a major role in determining consumer behaviour when it comes to online shopping. Buying habits have a significant impact on buying behaviour patterns of e-consumer. Hence H4 is accepted. Buying habits play a role in moderating variables between trust and customers repurchase intentions. A strong buying habit could reduce the trust towards repurchase intentions. In the vice versa condition, if the habit is weak, trust dominates the repurchase intentions (Chiu et al., 2012). Customers’ shopping preferences have changed as a result of the Covid-19 pandemic. People are more concerned with the availability of their required items. The findings of the study revealed that consumers’ purchasing preferences influence their purchasing patterns.

6.2 Practical Implications

The covid-19 pandemic has changed the buying behaviour of the customers. The outcome of the study helps the marketers to know the drastic changes that occurred in the behaviour of the consumers due to pandemics. This research assists e-commerce businesses in increasing their web traffic on the website. E-commerce companies could entice e-consumers to buy online during a pandemic by making it more convenient. Consumer loyalty is critical for e-commerce websites to develop their internet traffic. To draw and keep e-consumers on the digital web, marketers should concentrate on improving their purchasing motivations. Consumer choice in the post-lockdown environment should be a priority for e-commerce firms since it has a direct effect on e-consumer purchasing behaviour. To encourage e-consumers, businesses should pay close attention to digital payments. In a pandemic, digital payment improves significantly. Consumers are very concerned about the safety of internet transactions. The study shows that consumer behaviour is influenced by purchase intentions. Only when the perceived value of online shopping approaches the anticipated value will businesses be able to satisfy and retain customers. Consumers’ buying intentions must be positively influenced by e-commerce firms. Consumer purchasing preferences would facilitate e-commerce firms in analysing complex consumer behaviour and developing an effective marketing plan for e-consumers. Ease of purchasing has a major effect on changing typical consumer shopping behaviours and influencing e-consumer buying behaviour. The established structure improves marketers’ ability to comprehend the effect of identified factors on customer behaviour. The research team developed an innovative approach to understanding e-consumer behaviour. In a post-lockdown situation, this strategy assists advertisers in analysing the new buying patterns and motives of customers. It also assists in the
analysis of social trends in customer behaviour. The study’s findings assist marketers in devising an effective method for increasing sales volume and revenue.

7. CONCLUSION

The pandemic’s impact has been felt deeply in India. Due to the threat of a pandemic and the need to avoid social interaction more people are becoming e-consumers. The emergence of the covid-19 pandemic has aided the global pace of digitalization. Due to the digitalization market place has been converted into market space and pandemic has accelerated the growth of the digitalization process. Now, consumers are more influencing by online shopping. During a pandemic, customers can buy items online easily. As a result of the pandemic, consumers’ purchasing intentions have changed. Online shopping is changing the buying behaviour pattern of e-consumers. This study determined the changes in e-consumer behaviour. Analyzing the buying behaviour of e-consumers is essential to make an appropriate marketing strategy. Pertinent questionnaires were prepared to collect the primary data from the respondents. A random sampling technique was used to collect the data. The study identified the four important antecedents affecting e-consumers behaviour. The antecedents are buying motives, consumer preferences, purchase intentions, and buying habits. According to the study, consumer desires, purchasing plans, and buying motivations all have a positive effect on e-consumers shopping conduct. A structural equation model is used to represent the relationships between identified antecedents. This model would benefit e-commerce companies to develop a marketing strategy and online customer engagement strategies more effectively. Segmenting the online shopping platform like social media marketing, search engine optimization, and identifying possible variables of each digital platform will be the future scope of research.
REFERENCES


## ANNEXURE

### A1: Operationalisation of construct

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Item No.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Motives (BM)</td>
<td>I usually get excited to do the online shopping</td>
<td>BM1</td>
<td>Jung (2017)</td>
</tr>
<tr>
<td></td>
<td>Online shopping makes me feel good</td>
<td>BM2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I like online shopping because it is more enjoyable</td>
<td>BM3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Online shopping is more relaxing for me</td>
<td>BM4</td>
<td></td>
</tr>
<tr>
<td>Consumer Preferences (CP)</td>
<td>I prefer online shopping due to availability of competitive product price</td>
<td>CP1</td>
<td>Guo et al. (2020)</td>
</tr>
<tr>
<td></td>
<td>I purchase online products because it is good value for money.</td>
<td>CP2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I prefer e-commerce companies as they provide excellent services</td>
<td>CP3</td>
<td></td>
</tr>
<tr>
<td>Purchase Intentions (PI)</td>
<td>I definitely purchase products through e-commerce companies</td>
<td>PI1</td>
<td>Spears and Singh (2004)</td>
</tr>
<tr>
<td></td>
<td>I have very high purchase interest in online shopping</td>
<td>PI2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I intend to buy products through digital platform</td>
<td>PI3</td>
<td></td>
</tr>
<tr>
<td>Buying Habits (BH)</td>
<td>I like online shopping because it is convenient</td>
<td>BH1</td>
<td>Behrens et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>I am very much concerned about quality and safety issue while purchasing products</td>
<td>BH2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I do the online shopping for the entire month</td>
<td>BH3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I dislike to buy the products in supermarket</td>
<td>BH4</td>
<td></td>
</tr>
<tr>
<td>E- Consumers Buying Behaviour Pattern (EC)</td>
<td>Young people are more inclined towards online shopping</td>
<td>EC1</td>
<td>Kumar et al. (2019)</td>
</tr>
<tr>
<td></td>
<td>People with smart phones does more online shopping</td>
<td>EC2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>People looks value for money in online shopping</td>
<td>EC3</td>
<td></td>
</tr>
</tbody>
</table>
Surajit Bag holds a PhD in Logistics and Supply Chain Management from the University of Petroleum & Energy Studies, India. He has done Management Development Program (MDP) in Multivariate data analysis from Indian Institute of Technology, Kharagpur. He has also attended Management Development Program in Operations Research from Banaras Hindu University. He has trained in Case Study Teaching from Indian Institute of Management, Calcutta and trained in Total Quality Management from Indian Institute of Technology, Kanpur. He has got more eleven years of industry experience. His areas of research interest are Industrial supply chain automation, consumer behaviour, industrial marketing management and Business excellence. His articles are in the spotlight with 1200 citations, h-index 20 and i10-index 34 (Source: Google scholar). He is the proud recipient of “AIMS-IRMA Young Management Researcher Award 2016” for his significant contribution towards management research.