

Factors Affecting Customers' Online Shopping Behavior During Covid-19 Pandemic in Bangladesh

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Abstract

Online shopping is one of the fastest-growing marketplaces in Bangladesh. But during the Covid 19, when other sectors are stable, only online shopping has gained a greater positive response. Thus, for online shopping, customers' behavior is influenced by various factors including fare price, product quality, and durability, trust & security, etc. The study aims to identify the factors that influence the customers' online shopping behavior during the Covid-19 in Bangladesh under the effect of control variables. The results indicate that of the eight dimensions, features and quality, fair price, performance and durability, trust and reliability, security, E-service quality, ease of use, and time are positively and significantly affect customers' online buying behavior during the Covid-19 in Bangladesh. Concerning the influence of these factors on customers, the study finds that features and quality, performance and durability, trust and reliability, e-service quality, ease of use and time factors influence the customers' online buying behavior during the pandemic in Bangladesh. Online shopping companies must focus on these factors to get a higher response from people in Bangladesh.

Keywords

Online shopping, Covid-19, customer behavior, Bangladesh.

1. INTRODUCTION

The Covid-19 epidemic has altered our social interactions. In many nations, individuals were advised to maintain social distance, which translates to physical separation while meeting in person or staying at home. Globally, people have facilitated the transition to social separation by increasing their online time, including in Bangladesh. Social media platforms have been increasingly utilized by people who use the platforms to keep in touch with family, friends and colleagues. Online shopping during this Covid 19 in Bangladesh would gain extra attention from clients. If elements that influence on-line buying behavior during this Covid-19 epidemic in Bangladesh are overlooked or misinterpreted, a critical comprehension of consumer behavior in the online environment cannot be realized. Several researchers proposed that online shopping is significantly different from the traditional shopping environment. It is essential to know the key factors influencing customers' shopping behavior during Covid-19 in Bangladesh. In this study, the researchers have tried to sort out different factors that

influence the customers' internet shopping behavior in his pandemic in Bangladesh. Bangladesh is a small country with its high population. But as a developing country, a remarkable change has been noticed in GDP with an average 6% growth for the last decade, and above 7% in the recent two years.

However, the coronavirus situation remains unresolved, and the shutdown lift remains a pipe dream. However, during Covid-19, the existing business environment will undergo dramatic changes, and each function of a corporation will undergo a paradigm shift. Online marketing is an integral part of every business's marketing strategy. Despite the country's exceptional popularity of digital agencies, a firm grasp on how this epidemic will impact the landscape of digital marketing is critical for planning and strategizing for the future of the online company. The internet, together with the rapid development of computer and internet infrastructure, has ushered in a new age that includes, along with many other things, the growth of business over the online or via e-commerce.

All we know that customers are the lifeblood of all organization. But now, many companies have failed to match with customers' need and perceived performance. Gilbert et al. (2011) found that people are more concerned about how third-party applications may misuse or improperly handles users' privacy-sensitive data and recommended centralized automation to secure applications. Thus, customer satisfaction should measure different factors like product features, price, safety and security, privacy, e-service quality post services, etc. Such evaluation of service quality is essential in today's competitive, cost-conscious service market (Anderson, 1996). To reinforce customer orientation, a growing number of companies choose these factors as their leading performance indicators. Measuring customer perceptions of service quality is necessary to evaluate the impact of quality improvement activities through different strategies. Thus, this study investigates the most critical factors that affect the customers' online shopping behavior in Bangladesh.

According to Pratminingsih et al. (2013), customers' primary concern while adopting e-service quality is security or privacy. It should state that the transaction procedure was protected or trusted against a variety of bad issues such as deceit, hacking, theft, and so on. With the help of digitalization, Bangladesh's e-commerce is developing step by step. In comparison to earlier years, internet connectivity and information systems have advanced significantly, which are critical components of an e-commerce business.

Now it is time to think about the crucial factors that can influence customers' online shopping behavior. Cronin and Taylor (1992) hypothesized that service quality characteristics may be accurately predicted using just perceptions. The researcher attempted to ascertain these aspects that the people of Bangladesh would undoubtedly anticipate. Suppose online companies can greater connect with the current demand of people. In that case, this industry will face a bright future in Bangladesh, increasing foreign direct investment and GDP growth. Otherwise, it will be questionable for the future existence of online shopping in Bangladesh. If it can identify the most significant factors that can affect online shopping behavior, the futures of this industry will be highly favorable. The world after Covid-19 will never be the same. Through new interfaces, the new normal may result in a transformed lifestyle, buying habits, and even business. Thus, the post-pandemic solutions to these specific difficulties encountered during the pandemic may establish the groundwork for several business concepts and help define the future of our e-commerce sector in the coming years.

Studies made by Dimyati and Subagio (2016), Dhanapal et al. (2015), and Akhter et al. (2011) have identified fair prices, responsiveness, safety & security, ease of usage, trust etc., as key variables. But no study yet on these factors based on their significance level during this Covid -19 in Bangladesh. Thus, for the present study, the research question is Factors affecting customers' online shopping behavior during the Covid-19 in Bangladesh. Thus, the objectives of the study are to explore the factors affecting customers' online shopping behavior during the Covid-19 pandemic in Bangladesh and to explore the impact of the Covid-19 pandemic on customers' online shopping behavior in Bangladesh, as well as to examine further the level of significance of these factors during this Covid -19 in Bangladesh.

The ongoing Covid-19 has locked the entire world, but that does not mean the demands have gone from the market. Today, people prefer online shopping for many reasons. The researcher has tried to determine which factors are most important to customers' online shopping during this pandemic Covid-19 in Bangladesh. In this paper, researchers selected Dhaka city, Narayanganj and Munshiganj for conducting research. The researcher has chosen respondents only who have used the internet as online shopping for their needs. Based on different factors researcher tries to know the key factors that can influence the customers' online shopping behavior in Bangladesh.

This research paper has been prepared to know the key factors that may affect online shopping behavior and its significance level during this covid-19 in Bangladesh. Based on the previous studies, researchers have selected product quality, fair price, durability, safety & security, trust, e-service quality, ease of use and time as a dimension. With the help of theoretical knowledge, the researcher has tried to know the current perception of customers' towards online shopping behavior in Bangladesh. Researchers have been attempting to determine the most important factors among customers that can influence online shopping behavior during this Covid-19 in Bangladesh. This study will help determine the relationship among these factors and identify the most significant factors influencing customers' online shopping behavior in Bangladesh. This research paper will also help to build different strategies among business entities and their competitors. Business entities can find out the main important factors that are more important based on other respondents. By knowing these factors, entities can emphasize specific aspects and develop and adopt the policy for individual customers' needs. On the other hand, this study will help the policymakers draw a standard approach in this sector according to public demand and entities contributing to the country's growth. Finally, this study will enable customers to know the overall perception of other people on online shopping behavior in Bangladesh. It will also help to take the further decision regarding their response and others' feedback.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Consumers use the internet for many reasons and purposes in the business to consumers' e-commerce cycle activity. Compared to physical stores, online shopping has advantages as it is convenient and time-saving. But Covid-19 pandemic poses challenges and opportunities concerning consumer buying behavior in Bangladesh. Different factors have been recognised and identified by researchers worldwide, impacting consumers' behavior, especially those who shop online. In Bangladesh, consumers will pay more attention to online shopping during Covid-19, since it provides several advantages to clients, such as shopping from their home, decreased transportation costs, a greater selection of items, and more security, among others (Alba et al., 1997). Although Bangladesh has lagged on online shopping in this pandemic Covid -19, the economy has achieved a greater demand and responses from the customers. The size of the national market has been estimated to be more than Tk. 2000 core in a year. Davis (1993) said that customers' attitudes about internet purchasing are influenced by a variety of key variables. He hypothesized that although internet retailers indeed offer distinct benefits over traditional businesses, they also raise red flags for customers. Monsuwé et al. (2004) discovered that internet purchasing is more convenient and simpler than physical purchasing, requiring less time and effort. But financial and other risks also influence consumer buying behavior while shopping from the internet. Masoud (2013) delineated that the financial risks and factors significantly impact people's intention and attitudes who buy goods and services online.

According to Liu et al. (2017), the most powerful core component influencing customers' online purchasing behavior is the website's quality, which serves as a first impression for customers considering making an online purchase. Wang et al. (2005) did empirical study on online purchasing and discovered that customers' decision to buy online was highly impacted by the ease of the internet.

Product factors are directly related to the product with different characteristics. Product factors play a vital role in consumers' behavior when people need to purchase. Smith and Wright (2004) described that product quality as the extent to which a company provides products to meet customers' expectations. Customers engaging in online shopping have access to product information, alternative

products, and opinions about the product (Monswé et al., 2004). According to Phau and Poon (2000), in Singapore, different product features, quality, performance, and durability of services will significantly influence consumer choice between retail stores and online shopping. Again, Al-Azzam (2014) identifies that product quality and durability with various unique features influence consumer behavior to purchase online. Although many factors influence customer purchasing behavior, the most important factors are product quality, performance, and Durability (Al-Maghrabi et al., 2011). According to Rusmiati et al. (2020), product quality has a substantial influence on client buying choices and satisfaction. According to a research conducted in Indonesia by Andreti et al. (2013), the majority of customers visit convenience shops and make purchases based on the product and service quality given by these establishments. Thus, product quality and its features are one of the key indicators that affect consumer online shopping behavior. Based on the discussion, the following hypothesis (H₁) for the present study is

H1: Product quality has a significant positive impact on customers' online shopping behavior in Bangladesh

Durability is the capacity of a physical object to stay functional and act well throughout the course of its intended lifespan without needing significant maintenance or repair. According to Hossain et al. (2018), building more durable goods is a critical approach for the circular economy since it conserves resources and reduces the quantity of trash generated at the product's end of life. However, the design of durable items must be accompanied by an assessment and verification of the product's durability for both the consumer and the firm. Thus, product durability is one of the key indicators that affect consumer online shopping behavior. Based on the discussion, the following hypothesis (H₃) for the present study is

H2: Product durability has a significant positive impact on customers' online shopping behavior in Bangladesh

Consistency and dependability are the two main important factors that influence customer satisfaction. Reliability helps to build dependability and loyalty to any kind of Service Company over the world. It is considered the ability to deliver expected standard services and handle customer problems and feedback of their comments. Trust, as defined by Gommans et al. (2001), is another critical factor in customers' online purchasing behavior and e-loyalty. Trust is inextricably linked to security. Because consumers cannot see the goods in person when ordering, they cannot also gaze into the eyes of salespeople, while businesses must create confidence with their customers to prevent uncertainty. However, Ltfi and Gharbi (2012) contended that loyalty entails a deep bond between the brand and the client. And that deep association is shown by the emotional tie that binds customers' purchase and consuming habits. Thus, product trust and reliability is one of the key indicators that affect consumer online shopping behavior. Based on the discussion, the following hypothesis (H₄) for the present study is

H3: Product trust and reliability has a significant positive impact on customers' online shopping behavior in Bangladesh

Fair Price is the reasonable price for a good or service that is fair charge and agreed by both parties regarding agreed conditions, Promised quality, timeliness of performance. Liu et al. (2008) identified that people buy online and are satisfied when the company fairly charges it. A study was found in Taiwan by the Chu and Lu (2007) customers intention to repeatedly purchase when they found a fair price of the products. A fair price is the amount of money that is reasonable to pay in receiving products and services. According to Kotler (2012), price is the amount of money charged for a product or service or some of the values that customers exchange for the benefits received. But the marketing literature showed price fairness concerning customer satisfaction (Herrmann et al., 2007). According to Rehman et al. (2017), consumers use price as an indicator of the benefits of a product. Another study by Wang et al. (2005) defines the price as a sum of money (plus a few products) required to obtain a combination

of products and services. Thus product price is one of the key indicators that affect consumer online shopping behavior. Based on the discussion, the following hypothesis (H₂) for the present study is

H4: Product price has a significant positive impact on customers' online shopping behavior in Bangladesh

Customers must now be concerned about the security of transactions and customer data while purchasing items and services through online shopping. It demonstrates that the internet is not a secure place for online shopping, and that security should be used and taken seriously by online retailers to protect their consumers' data (Sinha and Kim, 2012). The success or failure of a project is frequently linked to security (Nuseir et al., 2010). One study dictated that customers are ensuring the security of the customers' payment details. This strategy is implemented to meet the observed behavior of online shoppers who make their purchase decisions based on security (Javadi et al., 2012). The most crucial elements for customers' online buying decisions, according to Hossain et al. (2018), are security, trust, payment method, acceptable price, privacy, and dependability. These characteristics have a big impact on customers' online purchasing decisions. Consumers may be put off by a perceived lack of security or a perceived lack of security while making an online purchase. Customers are worried about the security of their data and information in this situation, especially their credit and debit cards, which are at risk of theft and abuse (Comegys et al., 2009). Thus, security is one of the key indicators that affect consumer online shopping behavior. Based on the discussion, the following hypothesis (H₅) for the present study is

H5: security has a significant positive impact on customers' online shopping behavior in Bangladesh

The Psychological factors are the factors that affect an individual's psychological impression that drives his actions to seek satisfaction. Psychological factors, in general, operate as motivators for a person. In this research, researchers try to show the impact on customer satisfaction based on easiness, time and e-service quality.

One of the most significant factors to consider for online buyers when making purchases is ease of use. According to Davis (1989), perceived ease is the perspective of someone who is not distracted or bewildered by other aspects of the transaction. Kardaras and Papathanassiou (2001) identify it as one of the most important determinants of consumer happiness (Joseph and Stone, 2003). It is measured in terms of login speed, ease of access, app updates, and consumer usability. Prospective clients are not making much attempts in the transaction, and it is not too difficult to enable potential customers to make product purchase selections over the internet. As a result, convenience is one of the most important factors influencing customer online purchasing behavior. Based on the discussion, the following hypothesis (H₇) for the present study is

H6: Easiness has a significant positive impact on customers' online shopping behavior in Bangladesh

According to Thananuraksakul (2007), the first priority for consumers when adopting e-service quality is security or privacy, since it should demonstrate that the transaction process is safe or trustworthy against negative issues such as fraud or deceit. Thus e-service quality is one of the key indicators that affect consumer online shopping behavior. Based on the discussion, the following hypothesis (H₆) for the present study is

H7: E-service quality has a significant positive impact on customers' online shopping behavior in Bangladesh

When it comes to internet buying during Covid-19, the community has a lot of concerns. People want to save time when they go shopping. Most individuals with a sense of time will compare the amount of

time spent shopping, both physical and online, since going outside of this period is dangerous, and clients prefer online sites. According to Ganapathi (2015), measuring time indicators need a little time to analyze and pick things while performing online buying, but having a lot of time to purchase things via online shopping, they don't waste their time. As a result, convenience is one of the most important factors influencing customer online purchasing behavior. Based on the discussion, the following hypothesis (H₈) for the present study is

H8: Time has a significant positive impact on customers' online shopping behavior in Bangladesh

Figure: 1- consists of the independent variables as different factors that can influence customers' online purchasing behavior during Covid-19 in Bangladesh and dependent variables of customers' online purchasing behavior in Bangladesh. This model focuses on the factors that can influence customers' online purchasing behavior and their level of significance.

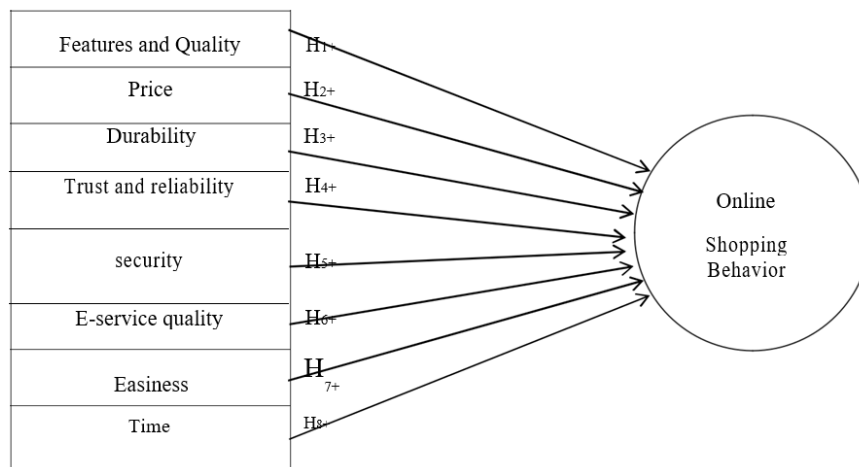


Figure 1: Factors affecting consumer online shopping behavior during Covid-19 in Bangladesh
 *Source: Authors' construction

3. RESEARCH METHODOLOGY

3.1 Research design

This research paper is based on the quantitative method using the survey questionnaire. The researchers have collected quantitative information that directly influences the customers' online shopping behavior during Covid-19 in Bangladesh. For the researchers' advantages, the convenience sampling method has been used for data collection. This paper has been prepared to identify the key factors that lead to affect customers' shopping behavior in Bangladesh. Two types of variables are considered for the study. First, Independent variables are taken as features and quality, fare price, performance and durability, trust and reliability, security, Service quality, ease of use and time. Second, customers' online shopping behavior is considered as the dependent variable.

Researchers have selected eight independent variables regarding factors affecting customers' online shopping behavior during Covid-19 in Bangladesh. They are as features and quality, fair price, performance and durability, trust and reliability, security, Service quality, ease of use and time. In general, we know that independent variables can vary from person to person. All variables are measured on a five-point Likert scale where "1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree". In this study, customers' online shopping behavior is considered the dependent variable, which can affect independent variables.

3.2 Sampling Framework and Questionnaire design

As for achieving important and major objectives of the research paper, the researcher has needed to formalize sampling techniques to collect required data from the valid number of the sample selected from the population. Therefore, the study adopted a convenience sampling technique. A sampling framework is given in which the researcher has selected a certain portion as a sample from the entire population for carrying out the questionnaire. First, at the target population stage, the researcher has tried to include customers who are constantly purchasing / shopping online during Covid-19 only at Dhaka divisions in Bangladesh. Second, at the sampling frame stage, the researcher has chosen both male and female customers based on different classes (gender, age, income, occupation.). Third, as for sampling techniques, researchers have used convenience sampling techniques to select respondents and finally conduct survey questionnaires to gather information. Though the sample size depends on the researchers' accepted significance level and the expected confidence interval, the researcher has planned to have 400 users in different areas based on convenience distribution.

For the present study, a structured questionnaire has been prepared to get the customers' perception of the factors influencing the customers' online shopping behavior in Bangladesh. Items of perceived variables are measured on a five-point Likert scale with 1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree. The questionnaire is divided into two sections. The second section covers the key factors affecting online shopping behavior. It includes features and quality, faire price, performance and durability, trust and reliability, security, service quality, ease of use, and time in Bangladesh.

The researchers have collected information in this report from various sources. These sources are divided into two parts. First, they are face-to-face communication with the customers; Online communication with the respondents, Through Survey questionnaire. Second, to make the survey easier for the respondents, the researcher has created a questionnaire in Google docs and shared the link to the respondents to answer the questions in their free time.

3.3 Econometric Model

This analysis aims to identify the factors influencing the customers' online shopping behavior during covid-19 in Bangladesh. A multiple regression model will be applied to study the relationship between the dependent and independent variables and specify the best predictors of the dependent variable (online shopping behavior).

$$Y = b_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + e$$

Here, X1= Features and quality; X2=Fair price; X3=Performance and Durability; X4= Trust and reliability; X5=Security; X6= E-service quality; X7= ease of use; X8=Time; Y = Customers' online shopping behavior. Following the completion of the primary factor analysis and the generation of a set of independent variables using a typical multiple regression model. This stage tries to quantify the link between the dependent variable, which represents consumers' online buying activity, and the many independent variables representing the factors influencing online shopping behavior in Bangladesh. Prior to doing factor analysis, it is critical to assess the scale's dependability. Cronbach's Alpha, a commonly used reliability metric, may be used to determine the scale's dependability. Its value ranges from 0 to 1, although it should be more than 0.6. Generally, a number of 0.6 or below implies inadequate outcomes. The chi-square test for independence, also referred to as Pearson's chi-square test, is used to evaluate hypotheses based on two categorical variables or assumptions. In this section, this study tests the previous hypotheses based on SPSS statistics. In the Chi-square test, the significance level "P" value is important for making a decision. If the significance level is within 5% (P <.05), it is statistically significant or does not reject the null hypothesis.

After completing the field survey and collecting information through questionnaires, statistical analyses of data have been performed using SPSS. For analysis of gathered data, SPSS (Statistical Package for Social Sciences) and Microsoft excel have used. Data findings have been presented through graphs, bar

charts, and frequency tables. Following the identification of scales, the model is evaluated using multiple linear regression to ascertain the connection between independent and dependent variables. Researchers used reliability and linear regression models to measure the key predictors of customer satisfaction, and mean differences were examined using ANOVAs for relevant subgroups. Finally, the chi-square test is used as a non-parametric test to describe the magnitude of discrepancy between observed data and expected data based on a specific hypothesis. In all tests, the significance level was set at 5% or 0.05.

4. ANALYSIS AND DISCUSSION

The data relating to respondent’s feedback is presented in the table- 1 as the demographic description of the respondents concerning their gender, age, profession and income. Of the total respondents, 34.33% are male, and 65.67% are female. The majority of the respondents are youth leading 67.33%, and adults cover 29.67%. Further, 46% are students and 20% are employed with students plus working 21.33% as a profession. Regarding monthly income, 65.67% are lower-earning, 22.33% are lower middle income, and 11.33% are upper middle income.

	Frequency	Percent (%)
Gender		
Male	103	34.33%
Female	197	65.67%
Total	300	100.0%
Age		
Children (00-14 years)	02	0.67%
Youth (15-24 years)	202	67.33%
Adults (25-64 years)	89	29.67%
Seniors (65 years and over)	07	2.33%
Total	300	100.0%
Profession		
Student	138	46.00%
Employed (Job holder)	60	20.00%
Student plus working	64	21.33%
Businessman	33	11.00%
Others	05	1.67%
Total	300	100.0%
Income		
Low-income (tk 00- tk 50,000)	197	65.67%
Lower –middle income (tk 50,001-tk 1,00000)	67	22.33%
Upper –middle income (tk 1,00001-tk 3,00000)	34	11.33%
High income (Above tk 3,00000)	02	00.67%
Total	300	100.0%

Table 1: Demographic description

*Source: Authors’ calculations

4.1 Reliability of the scale

To ensure the reliability of the measurement scales, Cronbach” s alpha was used in the calculation.

Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	No. of Items
.814	.819	9

Table 2: Reliability Statistics

A reliability score of more than 0.6 suggested that the variables were dependable. By contrast, scores more than 0.9 are considered as the most dependable, while values less than 0.6 were deemed inconsistent with the reliability scales, as George & Mallery’s faulty source stipulated. As a result, the Cronbach” s alpha value should be more than 0.60. In this case, all the factors had a satisfactory value of Cronbach’s alpha. The reliability of data confirmed by Cronbach’s alpha is .814, which is acceptable, indicating the high internal consistency of the responses. Hence the factors are reliable.

4.2. Multiple linear regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	F Durbin-Watson
1	.790	.592	.586	.515	.533	44.168	8	297	.000	2.049

Table 3: Regression Model Summary

*Source: Authors’ construction (SPSS output)

Here, R= .790 indicates a highly positive correlation between independent variables (features and quality, fair price, performance and durability, trust and reliability, security, E-service quality, ease of use, time) and the dependent variable (Customers’ online shopping behavior). Adjusted R square= .586 means 58.6% of the variance in the model can be predicted using the independent variables, or in simple words, 58.6% of Customers’ online shopping behavior is explained by the independent variables. Here level of significance is less than 0.05. So, our hypothesis is significant, and the model is a good fit.

4.3 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.673	8	10.334	41.838	.000
	Residual	71.645	289	.247		
	Total	154.32	297			

Table 4: ANOVA

*Source: Authors’ construction (SPSS output)

This table summarizes the results of the ANOVA analysis to determine if there is a statistically significant difference in group means. As seen, the significance level is 0.000 (P=0.000), which is less than 0.05. As a result, a statistically significant difference exists between the means of the independent variables. As a result, the model has statistical significance.

4.4 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	β	Std. Error	Beta	t		e	VIF
(Constant)	.939	.203		4.991	.000		
Features and Quality	.059	.038	.089	2.649	.133	.603	1.997
Fare Price	-.009	.049	-.009	-.258	.975	.710	1.740
Performance and Durability	.088	.047	.115	2.141	.047	.581	1.762
Trust and reliability	.019	.029	.135	1.681	.476	.816	1.226
Security	-.019	.045	-.029	-.455	.750	.499	2.003
E-service Quality	.280	.049	.423	7.099	.000	.579	1.728
Ease of Use	.269	.058	.372	5.267	.000	.608	1.646
Time	.121	.045	.263	3.892	.003	.507	1.973

Table 5: Coefficients

*Source: Authors’ construction (SPSS output)

4.5 Hypotheses Testing

Table 5 shows the regression coefficients for the factors affecting customers’ online shopping behavior. The results indicate that as consider for standardized coefficients of the eight factors where Features and Quality ($\beta=.089$), Performance and Durability ($\beta=.115$), Trust and reliability ($\beta=.135$), E-service Quality ($\beta=.423$), Ease of Use ($\beta=.372$), time ($\beta=.263$) have a greater influence on the customers’ online shopping behavior in this pandemic. Thus, customers’ online shopping behavior is influenced by the features and quality, performance and durability, trust and reliability, e-service quality, ease of use, and time during this Covid-19 at $P < .05$. On the other hand, fare price and security factor rejected as it has no significant relation with customers online shopping behavior during the Covid-19.

Variables	Chi-Square value	Significance (P=.05)	Hypotheses	Decision
Features and quality	81.938	($p=0.00 < 0.05$)	H ₁ accepted	has impact
Performance & durability	56.558	($p=0.00 < 0.05$)	H ₃ accepted	has impact
Trust & reliability	51.748	($p=0.00 < 0.05$)	H ₄ accepted	has impact
Fair Price	4.103	($p=0.00 > 0.05$)	H ₂ rejected	no impact
Security	6.103	($p=0.00 > 0.05$)	H ₅ rejected	no impact
Easiness	79.938	($p=0.00 < 0.05$)	H ₇ accepted	has impact
E-service quality	71.938	($p=0.00 < 0.05$)	H ₆ accepted	has impact
Time	91.738	($p=0.00 < 0.05$)	H ₈ accepted	has impact

Table 6: Findings of Chi-Square test

*Source: Authors’ construction

The chi-square test for independence also called Pearson's chi-square test, is used to test the hypotheses based on two categorical variables or assumptions. In this section, researchers test the previous hypotheses based on SPSS statistics. The results summarized in table 6 show the value of Pearson Chi-square and p value indicating the significance level. The results indicate that all the hypotheses are accepted except H2 and H5. That means except for price and security all other factors have significant impacts on customers' online shopping behavior during the Covid-19 in Bangladesh.

5. DISCUSSION OF THE FINDINGS

Table 2 shows that reliability statistics for Cronbach's Alpha is .814, representing the high reliability of the variables. Thus, in simply this study found that all the variables together are statistically significant. Table 3 represents the regression model summary where the value of $R=.790$ which indicates the highly positive correlation features and quality, fair price, performance and durability, trust and reliability, security, e-service quality, ease of use, time and customers' online shopping behavior in Bangladesh. In table 5, regression coefficients have found features and quality ($\beta=.089$), performance & durability ($\beta=.115$), trust & reliability ($\beta=.135$), e-service quality ($\beta=.423$), ease of use ($\beta=.372$), time ($\beta=.263$) have a greater influence on the customers' online shopping behavior during this Covid-19 in Bangladesh among eight independent variables. The results indicate that customers want the best features and updated services with minimum cost but high services with standard quality products. They are not so much concerned about security & high prices of the products during the Covid-19 as it will be risky to go outside for them in this situation. Shopping malls in Bangladesh are always crowded, and the traffic system is not so good. So, people want to save their time regarding their needs.

Table 6 summarizes the hypotheses test through Chi-square analysis. The results suggest that features and quality significantly impact customers' online buying behavior during the covid-19 in Bangladesh. It infers that today, both males and females depend on online shopping to find the most updated and best quality products. Their perceptions of online shopping are gained through best experiences and gain popularity in this sector. The second hypothesis has tested for fair prices where $p=.457 > 0.05$, which dictates that fair prices have no impact on customers' online buying behavior during this Covid-19 in Bangladesh. Because the whole world is in lockdown and production capability is declined due to this pandemic situation. Thus, customers' do not consider the higher prices as safe from going outside. In online shopping, customers compared to their older counterparts hold a less favorable opinion about the reliability and other perceived service quality factors.

The respondent's performance and durability show the same result $p=.00 < .05$, concluding that performance and durability impact customers' online shopping behavior during the Covid-19 in Bangladesh. It occurs because today, online platforms have provided the most updated and durable products to their customers and gained the trust of the young generation and attract them. The result for security $p=.687 > .05$ dictates that security has no impact on customers' online buying behavior during this Covid-19 in Bangladesh. Because people don't think that online shopping platforms maintain their security at the best level and stay worried about hacked and theft of personal information.

The result for e-service quality of the respondents and find the result $p=.01 < .05$ which concludes that e-service quality has a significant impact on customers' online shopping behavior during the Covid-19 in Bangladesh. It infers that online shopping platform offers the most attractive page looking and quick feedback and easy to purchase products from their sites. Finally, the result for time found that the delivery time of the products is satisfactory and time impacts customers' online shopping behavior during the Covid-19 in Bangladesh. It has been found that people buy products or services that match the occupation requirements they pursue. Knowledge of customers also influences deciding the standard of life.

So, from the discussion part of this study, most respondents are satisfied with online shopping during the Covid-19 in Bangladesh. Only price and security have no impact on customers' online shopping behavior during the Covid-19 in Bangladesh besides these people demanding this service and gained

popularity for its features, durable performances, gaining trust, e-service attractiveness, ease of order and satisfactory delivery time. Youth and student plus working customers are now highly reliable on online shopping during this Covid-19 in Bangladesh. If an online platform can hold this satisfaction level, it has a great future in Bangladesh.

6. CONCLUSION

The purpose of this research was to examine the variables influencing consumers' online buying behavior in Bangladesh during Covid-19 on a variety of aspects such as features quality, fair price, performance and durability, trust and reliability, security, and E-service quality, ease of use, time. In general, the study found that the results have supported the proposed model. The results indicate that of the eight dimensions, features and quality, fair price, performance and durability, trust and reliability, security, E-service quality, ease of use, and time are positively and significantly affects customers' online buying behavior during the Covid-19 in Bangladesh.

Additionally, this research investigates the variables influencing customers' online buying behavior during the Covid-19 and the effect of these variables on customers' online buying behavior during the pandemic in Bangladesh, hence achieving the first and second goals. Finally, concerning the influence of these factors on customers, it is found that proposed hypotheses H₁, H₃, H₄, H₆, H₇ and H₈ were supported. It indicates that features and quality, performance and durability, trust and reliability, e-service quality, ease of use and time factors influence the customers' online buying behavior during the pandemic in Bangladesh. Thus, it fulfills the third research objective.

There is an opportunity to further investigate the customers' online shopping behavior based on the satisfaction model using company brands among competitors as a control variable. In addition, other variables can be explored, such as unique services, innovativeness, marketing strategies, etc. Therefore, it is further suggested to test customer satisfaction as a mediating variable on online shopping behavior in Bangladesh. The e-commerce business in Bangladesh is growing at a rapid pace, despite certain hurdles, and has grown increasingly competitive in recent years.

As most online customers have difficulties in online payment systems like credit or debit cards, companies may accept cash on delivery as customers prefer it. Now online shopping is highly demanding by the people in Bangladesh. Thus, online shopping platforms have a bright future in this sector. But without satisfying customer, no companies can sustain in the long run. The studies established that features & quality, performance and durability, trust and reliability, security, e-service quality, ease of use & time are more important. These factors are the most important determinants affecting customers' online shopping behavior in Bangladesh. Thus, online shopping companies must focus on these factors to get a higher response from people in Bangladesh.

This study has some limitations. First, the period of this project is not enough to perform such an extensive study. It is difficult to produce such a comprehensive report in the few months after the completion of the project. The majority of respondents took an extended period of time to answer to survey questions. Second, since the researcher is unable to contact each individual consumer, the sample size is tiny.

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