Customers' choice of the bank during the Covid-19 pandemic: the moderating effect of different banks in Bangladesh

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Abstract

Purpose – The study aims to examine the factors affecting the customers' choice of Bangladeshi banks during the Covid-19 pandemic and the moderating effects of private and public banks on this association.

Design/methodology/approach – This study is based on explanatory research, where significant factors have been explored to evaluate the customers' perception of private and public banks in Bangladesh. Primary data are accumulated through an online survey from customers who have an account in a private or public bank in Bangladesh during the past four months, where 318 (non-probability convenience sampling) are usable, and secondary data are collected from various sources. Descriptive statistics, multiple and hierarchical multiple regressions have been conducted.

Findings – The results revealed that customers consider safe and secure websites, infrastructural facilities, technological know-how, service, price, time, payment, administrative and psychological factors in choosing Bangladeshi banks during Covid-19. Moreover, the results show that private and public banks have moderated these associations.

Originality/value – During Covid-19, few studies were conducted on Pakistani, Sri Lankan and Ethiopian banking customers, where different factors are significant; however, this study is unique because all factors are significant for Bangladeshi banking customers. The findings will originate the value with several theoretical implications and managerial guidelines.

Keywords Customers' behaviour, Bangladeshi bank, Covid-19

Paper type Research paper

Introduction

Coronavirus disease was detected first in China in December 2019 (Riou and Althaus, 2020) and then in Bangladesh in March 2020 (Alam *et al.*, 2020). Consequently, it has spread out throughout the world. Thus, World Health Organisation declared it a pandemic (Jakobsson *et al.*, 2020). Besides health (Rahman *et al.*, 2022), every sector in the world is now struggling due to this pandemic, for instance, business (Chowdhury *et al.*, 2020), education (Dhawan, 2020), tourism (Jafari *et al.*, 2021) and other sectors. Moreover, Bangladesh was struggling because of Covid-19, where economic, social, educational and other activities were badly interrupted (Kabir and Hussain, 2021). Although banks were operating only for a limited hour to provide financial services, they offered online and mobile banking services to promote cashless transactions and staying at home to reduce the spread of coronavirus (Khatun *et al.*, 2021). Thus, Bangladeshi customers selected banks that offered digital financial services rather than offline during this pandemic (Kumar, 2022), where they are concerned about the

security of digital financial services (Vatanasombut *et al.*, 2008), infrastructural facilities of online services (Neger and Uddin, 2020), e-banking knowledge of bank employees (Zyberi, 2021), customer support 24/7 (Azarpazhooh *et al.*, 2020), reasonable fees of online services (Fatema and Siddiqui, 2021), fast services (Yan *et al.*, 2021), cashless transactions (Alharthi *et al.*, 2021), e-complaint tracking and online problem-solving strategies (Agnihotri *et al.*, 2021) and trustworthiness (Islam *et al.*, 2021) due to the Covid-19.

Furthermore, the effects of Covid-19 have been known from the studies of several scholars who identified and explored its effects on rural people's intention to use branchless banking during this pandemic in Bangladesh (Ashraf, 2022), customer's internet banking experience, satisfaction, trust, loyalty, e-service quality in Egypt (Mosallamy and Metawie, 2022), small business owners (Fairlie, 2020), e-learning and e-wallet's payments during Covid-19 in India (Gajendran, 2020; Jain *et al.*, 2020), "e-Learning crack-up" perception and a mediating role of "fear of academic year loss" during Covid-19 (Hasan and Bao, 2020), green banking (Ahmad *et al.*, 2013), telemedicine, privacy and information security in the age of Covid-19 (Jalali *et al.*, 2021), advanced data integration in banking, financial and insurance software during Covid-19 (Maiti *et al.*, 2022), user's intention to continue the use of e-banking during Covid-19 (Rahi *et al.*, 2022), individuals' mental health in Bangladesh (Sakib *et al.*, 2021), customer satisfaction with the Islamic banking system in Pakistan (Alharthi *et al.*, 2021), information and communication technology (ICT) application in human resource management (HRM) of Bangladeshi banks (Rahman *et al.*, 2020), service quality and customer satisfaction of mobile banking services in Bangladesh (Bala *et al.*, 2021), behavioural changes of Sri Lankan (Panditaratne *et al.*, 2021), shopping behaviour in Bangladesh and India (Zannat *et al.*, 2021), customers' satisfaction of m-banking services in Ethiopia (Ketema, 2020), crisis perception and consumption pattern in Bangladesh, India and Pakistan (Hasan *et al.*, 2021), mobile payments quality in Poland and Turkey (Chmielarz *et al.*, 2021).

Moreover, no study was conducted on the factors affecting the customers' choice of Bangladeshi banks during Covid-19. Besides, no study was conducted on the moderating effects of different banks (private and public banks) on the customers' choice of Bangladeshi banks during Covid-19. Consequently, customers behave differently toward Bangladesh's private and public banks (Sadekin *et al.*, 2019). Thus, it is unknown or unexplored which factors affected customers' choice of Bangladeshi banks during Covid-19 and the moderating effects of different banks (private and public banks) on this association. Hence, the study's findings will be interesting for the policymakers of the private and public banks in Bangladesh by recommending new policies and for the researchers by adding new theories to the existing literature.

The research aim could be: "to examine the factors affecting the customers' choice of Bangladeshi banks during Covid-19 and the moderating effects of private and public banks on this association". Besides, the broad objective is to investigate the factors affecting the customers' choice of Bangladeshi banks during Covid-19. Though the specific objectives are:

(1) To construct the demographic profile of the banking customers of Bangladesh during Covid-19.

(2) To examine the factors affecting the customers' choice of Bangladeshi banks during Covid-19.

(3) To examine the moderating effect of different banks on the factors affecting the customers' choice of Bangladeshi banks during Covid-19.

Literature review
Theoretical foundation
Bangladesh is a developing country whose economy is based on service, contributing 54% of the gross domestic product (GDP), and the banking sector is the highest contributor.

Besides, this is the country's fastest-growing sector and is also the highest contributor to GDP, where 43 are private, nine are public and nine are foreign commercial banks, but this sector is badly interrupted during Covid-19. However, no study has been conducted yet in this area. Besides, customers behave differently towards Bangladesh's private, public and foreign banks (Sadekin *et al.*, 2019). Thus, a study gap exists in this area. Thus, it is interesting to explore which factors affect customers' choice of Bangladeshi banks and the moderating effects of different banks (private and public banks) on this association during Covid-19. Consequently, this study will also be interesting for the policymakers by recommending new policies and for the researchers by adding new theories to the existing literature.

Due to the Covid-19 pandemic, regular activities are interrupted throughout the world. Moreover, the Bangladeshi banking sectors were operating and encouraging digital financial services rather than offline (Ahmad *et al.*, 2013), but no earlier research has been conducted on this area. Thus, the relevant literature was reviewed to identify the factors, and then a conceptual framework and the subsequent hypotheses were designed.

Hypotheses development
Hence, customers prefer online banking over offline due to Covid-19 (Andersen *et al.*, 2020), where a trustworthy website is safe and secure for bank employees and customers (Vatanasombut *et al.*, 2008). So, the employees can deliver their online banking services effectively and efficiently by ensuring the customers' data security (Lee *et al.*, 2020). Besides, Arellana *et al.* (2020) mentioned that customers consider security a vital factor in choosing any service worldwide. Consequently, Gajendran (2020) argued that organisational privacy and security affect customers' choices during Covid-19. Subsequently, customers' emphasis on privacy and data security during this pandemic is also explored by Jalali *et al.* (2021). Thus, security is a vital issue of online banking, which may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H1. Security factors will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

Moreover, several scholars stated that the availability of bank branches is one of the main reasons for choosing a bank during Covid-19 (Buehler *et al.*, 2020), while others explored that ATM booths are the main reason for selecting banks (Almossawi, 2001). Besides, Hensher (2020) also argued that wide office space was another vital reason for selecting banks during Covid-19. Consequently, Neger and Uddin (2020) also argued that customers consider ICT infrastructure because business activities are conducted online during Covid-19, which are closely related to information and communication technology. Subsequently, Rahman *et al.* (2020) supported that Bangladeshi bank employees can provide better ICT services during Covid-19 because most banks are introducing ICT in HRM. Thus, infrastructure may positively affect the customers' choice of Bangladeshi banks during this pandemic. Accordingly, the hypothesis:

H2. Infrastructural factors will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

However, several researchers also explored that the bank employees' e-banking knowledge is another reason for choosing a bank during Covid-19 (Zyberi, 2021) because without the technological know-how, it is impossible to ensure quality service by them (Irgashevich, 2020), whilst Hogarth and Hilgert (2002) argued that customers prefer bank that arranged online training. Thus, they can learn to do online banking rather than offline (Chen *et al.*, 2021). Motaung and Dube (2020) explored e-tutorials as another reason for choosing a bank

during Covid-19. However, Rafdinal and Senalasari (2021) argued that mobile payment applications are another reason for choosing a bank during Covid-19, for instance, bKash, Rocket, EBL Sky banking, MTB Smart Banking, Islamic Wallet, mCash (Khatun *et al.*, 2021). Moreover, Yan *et al.* (2021) also added that banks should train their employees (Maiti *et al.*, 2022) and customers (Vohra, 2020) about the latest technological know-how, like FinTech, and smart apps because customers are mostly dependent on these during this pandemic. Thus, technological knowledge may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H3. Technological knowledge will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

However, several scholars explored that updated (Kwan *et al.*, 2021) and user-friendly (Ahmed and Sur, 2021) websites of banks influenced customers to choose a bank during Covid-19, while Azarpazhooh *et al.* (2020) argued that 24/7 customer support is another main reason of choosing bank during Covid-19. Although, Naeem and Ozuem (2021) explored that internet banking services are the main reason for choosing banks during Covid-19, for instance, electronic fund transfer (EFT) services (Neger and Uddin, 2020). Moreover, Fatema and Siddiqui (2021) also argued that organisational selection is influenced by e-services quality and user-friendliness during Covid-19. Consecutively customers' experiences are directly influenced by e-services quality during this pandemic (Mosallamy and Metawie, 2022). Thus, service may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H4. Service factors will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

Hence, Fatema and Siddiqui (2021) explored customers who considered reasonable fees in choosing Bangladeshi banks during Covid-19. Besides, Pu *et al.* (2021) also identified that small and medium enterprises (SMEs) also expected that the government would take the initiatives to ensure the bank would charge reasonable fees during Covid-19. By contrast, Barua and Barua (2021) argued that Bangladeshi customers considered less charge for online banking services during Covid-19. Besides, Rahman *et al.* (2020) also supported that customers prefer faster service at lower or less costly services in choosing Bangladeshi banks during Covid-19. Consequently, Pu *et al.* (2021) also argued that customers desire fair prices regarding bank interest rates, SMS charges and annual fees because some banks demand high service charges on loans that adversely affect customers during Covid-19 (Alharthi *et al.*, 2021). Thus, the price may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H5. Price factor will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

Yan *et al.* (2021) explored that customer considered fast service and safety in choosing Bangladeshi banks during Covid-19, while Bodrud-Doza *et al.* (2020) argued that customers expected quick administrative action during this outbreak in Bangladesh. Moreover, Rahman *et al.* (2020) also explored that customers preferred fast processing in banking services at a lower cost during Covid-19, while Bakht and Basher (2015) also argued that SMEs preferred one-stop services in choosing Bangladeshi banks, for instance, the foreign loan, which encourages foreign investment also required one-stop service (Chowdhury *et al.*, 2017). Consequently, Neger and Uddin (2020) also added that customers seek EFTs at every bank because they are not available at all public banks in Bangladesh. Subsequently, EFT is preferred because of the quick services between banks and saving customers time (Ashraf, 2022). Besides, all customers favour high-speed processing and instant transactions during

this pandemic (Pu *et al.*, 2021). Thus, the time-saving factor may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H6. Time-saving factor will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

Banna *et al.* (2021) explored that consumers expect a cashless society because of safety concerns during Covid-19. Besides, Yaakop *et al.* (2021) stated that a cashless country is desired during this outbreak, for instance, using e-wallets due to Covid-19. Salam *et al.* (2021) stated that customers who select banks in a low-income country like Bangladesh consider mobile banking for financial services. Consequently, Bala *et al.* (2021) also supported that mobile banking service is a crucial factor during Covid-19, while Alharthi *et al.* (2021) argued that the availability and number of ATMs to withdraw money 24/7 is another crucial factor in choosing banks during this outbreak. Accordingly, customers prefer a secure website to use online banking services, like online payment, mobile wallet transfer and credit card and other bills payment, EFT without any disruption during this pandemic (Jain *et al.*, 2020; Neger and Uddin, 2020). Thus, payment may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H7. Payment factor will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

Huterska *et al.* (2021) explored social distancing as the most vital issue in considering Bangladeshi banks during Covid-19. Besides, Shammi *et al.* (2020) supported social distancing as the prerequisite of regular economic activities during this outbreak; for instance, bank customers desire social distancing in public places (Agusi *et al.*, 2020) and shopping malls (Wang *et al.*, 2021), while Davras and Durgun (2021) argued that Bangladeshi customers preferred e-complaint tracking and online problem-solving strategies, for instance, innovative problem handling activities, like e-complaint management by the banking industry in the social media (Agnihotri *et al.*, 2021). Consequently, Neger and Uddin (2020) also explored that government support can also facilitate regular business activities during this pandemic, for instance, favourable rules and regulations regarding e-banking and e-service activities, social distancing based on those the organisations can conduct their business activities (Rahi *et al.*, 2022). Thus, the administrative factors may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H8. Administrative factors will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

Rabbi *et al.* (2021) explored reliability as an essential consideration of customers during Covid-19; for instance, mobile banking customers preferred reliability and responsiveness (Amin and Nahiduzzaman, 2021), while Islam *et al.* (2021) argued that trustworthiness is another vital issue because employees are working at home and customers are taking services through online. Moreover, Catania *et al.* (2021) also explored that customers' prior experience is another vital issue during this outbreak, for instance, prior experience of banking customers. Furthermore, Yasmin *et al.* (2021) claimed the substantial effect of psychological factors on banking customers during Covid-19, while the positive perceptions of e-learning strongly influence banking customers because most organisations are conducting their business activities online during this pandemic (Hasan and Bao, 2020). Thus, psychological factors may positively affect the customers' choice of Bangladeshi banks during Covid-19. Accordingly, the hypothesis:

H9. Psychological factors will positively affect the customers' choice of Bangladeshi banks during the Covid-19 pandemic.
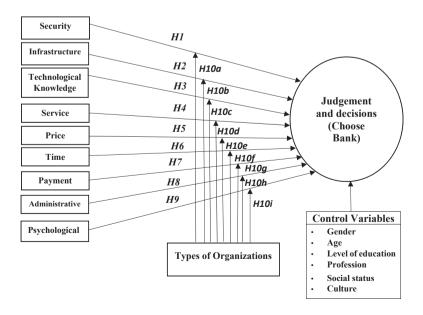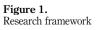
Chu *et al.* (2019) explored organisational differences, such as ownership and operation, rules and regulations, and service orientation differences between public and private organisations. Consequently, Kumar and Almoula (2020) also explored that private and public banks are different in terms of service variations, where they prefer public banks due to their reasonable fees over private; in contrast, Wójcik and Ioannou (2020) argued that customers prefer private rather than public during Covid-19 because of fast and reliable services. Besides, Narayanamurthy and Tortorella (2021) explored the moderating role of organisational differences, for instance, the moderating role of the private and public banks on customers' choice of Bangladeshi banks during Covid-19 (Baber, 2021). Consequently, Basak (2021) explored mainly two types of banks in Bangladesh, where customers prefer private because of service excellence during Covid-19. Subsequently, organisational differences will moderate the influences of various factors on customers' choices (Garaus and Treiblmaier, 2021). Therefore, private and public banks will moderate the effects of different factors on the customers' choice of Bangladeshi banks during Covid-19. Therefore, the hypotheses:

H10. Organisational types will moderate the effects of different factors on the customers' choice of Bangladeshi banks during the Covid-19 pandemic.

A research framework is designed based on the above discussion (Figure 1).

Methodology

This study is based on explanatory research where the researcher analysed the demographic profile of the banking customers of Bangladesh, formulated the hypotheses to investigate how the factors affecting the customers' choice of Bangladeshi banks during Covid-19 and how the moderating variable affected these relationships, Then, a complete understanding of the relationship of these factors has been explored to evaluate the customers' perception of private and public banks in Bangladesh. Thus, explanatory research is appropriate for this study (Dewasiri *et al.*, 2018).

Figure 1.
Research framework

An online survey was conducted to collect data from the respondents. The questionnaire was uploaded on Google Forms, and the link was shared on several social media sites, including Facebook, Instagram and Twitter. Respondents could visit the website by clicking the link, responding to the questions and submitting them online. The target demographic of this study is "banking customers of Bangladesh who have had a bank account during the last four months", identified at the beginning of the questionnaire (Do you have a bank account during the past four months?). The researchers have chosen a non-random convenience sampling method due to a lack of time and budget. Previous studies showed that the sample size for similar issues varies between 60 and 976 (Rajan, 2021; Afridi *et al.*, 2021; Ltifi and Hichri, 2021; Alhumaid *et al.*, 2021; Haq and Awan, 2020). Based on these, the researcher determined 320 as the required sample size. Consequently, Covid-19 restrictions and time and budget constraints are other reasons for the limited sample size.

The questionnaire was divided into three parts: the demographic profile, the factors affecting the customers' choice of Bangladeshi banks during Covid-19 and the recommendations. It consists of dichotomous questions, multiple-choice questions, a seven-point Likert scale where 1 indicates extremely disagree and 7 indicates extremely agree and an open-ended question for recommendations, which will take 10 min to respond. In total, 320 responses were received, of which 178 were private (55.6%) and 142 were public bank customers (44.4%). Thus, these are good enough to explore the moderating effects of different types of organisations (private and public banks) on the existing relationships.

This study explored nine independent constructs: security (Lee *et al.*, 2020), infrastructure (Hensher, 2020), technological knowledge (Zyberi, 2021), service (Ahmed and Sur, 2021), price (Fatema and Siddiqui, 2021), time (Yan *et al.*, 2021), payment (Banna *et al.*, 2021), administrative (Agusi *et al.*, 2020) and psychological (Amin and Nahiduzzaman, 2021), which different Bangladeshi customers consider in choosing banks during Covid-19. Besides, several studies also explored different types of organisations (private and public banks) that moderate the existing relationships during Covid-19 (Narayanamurthy and Tortorella, 2021). The researcher also identified six control variables: gender, age, education, profession, social status and culture, which improve the internal validity of the study by limiting the effect of confounding and other extraneous variables; consequently, it is helpful to establish a correlational or causal relationship between different variables of interest (Bloomfield and Fisher, 2019). Thus, there are nine independent constructs, one mediating construct and one dependent construct (bank choice).

A pilot survey was conducted among ten people of the target population to determine if there were any complexities in the content, wording, instructions and time required to answer the question. The questionnaire was finalised based on the pre-test. Utmost care was given in the data collection procedure to minimise biases and ensure validity and reliability. The questionnaire link was shared on social media websites for 15 days. The respondents filled in the information by themselves. The response rates were increased by sending a prior email notification. Table 1 illustrates the sampling design of the study.

Multiple regression analysis model will be:

$$CB = D + \beta_1 Security + \beta_2 Infrastructure + \beta_3 TKnowledge + \beta_4 Service + \beta_5 Price$$
$$+ \beta_6 Time + \beta_7 Payment + \beta_8 Administrative + \beta_9 Psychological + e_i$$

Hierarchical multiple regression model will be:

$$CB (organizational\ types) = D + \beta_1 Security + \beta_2 Infrastructure + \beta_3 TKnowledge$$
$$+ \beta_4 Service + \beta_5 Price + \beta_6 Time + \beta_7 Payment$$
$$+ \beta_8 Administrative + \beta_9 Psychological + e_i$$

Initially, data screening was conducted by handling outliers and examining the standard deviation of each question. Then, the demographic profile was developed. Consequently, the normality and multicollinearity of the data were tested, and the reliability of each construct was checked discretely. Subsequently, multiple regression and hierarchical multiple regression analyses were conducted to test hypotheses. Besides, the data were screened by emphasising the outliers and missing values where respondents' careless attitudes caused outliers to extreme values in the dataset (DeSimone *et al.*, 2015). Thus, the dataset was screened by removing outliers based on standard deviation and removing missing values.

Firstly, the standard deviation for each respondent across the dataset was measured to identify the outliers. The standard deviation less than 0.4 and above 2.60 was treated as an outlier. Through this, two extreme cases were identified ($\sigma = 2.82$), which were also deleted from the dataset. *Secondly*, this research was not concerned about missing value/data because respondents were bound to complete all questions within a specific range (1–7) or options (male or female) to go to the following webpage. Thus, there was no missing value. *Finally*, the dataset consists of 318 after screening.

Table 2 illustrates that most respondents are male (55.97%), between 39-45 years (29.87%), graduate (46.54%), other profession (35.85%), middle class (45.91%) and collectivistic (53.46%).

Cronbach's alpha instrument was used to test the reliability of each construct (Souza *et al.*, 2017). Table 3 illustrates the overall construct reliability, and if the deletion will cause substantial enhancement of any construct reliability, the item is deleted, which value is greater than overall reliability (Purwanto *et al.*, 2019).

Based on Table 3, two items: TKF3 and SF4, were excluded because they will significantly improve the reliability of two constructs (technological knowledge and service factor). Thus, this research ensures scale reliability.

Results and discussion

Initially, multiple regression analyses were conducted to examine the factors affecting the customers' choice of Bangladeshi banks during Covid-19 (*H1-H9*), then hierarchical multiple regression analyses were conducted to test the moderating effect of different banks on the factors affecting the customers' choice of Bangladeshi banks during Covid-19 (*H10a-H10i*).

Table 4 illustrates that a significant model was developed ($F15,302 = 23.634$, $p < 0.0005$). The results also indicated that all independent variables are significant ($\beta_1 SF = 0.112, \beta_4 SF = 0.093, \beta_5 PRF = 0.098, \beta_6 TSF = 0.200, \beta_8 AF = 0.123, \beta_9 PSF = 0.111$ at $p < 0.05$ and $\beta_2 IF = 0.084, \beta_3 TKF = 0.082, \beta_7 PF = 0.086$ at $p < 0.01$). These results indicate that these factors positively affect the customers' choice of Bangladeshi banks during Covid-19, thus providing support for *H1-H9*.

Table 5 indicates the significant increment of adjusted R^2 value and model for private banks ($F15,302 = 19.367, p < 0.0005$) and public banks ($F15,302 = 13.499, p < 0.0005$) illustrates the presence of moderating effects, but five factors ($\beta_4 SF = 0.081, \beta_5 PRF = 0.087, \beta_6 TSF = 0.156, \beta_9 PSF = 0.091$ at $p < 0.05$ and $\beta_7 PF = 0.067$ at $p < 0.01$) are significant for

Target population	Elements	Customers (bank account)
	Sampling unit	Bangladeshi private or public banks
	Extent	Dhaka city
	Time	Four months
Sampling method	Non-probability convenience sampling	
Sample size	320	
Source(s): Authors constructed		

Demographic	N	%
Gender		
Male	178	55.97
Female	140	44.03
Age range		
18–24	40	12.58
25–31	45	14.15
32–38	67	21.07
39–45	95	29.87
45-above	71	22.33
Level of education		
School	25	7.86
College	45	14.15
Graduate	148	46.54
Post-graduate	100	31.45
Profession		
Student	55	17.30
Businessmen	79	24.84
Jobholders	70	22.01
Others	114	35.85
Social status		
Upper class	52	16.35
Middle class	146	45.91
Lower class	120	37.74
Culture		
Individualistic	148	46.54
Collectivistic	170	53.46

Table 2.
Respondents
distribution

private bank customers, while all eight factors (β_1SF = 0.101, β_2IF = 0.098, β_3TKF = 0.087, β_4SF = 0.089, β_6TSF = 0.200, β_8AF = 0.103, β_9PSF = 0.099 at $p < 0.05$ and β_7PF = 0.078 at $p < 0.01$) are significant for public banks. Thus, H10 is supported.

Finally, all the hypotheses test results are supported. Thus, all the results obtained in this study are in line with the results obtained in the literature review because all the hypotheses developed based on the literature review also explored that the customers consider all the constructs in choosing different Bangladeshi banks during Covid-19.

Discussion
The multiple regression model results revealed that all nine (β_1SF = 0.112, β_4SF = 0.093, β_5PRF = 0.098, β_6TSF = 0.200, β_8AF = 0.123, β_9PSF = 0.111 at $p < 0.05$ and β_2IF = 0.084, β_3TKF = 0.082, β_7PF = 0.086 at $p < 0.01$) factors have positive associations (Table 4), which are in line with the findings of similar studies for mental health (Sakib *et al.*, 2021), ICT applications (Rahman *et al.*, 2020) and shopping behaviour (Zannat *et al.*, 2021). During Covid-19, few studies were conducted on Pakistani (Alharthi *et al.*, 2021), Sri Lankan (Panditaratne *et al.*, 2021) and Ethiopian (Ketema, 2020) banking customers, where different factors are significant; however, this study is unique because all factors are significant for Bangladeshi customers. Consequently, the outcomes strongly supported earlier studies because customers consider the above factors in choosing Bangladeshi banks during Covid-19. Thus, *H1-H9* are supported.

Construct	Item	Construct reliability (if item deleted)	Construct reliability
Security factor	SF1	0.821	0.891
	SF2	0.887	
	SF3	0.812	
Infrastructure factor	IF1	0.772	0.789
	IF2	0.763	
	IF3	0.767	
Technological knowledge factor	TKF1	0.801	0.812
	TKF2	0.803	
	TKF3	0.845	
	TKF4	0.789	
Service factor	SF1	0.812	0.822
	SF2	0.798	
	SF3	0.815	
	SF4	0.840	
Price factor	PRF1	0.830	0.834
	PRF2	0.810	
Time-saving factor	TSF1	0.870	0.881
	TSF2	0.823	
Payment factor	PF1	0.865	0.876
	PF2	0.848	
	PF3	0.845	
Administrative factor	AF1	0.900	0.901
	AF2	0.892	
	AF3	0.879	
Psychological factor	PSF1	0.880	0.896
	PSF2	0.848	
	PSF3	0.869	

Table 3.
Item reliability
(Cronbach's alpha)

	Model 1	Model 2
Control variables		
Gender	0.109	0.029
Age	−0.075	−0.037
Level of education	0.111	0.046
Profession	−0.081	−0.057
Social status	−0.067	0.087
Culture	0.101	0.034
Independent variables		
Security factor		0.112**
Infrastructure factor		0.084*
Technological knowledge factor		0.082*
Service factor		0.093**
Price factor		0.098**
Time-saving factor		0.200**
Payment factor		0.086*
Administrative factor		0.123**
Psychological factor		0.111**
Adjusted R^2	0.030	0.578
F-value	1.768	23.634**
Δ Adjusted R^2 (from Models 1 to 2)		0.548
Note(s): *$p < 0.05$; **$p < 0.01$		

Table 4.
Multiple regression
outcomes (H1-H9)

	Private banks ($n = 198$)		Public banks ($n = 120$)	
	Model 1	Model 2	Model 1	Model 2
Control variables				
Gender	0.113	0.027	0.092	0.027
Age	−0.066	−0.036	−0.065	−0.032
Level of education	0.101	0.046	0.101	0.038
Profession	−0.061	−0.047	−0.061	−0.046
Social status	−0.057	0.078	−0.065	0.056
Culture	0.081	0.044	0.096	0.024
Independent variables				
Security factor		0.103		0.101**
Infrastructure factor		0.078		0.098**
Technological knowledge factor		0.080		0.087**
Service factor		0.081**		0.089**
Price factor		0.087**		0.081
Time-saving factor		0.156**		0.200**
Payment factor		0.067*		0.078*
Administrative factor		0.960		0.103**
Psychological factor		0.091**		0.099**
Adjusted R^2	0.045	0.501	0.015	0.499
F-value	1.481	19.367**	0.799	13.499**
Δ Adjusted R^2 (from Models 1 to 2)		0.456		0.484
Note(s): *$p < 0.05$; **$p < 0.01$				

Table 5.
Results for testing
moderating effects
(organisation types)

The hierarchical multiple regression model results revealed that Bangladeshi private bank customers emphasised more on five factors (β_4SF = 0.081, β_5PRF = 0.087, β_6TSF = 0.156, β_9PSF = 0.091 at $p < 0.05$ and β_7PF = 0.067 at $p < 0.01$); in contrast, public bank customers emphasised significantly on eight factors (β_1SF = 0.101, β_2IF = 0.098, β_3TKF = 0.087, β_4SF = 0.089, β_6TSF = 0.200, β_8AF = 0.103, β_9PSF = 0.099 at $p < 0.05$ and β_7PF = 0.078 at $p < 0.01$). Although Bangladeshi private banks offer safe and secure websites, infrastructural facilities, technological know-how and administrative capability, however, customers still seek more service, reasonable price, timely service, easier payment and more reliability and trustworthiness from concerned authorities, which are in line with the findings of similar studies where banking customers seek 24/7 customer support (Azarpazhooh *et al.*, 2020), reasonable fees (Fatema and Siddiqui, 2021), fast and reliable service (Yan *et al.*, 2021; Rabbi *et al.*, 2021), and easier payment (Salam *et al.*, 2021). By contrast, public bank customers demand more due to their unsafe and insecure websites, poor infrastructure, lack of technological know-how, less and slow service, complex payment system, poor administration and unreliable and bad experience, which are in line with the findings of similar studies where banking customers seek secure and reliable websites (Vatanasombut *et al.*, 2008), better infrastructure (Almossawi, 2001), technological expertise (Zyberi, 2021), speedy service (Yan *et al.*, 2021), easier payment system (Bala *et al.*, 2021), good administration (Davras and Durgun, 2021) and best experience (Catania *et al.*, 2021). Consequently, the outcomes strongly supported earlier studies because different types of organisations have a moderating effect on the association of the factors mentioned above. Thus, *H10a-H10i* are supported.

Conclusion, implications, limitations and future research directions
This study explores the influence of different factors on the customers' choice of Bangladeshi banks during Covid-19. Firstly, the study identified the study's rationale or research gap, problem/aim and objectives. Secondly, the key factors and the moderating variables were

identified and explained based on the related theories. Thirdly, a conceptual framework and the subsequent hypotheses were designed. Fourthly, the researcher designed and explained the methodology of the research strategy. Fifthly, the data (online survey) were analysed, and hypotheses were tested by constructing respondents' profiles and conducting multiple regression and hierarchical multiple regression techniques. Sixthly, the key data analysis findings were discussed, and the theoretical and managerial implications were also mentioned. Finally, each research objective is discussed and justified by addressing the outcomes.

The research makes essential theoretical contributions that have uncovered different theoretical insights linked to the new factors and a moderating variable of choosing Bangladeshi banks during Covid-19. This study explored several theoretical implications. *Firstly*, this research explored customers' factors in choosing Bangladeshi banks during Covid-19. Besides, a moderating variable is also added to the research framework to test the moderating effects on these associations during Covid-19. *Secondly*, the demographic profile of the banking customers of Bangladesh during Covid-19 has been devolved, where most respondents are male, between 39-45 years, middle class and collectivistic, which are in line with the findings of similar studies on mental health, ICT applications and shopping behaviour. *Thirdly*, although most of the prior studies revealed that all the factors had a positive association in the context of different industries, for instance, mental health, ICT applications and shopping behaviour (Sakib *et al.*, 2021; Rahman *et al.*, 2020; Zannat *et al.*, 2021), and banks in different countries, for instance, Pakistan, Sri Lanka and Ethiopia (Panditaratne *et al.*, 2021; Ketema, 2020). However, this research found that all factors were significant; thus, all these factors should be considered. *Fourthly*, the findings of this research also added that the moderating effect of organisational types on the associations between different types of organisations (private and public banks) have a moderating effect on the association of factors mentioned above and customers' choice of Bangladeshi bank during Covid-19. Overall, this research explored and examined the significance of different factors in choosing Bangladeshi banks during Covid-19. The moderating effect on the association of different factors in customers' choice of Bangladeshi banks during Covid-19 adds valuable insights to the existing knowledge.

The research makes essential managerial implications for the bank managers and policymakers of the banking industry of a developing country like Bangladesh during Covid-19. This study explored several managerial implications. *Firstly*, private bank managers should emphasise more reasonable prices of their services because of the economic recessions around the world during Covid-19. Thus, bank customers seek less charge or interest rates on different services (Table 5). *Secondly*, public bank managers should emphasise safe and secure websites because most of the time, their websites are not working, which is essential to meet the need of the customers during Covid-19. *Thirdly*, public bank managers should improve infrastructural facilities because most are poorly designed and unsuitable during Covid-19. *Fourthly*, public bank managers should introduce updated technological know-how because most of their employees have little knowledge about the latest technology, which is essential to meet the need of the customers during Covid-19. *Fifthly*, public bank managers should ensure good administration to ensure the Covid protocol, e-complaint management and service recovery during Covid-19 (Table 5). *Sixthly*, private and public bank managers should emphasise more on service levels because customers seek better service than the existing services offered by different banks during Covid-19. *Seventhly*, private and public bank managers should emphasise more on timely services because customers seek fast and instant service during Covid-19. *Eighthly*, private and public bank managers should improve easier payment systems, like e-wallets, online payment and mobile banking services during Covid-19. *Finally*, private and public bank managers should emphasise reliability and trustworthiness more during Covid-19 because employees work at home instead of the office, and customers take services online instead of online (Table 5).

However, this study contains several limitations. The main limitation is the Covid-19 restrictions because the study was conducted during the pandemic; thus, the online survey

was conducted, and only 320 responses were collected, reducing the research accuracy (Black *et al.*, 2019). Secondly, this study is conducted from the perspective of the customers of Bangladeshi banks, whilst the service providers' perceptions are not considered. Thus, the outcomes only reflected customers' insights which also confines scope of this study because service providers' perceptions can also add valuable insights.

Finally, online survey was conducted to collect data from bank customers due to the Covid-19 restrictions, time and budget constraints. Therefore, the findings of this study cannot be generalised to another country or industry due to the differences in customers, cultures, market complexity and competitiveness (Gunn *et al.*, 2019).

There are many areas for *further* study. Firstly, similar studies might be conducted from the perspective of both customers and banks, which will provide new perceptions. Secondly, similar studies might be conducted in different countries and industries. Finally, the moderating role of different complainers and prior experience might be examined as the influence of all factors on the customers' choice of Bangladeshi banks during Covid-19.

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