

Hoque, Md. Mukitul; Saumi, Bildana Haque

## Article

# Sharing economy services in Dhaka: A change towards women's perception of commuting

Rajagiri Management Journal (RAMJ)

## Provided in Cooperation with:

Rajagiri Business School and Rajagiri College of Social Sciences, Kochi

*Suggested Citation:* Hoque, Md. Mukitul; Saumi, Bildana Haque (2022) : Sharing economy services in Dhaka: A change towards women's perception of commuting, Rajagiri Management Journal (RAMJ), ISSN 2633-0091, Emerald, Leeds, Vol. 16, Iss. 2, pp. 144-163, <https://doi.org/10.1108/RAMJ-08-2020-0048>

This Version is available at:

<https://hdl.handle.net/10419/337007>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# Sharing economy services in Dhaka: a change towards women's perception of commuting

Md. Mukitul Hoque

*Department of Business Administration and External Affairs,  
Kyungsoong University, Busan, Republic of Korea, and*

Bildana Haque Saumi

*Department of BBA, Marketing, East West University, Dhaka, Bangladesh*

## Abstract

**Purpose** – In the modern era of transportation, using a ride-sharing service can add an extra value to the lifestyles of women. Also, women are thinking about the ride-sharing service, what are the factors they consider while purchasing the service and so on. The purpose of this study is to find out women's perception of ride-sharing services.

**Design/methodology/approach** – This paper is based on deductive research approach and descriptive research design. This paper has followed mixed research method by using qualitative and quantitative data. By dividing the larger population into subgroups, the researchers have conducted a survey on 240 respondents. To select these respondents, researchers have applied simple random technique. Based on a survey on consumers' buying behaviour of ride-sharing service, the researchers tested the impact of tangibility, reliability, safety, fare, efficiency and convenience as the factors for choosing ride-share rather than other public transportation.

**Findings** – The study results indicate that reliability which includes consistency, punctuality and schedule routes are the major concerning issue for women while choosing ride-share service. Women are also concerned about efficiency which includes global positioning system tracking, smartphone technology and so on. One of the important criteria for choosing a ride-sharing service is safety, which includes verified drivers, and drivers review scores. So, reliability, efficiency and safety are the most effective issues. On the other hand, tangibility, fare and convenience do not affect that much.

**Originality/value** – To the best of the authors' knowledge, this is the first research to scrutinize the sharing economy service in Dhaka city towards women's perception of commuting.

**Keywords** Sharing economy, GPS tracking, Ride-share, Smartphone technology

**Paper type** Research paper

## Introduction

While some change has been achieved, differences between the sexes exist across geographies, cultures and fields. People in most countries do not have the same exposure to essential needs and resources as people, including transportation systems and employment



opportunities. Across all these ways, ride-sharing can reduce barriers for women – by supplying drivers with flexible job conditions and affordable on-demand transportation for passengers. Over the years this hypothesis has been supported by mixed, largely anecdotal evidence, along with troubling issues that greatly affect women’s participation, such as cultural norms and security concerns.

For travellers to reach their destination there are several transportation modes available. Travellers consider several criteria like availability, cost, flexibility, security, pick-up and drop-off points while selecting a mode of transportation. Public transports like bus or metro may charge a little fee but lack convenience. On the other hand, private cars or taxi services can be fast and convenient, but cost a lot more than that of the bus or metro. Owing to weak traffic systems and lack of protection, commuting can be very difficult in a mega city like Dhaka. According to the Passenger Welfare Association of Bangladesh, from January 2015 to December 2018 the number of deaths caused by road accidents was 29,315 while the number of injured was 69,428 (Mamun, 2019). A study conducted by BRAC (Known formerly as the Bangladesh Rehabilitation Assistance Committee, then as the Bangladesh Rural Advancement Committee, and later as Building Resources Across Communities) on “Roads Free from Sexual Harassment and Crash for Women” stated that 94% of women face harassment, either verbal or physical while commuting in public transport (Khairuzzaman, 2019).

Women in Bangladesh are working in almost every sector of the country, and they make great contributions to the economy of the country. Working women and female students need to travel and commute for socio-economic reasons (Rahman *et al.*, 2019), and the worn-out state of public transportation has increased the use of ride-sharing services amongst women. Ride-sharing services like Uber, Pathao, OBhai and Shuttle are the relatively new concept in Bangladesh. It was Uber to introduce a ride-sharing service in Dhaka back in 2016. Even though these services are getting popular with time, there are still questions about their reliability when it comes to female commuters.

Is the question of course, how comfortable it is for women to ride-share, essentially hopping into vehicles with total strangers? The answer is a bit weak, as there is no way to fully monitor passengers before requesting a ride. There is a rating policy, of course, but it will not apply if a passenger has not yet been rated. There should be every right for women to drive, but let’s face it, there can be risks. Even though ride-sharing is much safer compared to public transports, the allegation of harassment is not uncommon. An Uber driver from Toronto was charged in a sexual assault investigation in April 2019 (The Canadian Press). In many cases, working women get transportation facilities from their working place and those who didn’t get go for having their own vehicle which is very costly including maintenance cost and interests. These issues indicate that women have largely been deprived of the advantages of transportation, but there are safety concerns. This study illustrates why and how this is rising amongst women by guaranteeing future safety.

### *Objectives of the study*

The objective of this study aims to scrutinize the perception of women’s ride-sharing services, especially in the Dhaka city. Women in ride-sharing service is a new form that significantly contributes to economic, ecological and social sustainability year-to-year and step-by-step. Therefore, after analysing the result of this research we are able to relate the impact of tangibility, reliability, safety, fare, efficiency and convenience as considerations for choosing ride-share rather than other public transportation and indicate that the reliability that includes quality, punctuality and scheduling routes are the major issues for women when choosing ride-share service. Furthermore, this study aims to give some recommendations based on the result regarding the perception of women towards ride-sharing services.

*Rationale of the study*

Nevertheless, studies on the perception of ride-sharing services by women are not so common. Few researches have precisely addressed the particular mode of transportation service. Therefore, a new form of service such as ride-sharing is crucial for the academics, readers and researchers working on this topic. Through this research, all targeted readers will get the integrated idea of the sharing economy as well as ride-sharing service. Even for Bangladeshi researchers working on ride-sharing services and the sharing economy, the research is also relevant.

Although ride-sharing services are available outside Dhaka city, the researchers have done this research based on the users of Dhaka. The research focuses on the perception of women about ride-sharing, but it cannot find the percentage of women getting the advantages of ride-sharing service. Future research can be done the gap of this study. Besides, the future research can be done about how ride-sharing can help the women outside Dhaka city, especially in the suburban areas.

The outline of this research is organized as follows. The first section is the introduction, the second section is the literature review, the third section is research design, the fourth section is the result analysis of this study and the fifth section is recommendations and conclusion and finally acknowledgments and references at the end of this research.

**Literature review and hypotheses development***Concept of sharing economy and ride-sharing service*

Owing to the fame of smartphone devices and the enhancement of communication and information technology, a new economic trend, the sharing economy, has materialized. The economy of sharing is a new economic form in which redundant goods or services are distributed, exchanged and reused by individuals or organizations using online systems (Parsons, 2014; Hamari *et al.*, 2016; Grybaitė and Stankevičienė, 2016). The sharing economy is defined as networks of persons who provide goods and services at competitive prices to each other than having them through corporations (Berg and Fitter, 2015). Moreover, the sharing economy is a concept that defines social and economic practices involving online transactions enabling people to rent other people's owned assets (Hamari *et al.*, 2016). Besides, the sharing economy is an internet-based business model that involves the sharing of peer to peer-based resources and skills amongst people (Elmeguid *et al.*, 2018). However, the ride-sharing is an updated service oriented to time and facility using simple and secured mobile phone technology in real-time trips accumulating wherever there are two groups of people as drivers and passengers (Feeney, 2015; Geisberger *et al.*, 2009). This service includes mainly the effective usage of automobiles in a specific form of transportation, typically bikes and cars. Therefore, companies that are involved in the transport network can create a meaningful transformation in this sector by using up-to-date technology to meet the current demands of new eras, such as diminished trip time, trip expenses and the traffic jam (Bicocchi and Mamei, 2014). In line with the research background discussed above, the first and second hypotheses are presented as follows:

- H1. There is no significant relationship between women's perception and tangibility of ride-sharing service.
- H2. There is no significant relationship between women's perception and efficiency of ride-sharing service.

---

### *Constructs that may form the perception of ride-sharing*

Ride-sharing is not different from conventional taxi services but what has enabled its rapid growth in technology particularly smartphones, social media and global positioning system (GPS) navigation devices. Factors like tangibles, reliability and price have a positive association with the satisfaction of the customer on Malaysian ride-sharing services (Balachandran and Hamzah, 2017). Tangible refers to appearance, or physical facilities like settings, display, decorations and equipment (Parasuraman *et al.*, 1985). Smartphone apps connect riders with nearby driver partners. The service matches people with riders headed in the same direction. With the help of GPS tracking and smartphone technology, ride-sharing services have been proved more efficient than regular taxi services. Faster service and technology advancement increases ride-sharing apps like Uber's accessibility and availability that keep it always on demand (Mohamad *et al.*, 2016). When a user opens up the ride-sharing app, then HTTP request is made along with the user's geo location and the server sends back only the info of cabs present within some radius of the user's location. Based on that data, the user can see some cabs moving around. User requests reservation to a particular destination to server. The server tries to contact all the available drivers. The server retrieves the driver's details like image, license plate number and pushes to the user's app, that is where you can see those details. Also, the server calculates the approximate time to reach based on the distance of the cab's location.

According to McKnight (1986), reliability refers to the skill to perform the service with consistency, promptness as researchers can see in the reliability of the transport services such as arrival at destination, the length of the journey, communications and scheduled routes are essential for the quality measurements of the ride-sharing service. Several factors that make women's mobility more limited compared with that of men such as lack of availability of vehicles, lack of safety and the inflexibility of public transportation routes are some of the reasons. The availability of ride-sharing vehicles is one of the prime reasons that attract women to purchase these services (Driving toward equality: women, ride-hailing, and the sharing economy, 2018). Thus, authors assume the following hypothesis:

- H3.* There is no significant relationship between women's perception and reliability of ride-sharing service.

A perfect combination of technology and transportation is the ease of always-available cars and drivers combined with easy-to-use applications, plus a range of driving and pricing choices. These services have the record of being punctual in delivering services on time. Ride-sharing services are safer for women in many ways compared to taxi services. Information of drivers, option like sharing your trip status with trusted contacts has made the service better for females. On the other hand, these services require information from riders, such as real-time location data and a form of payment; if that information is mishandled, they may pose risks to riders' information and privacy. Although ride-sharing apps have made commuting easy and the transaction cashless, there have been disturbing reports of assault, harassment and robbing passengers on these services (Chaudhry *et al.*, 2018). However, these services continue building technologies that make millions of rides secure every day. Thus, researchers hypothesise the following:

- H4.* There is no significant relationship between women's perception and safety of ride-sharing service.

Price is another important factor that affects customer choice. As the riders get to share the trip with other passengers, it costs them less than that of a taxi service. According to

Chaudhry *et al.* (2018), the ride-sharing payment system also makes it easier for passengers to pay with stored payment information via the app. Besides, to guarantee a certain service, travellers do not need to bring cash around. The availability of ride-sharing services has made it convenient for people. In Bangladesh, many women avoid the hassle of public transportation (Chaudhry *et al.*, 2018). The lack of public transportation in remote areas also influences people to purchase ride-sharing services. In a city like Dhaka, commuting through public transportation can be risky at night. Ride-sharing service providers like Uber and Pathao are available in late hours when most of the public transportation stops operating. Moreover, the easy payment system, track of a rider's journeys, transactions and driver also increase the convenience of ride-sharing services (Chaudhry *et al.*, 2018). Therefore, it follows the following hypotheses:

- H5. There is no significant relationship between women's perception and fare of ride-sharing service.
- H6. There is no significant relationship between women's perception and convenience of ride-sharing service.

#### *Perception and preference*

The word perception comes from the Latin word perception which represents the organising, identifying and interpreting the sensory of information to show and realize the presented information or the environment (Schacter, 2010). As per Mothersbaugh and Hawkins (2016), perception is a method that starts with consumer experience and awareness of marketing stimuli and finishes with consumer interpretation. According to Mothersbaugh and Hawkins (2016), the formation of perception goes through three stages: exposure, attention and interpretation. Consumers' perception can have a dramatic effect on their buying behaviour, and this is why successful businesses continue to foster consumer perception that results in profitable behaviour (Mack and Seidel, 2019). According to Kotler and Keller (2006), satisfaction is an individual perception based on their expectations of product or service performance, whether they are satisfied or dissatisfied. Customers compare the perceived quality of a service to their expectations. Hence, the authors of this study predict the following hypothesis:

- H7. There is no significant relationship between women's perception and preference of ride-sharing service.

According to Lichtenstein and Slovic (1971), preference means to a person's approach towards a set of goals, usually replicated in a clear decision-making process. Preferences are formed during a longer relationship between the consumer and the brand when the consumer perceives the brand as of high quality (Voicu, 2013). Preference certainly reflects individuals' likes and dislikes, and it can influence their buying behaviour. Preferences of consumers narrate the reason for their choice while selecting any product or service (Richard, 2017). A marketer needs to consider preference as a significant variable while constructing marketing strategies. Any organization's survival needs to know consumers' preferences because they help to carry out various organizational activities (Voicu, 2013). So, the researchers of this study believe that:

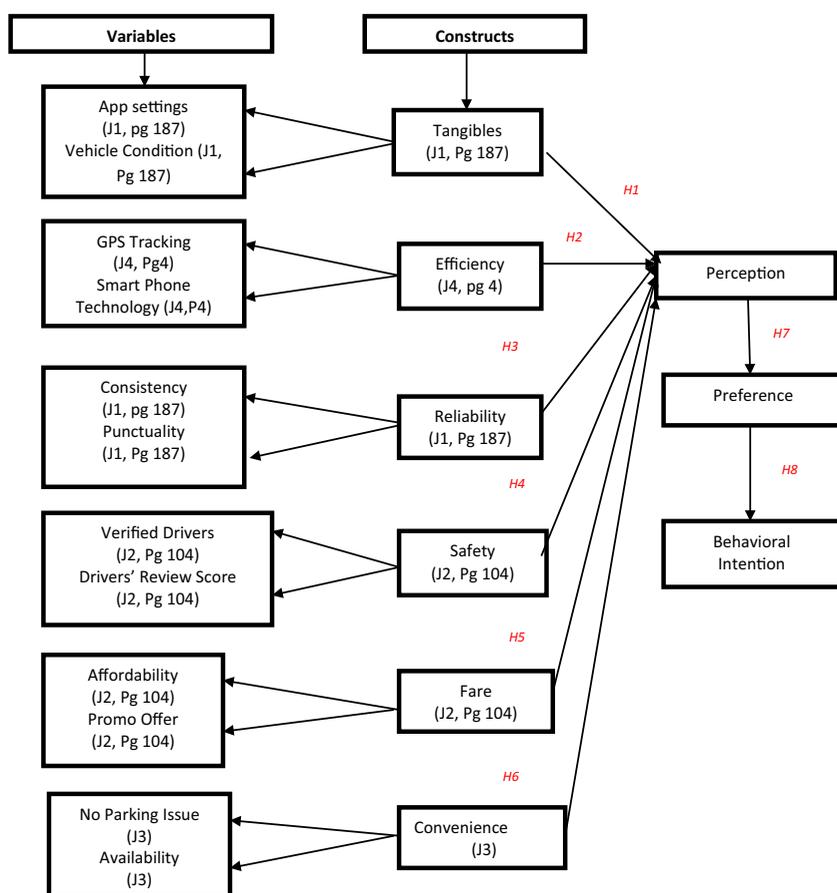
- H8. There is no significant relationship between preference and behavioural intention for purchasing of ride-sharing service.

Now, a conceptual framework was developed to test the research hypotheses using variables in this study. The conceptual framework of research is shown in [Figure 1](#).

### Research methodology

#### Research approach and design

This paper is based on deductive research approach. The researchers have developed hypotheses and collected data to evaluate the hypotheses. The paper has followed descriptive research design where researchers have collected data from defined sources. The researchers have used both the qualitative and quantitative data in this paper. The qualitative data has been used to construct the background and explain the findings of the research paper. On the other hand, the quantitative data has led to the statistical calculation and findings of the paper. For qualitative data, the researchers have used information from newspapers, news portals, existing research papers and articles from reliable sources. For quantitative data, a questionnaire-based survey was conducted on



Source: The Systematic Literature Review

Figure 1  
Modified graphical model

target population. The researchers have used mixed research method to determine the changing women's perception towards ride-sharing services in Dhaka city.

#### *Data collection and sample selection*

The qualitative data has assisted to develop the literature review of the paper and analysis of findings. To gather qualitative data, a survey was conducted on target population. The target population of this paper was female commuters in Dhaka and the ride-sharing service providers. To select the respondents for the survey, researchers have selected the commercial areas of Dhaka city such as Gulshan, Motijheel, Polton, Mirpur, Banani, Nilkhet and Uttara. The measurement of research used a personal survey method to find out the women's perception towards ride-sharing service. The sample size of the survey was 240. To select the respondents, researchers applied simple random sampling technique. The simple random sampling is very effective to ensure accurate representation of the larger population. A total of 240 questionnaires were subsequently used for data analysis. The questionnaire has been developed using a five-point Likert scale. Based on collecting all the data for independent variables and overall variables, researchers used Cronbach's alpha to evaluate data reliability. For calculation of the primary data, statistical package for the social sciences (SPSS) and Microsoft Excel software were used.

#### *Demographic analysis*

The table below illustrates the respondent's demographic profile. As the research paper is about women's perception of ride-sharing services, the majority of respondents (70%) were female. The majority of the respondents were private employees and had a monthly family income of more than taka 60,000. All these characteristics have an influence on people's behaviour and perception. Especially factors like gender, education and income have a great impact on the products and services people use (Table 1).

#### *Data analysis*

The study analysed data by using the SPSS program to test the women's perception towards ride-sharing services. Moreover, SPSS is a statistical program for estimating the unknown coefficient within a system of structural equations. Multiple regression analysis is used as a statistical test to determine the degree of relationship amongst the variables involved in this research.

#### *Data reliability*

The table below shows that Cronbach's alpha for all of the six variables stand above than 0.7, and it indicates acceptable data reliability (Table 2).

### **Result analysis**

#### *Correlation analysis*

Table 3 provides a correlation analysis of key variables scrutinized in this research. Relation intensity can be calculated by the Pearson correlation. If the  $r$  value is 0, then it does not indicate a relationship between two variables, and if the  $r$  value is 1, it means a perfect positive correlation, whereas if the  $r$  value is  $-1$ , it means a negative correlation. The  $r$  value can interpret the strength of the relationship according to the Cohen study (1988). The  $+$  or  $-$  sign shows a positive or negative relation. The correlation analysis of all major variables is illustrated in the following table:

Characteristics	Categories	Frequency	(%)	Valid percent
Gender	Male	72	30.0	30.0
	Female	168	70.0	30.0
Age	21–25	72	30.0	30.0
	26–30	60	25.0	25.0
	31–35	24	10.0	10.0
	36–40	48	20.0	20.0
Education	Above 40	36	15.0	15.0
	SSC	0	0	0
	HSC	0	0	0
	Undergraduate	60	25.0	25.0
	Graduate	72	30.0	30.0
Profession	Postgraduate	108	45.0	45.0
	Business person	24	10.0	10.0
	Government employee	48	20.0	20.0
Family income	Private employee	108	45.0	45.0
	Student	60	25.0	25.0
	20,001–30,000	12	5.0	5.0
	30,001–40,000	12	5.0	5.0
	40,001–50,000	36	15.0	15.0
	50,001–60,000	72	30.0	30.0
	More than 60,000	108	45.0	45.0

**Source:** Survey Questionnaire Feedback

**Table 1.**  
Demographic  
analysis of  
respondents

Variables	Cronbach's alpha
Tangibility	0.722
Efficiency	0.735
Reliability	0.763
Safety	0.781
Fare	0.708
Convenience	0.746

**Source:** The Authors Calculation

**Table 2.**  
Reliability statistics

The Pearson correlation in [Table 3](#) shows the positive and significant correlations between mean recommendation for use and many variables. Mean recommendation for use is positively and significantly related to perception mean safety mean reliability, mean tangible and negatively significant relationship with preferred transportation service, mean convenience and mean fare. Moreover, perception is positively and significantly related to mean tangible, mean reliability and mean safety while it is negatively and significantly related to mean fare and mean convenience. Preferred transportation service is positively and significantly correlated with mean safety and mean fare. In opposite, it is negatively and significantly related to mean tangible and mean convenience. Mean convenience is negatively correlated with mean tangible and mean fare. Besides, mean fare is positively and significantly correlated with mean efficiency and mean safety but negatively and significantly related to mean tangible. Mean safety is positively and significantly related to mean tangible, mean efficiency and mean reliability. Furthermore, mean reliability is

**Table 3.**  
Correlation of major  
variables

Variable	Mean tangible	Mean efficiency	Mean reliability	Mean safety	Mean fare	Mean convenience	Preferred transportation service	Perception	Mean recommendation for use
Mean tangible	1								0.334**
Mean efficiency	0.184**	1							0.276**
Mean reliability	0.234**	0.158*	1						0.639**
Mean safety	0.224**	0.143*	0.466**	1					0.297**
Mean fare	0.369**	0.369**	1		1				0.218**
Mean convenience	-0.273**	-0.335**	-0.133*			1			-0.130*
Preferred transportation service							1		-0.169**
Perception								1	0.870**
Mean recommendation for use									1

**Source:** The Authors' Calculation

positively and significant related to mean tangible and mean efficiency. There is also a positive and significant association with mean tangible.

*Regression analysis*

According to Table 4, the authors can say that the value of *R* is equal to 0.911. Researchers can say that the strength of the relationship between multiple variables is a strong correlation, and these are good predictors. The authors also found that the value of *R* square is 0.830 which implies that 83.0% change in the recommendation for use can be explained by the independent variables tangibility, efficiency, reliability, safety, fare and convenience. There may be other variables (17.0%) that influence the dependent variables.

The ANOVA significance 0.000 shows that independent variables are good predictors in Table 5 which is also known as *p*-value. Therefore, the authors can say that there is a positive significant impact of independent variables upon dependent variables.

From Table 6, the researchers found that preference (0.000), perception (0.000), tangibility (0.048), efficiency (0.002), reliability (0.002), safety (0.000), fare (0.000) and continence (0.000) are less than *p*-value 0.05 and indicated that those independent variables have significant relationship and have a positive impact on the dependent variables.

Moreover, those independent variables are the major predictors of dependent variable.

Recommendation to use = 0.535–0.17 preference + 0.68 perception – 0.77 tangibles + 0.94 efficiency + 0.127 reliability + 0.23 safety – 0.26 fare – 0.15 convenience

The results of the regression show that efficiency, reliability and safety towards ride-sharing are positive. But preference, tangibility, fare and convenience are negative.

**Preference**

From the equation, the authors can see that preference and recommendation to use are adversely related. It means consumers will be less likely to recommend ride-sharing services

Model	<i>R</i>	Model summary		
		<i>R</i> square	Adjusted <i>R</i> square	Std. error of the estimate
1	0.911a	0.830	0.824	0.57033

**Notes:** <sup>a</sup>Predictors: (Constant), Mean\_Convenience, Mean\_Reliability, Preferred\_transportation\_service, Mean\_Efficiency, Mean\_fare, Mean\_Tangibles, Perception, Mean\_Safety.

**Source:** The Authors' Calculation

**Table 4.**  
Value of regression

Model		ANOVA <sup>a</sup>				
		Sum of squares	df	Mean square	<i>F</i>	Sig.
1	Regression	366.460	8	45.808	140.825	0.000 <sup>b</sup>
	Residual	75.140	231	0.325		
	Total	441.600	239			

**Notes:** <sup>a</sup>Dependent variable: Recommendation\_for\_use; <sup>b</sup>Predictors: (Constant), Mean\_Convenience, Mean\_Reliability, Preferred\_transportation\_service, Mean\_Efficiency, Mean\_fare, Mean\_Tangibles, Perception, Mean\_Safety

**Source:** The Authors' Calculation

**Table 5.**  
Significance of ANOVA

Model	Coefficients <sup>a</sup>		Standardized coefficients		
	$\beta$	Std. error	$\beta$	<i>t</i>	Sig.
1 (Constant)	0.535	0.625		0.856	0.393
Preferred_transportation_service Perception	-0.273	0.056	-0.167	-4.867	0.000
Mean_Tangibles	1.062	0.060	0.677	17.818	0.000
Mean_Efficiency	-0.245	0.123	-0.076	-1.989	0.048
Mean_Reliability	0.208	0.066	0.094	3.166	0.002
Mean_Safety	0.247	0.079	0.127	3.117	0.002
Mean_fare	0.768	0.153	0.229	5.014	0.000
Mean_Convenience	-0.602	0.097	-0.256	-6.209	0.000
	-0.346	0.093	-0.145	-3.721	0.000

**Table 6.** Value of coefficients **Note:** <sup>a</sup>Dependent variable: Recommendation\_for\_use  
**Source:** The Authors' Calculation

even though they prefer ride-sharing services. One explanation may interpret this result. There are forums and social media communities for ride-sharing services where members can share their ride-sharing experience and issues, and these platforms have become an effective way to interact with riders, drivers and franchisees (Cruz, 2016). In Bangladesh, there are also similar platforms such as “Uber Users of Bangladesh” and “Pathao users of Bangladesh” where users can express their opinion and share their experiences.

There are Facebook groups such as “Uber Users of Bangladesh” and “Pathao users of Bangladesh” where riders and drivers share their experience and thoughts of the services. These Facebook groups contain complaints from both male and female users. Even though people prefer these services, they would not make strong recommendations to others because they are not satisfied enough with the services. Ride-sharing may be a safer option than public transport, but it is yet to meet the expectations of users. The service providers will get loyal customers when they will solve the issues.

### Perception

Consumers in general have a positive perception of ride-sharing services. The cars and bikes that are used for ride-sharing services relatively have better conditions than public transport. The uses of apps make the service easier and less expensive. It also assures safety as the customers get to know about the details of the drivers. So, it becomes quite obvious that people will recommend it to others when they have a good perception about the service.

### Tangibles

It shows that more tangibility will harm recommendation. Future research can be conducted to determine what factors can influence the adverse relation between tangibility and the recommendation to use ride-sharing services.

### Efficiency

These ride-sharing services can also promote greater use of the existing stock of vehicles. One research, conducted in five cities, found that Uber drivers had higher rates of capacity utilization than taxis, possibly because of the more effective ordering and pricing techniques of Uber, its larger size, as well as taxi regulation inefficiencies (Cramer and Krueger, 2016).

One of the main reasons consumers like ride-sharing services is their accountability and efficiency through technology (McGee, 2014). The use of technology has made the service more reliable and quicker. The system of rating the drivers make the ride-sharing service credible. So, it is clear that people would like to recommend it to others as the service is more efficient than any other public transportation service.

### Reliability

It makes sense that people will make more recommendations when they will find the service reliable. The app allows passengers to see the details of drivers before taking the ride. The GPS tracking system allows tracking the car (Sturino and Raatikainen, 2017). While placing the order, users see the arriving time and reaching time as well. It makes the service more reliable.

### Safety

GPS is often used to map and store paths, enabling both passengers and drivers to see the path taken once the trip has finished which suggests drivers will have a degree of transparency. And law enforcement will then show the path if a lawsuit is lodged. So far as personal details are concerned, though passengers stay in touch with drivers during or during a trip, individual phone numbers are obscured to preserve the privacy of all. If a passenger forgets his things behind and need to stay in contact with the driver, the function comes in handy because they cannot pick up the passenger's phone number to use it afterwards (Jet, 2018).

Personal security and safety influence women's choice of transportation. Ride-sharing apps include certain security features like the data trail, which makes information about the driver available to riders when they book a ride (Driving toward equality: women, ride-hailing, and the sharing economy, 2018). The drivers who drive for ride-sharing services go through background checking. So the drivers are experienced and have no criminal records. Riders can also rate drivers and give comments, which make the service more transparent and safer than public transportation.

Thus, people will make more recommendations as they feel the service is safer.

### Fare

Women spend less money in general on ride-sharing trip compared with men (Driving toward equality: women, ride-hailing, and the sharing economy, 2018). When service providers give promo codes and offers, they get more bookings from women. In Bangladesh, women have also started using services like UberMOTO and Pathao Bike as they are more cost-effective. In June 2018, the Bangladesh government proposed to impose 5% VAT on ride-sharing services (Bdnews24.com, 2018). After taxation, the fare is likely to increase as the overall operation cost of service providers will increase.

### Convenience

Ride-sharing services are gaining more popularity in developing countries like Bangladesh. However, with the rising popularity of ride-sharing services, more issues are likely to occur (White, 2017). More than 15% of people in the USA use a ride-sharing service, 17% of which uses a ride-sharing service every day or week. Young people aged 18–29 are the most likely group to be using a ride-sharing service.

When a service becomes convenient for users, it generally creates good impacts. But in the equation, the researchers can see the negative impact of convenience on the recommendation. One reason may be the risk of accidents and insurance policy. The policies

regarding accidents or car crashes still have a lot of grey ground. The result of this research requires further research to explain why the consumer will make fewer recommendations even if the service is convenient to them.

*Cross tabulation*

Amongst the 48 government employees, 24 have said that they will not recommend ride-sharing services. From the table, the authors can see that the strong agreement of recommendation comes from the business persons and private employees. From the respondents, all of the people who are businesspersons will recommend ride-sharing services to others. Only 15% of the total respondents have shown a neutral position (Table 7).

The frequency of using ride-sharing apps is least amongst those who prefer public transportation and have own vehicle. In total, 50% of the respondents who prefer public transportation take no service from ride-sharing apps in a week. In total, 10% of the total respondents are heavily dependent on the ride-sharing services as they use it 5–6 times a week (Table 8).

Only 16.7% of people whose income ranges in between 20,001 and 30,000 taka prefer ride-sharing. The highest percentage of preference for ride-sharing service comes from the people who have a family income of more than taka 60,000 and that is 66.7% (Table 9).

**Recommendation and conclusion**

The research paper aims to identify the perception of women towards the ride-sharing services in Dhaka city. The paper has determined what factors influence the perception and what aspects of ride-sharing influence women to purchase such services. Safety and convenience are two of the major factors that raised the popularity of ride-sharing services amongst women. Even though the services use GPS to track location, women still feel

			Profession				
			Business person	Government employee	Private employee	Student	Total
Recommendation for use	Definitely will not recommend	Count	0	24	0	0	24
		% within profession	0.0%	50.0%	0.0%	0.0%	10.0%
	Probably will not recommend	Count	0	0	24	12	36
		% within profession	0.0%	0.0%	22.2%	20.0%	15.0%
	Neutral	Count	0	0	24	12	36
		% within profession	0.0%	0.0%	22.2%	20.0%	15.0%
	Probably will recommend	Count	0	24	12	24	60
		% within profession	0.0%	50.0%	11.1%	40.0%	25.0%
	Definitely will recommend	Count	24	0	48	12	84
		% within profession	100.0%	0.0%	44.4%	20.0%	35.0%
Total		Count	24	48	108	60	240
		% within profession	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 7.** Recommendation for use (profession cross tabulation)

**Source:** The Authors' Calculation

**Table 8.** Frequency of ride sharing app (preferred transportation service cross tabulation)

		Preferred transportation service			Total	
		Public transportation	Ride sharing service	Own vehicles		
Frequency of ride sharing app	0	Count	48	0	24	72
		% within preferred transportation service	50.0%	0.0%	33.3%	30.0%
1–2 times		Count	36	0	36	72
		% within preferred transportation service	37.5%	0.0%	50.0%	30.0%
3–4 times		Count	12	48	12	72
		% within preferred transportation service	12.5%	66.7%	16.7%	30.0%
5–6 times		Count	0	24	0	24
		% within preferred transportation service	0.0%	33.3%	0.0%	10.0%
Total		Count	96	72	72	240
		% within preferred transportation service	100.0%	100.0%	100.0%	100.0%

Source: The Authors' Calculation

		Preferred transportation service			Total	
		Public transportation	Ride sharing service	Own vehicles		
20,001–30,000		Count	0	12	0	12
		% within preferred transportation service	0.0%	16.7%	0.0%	5.0%
30,001–40,000		Count	12	0	0	12
		% within preferred transportation service	12.5%	0.0%	0.0%	5.0%
40,001–50,000		Count	24	12	0	36
		% within preferred transportation service	25.0%	16.7%	0.0%	15.0%
50,001–60,000		Count	48	0	24	72
		% within preferred transportation service	50.0%	0.0%	33.3%	30.0%
More than 60,000		Count	12	48	48	108
		% within preferred transportation service	12.5%	66.7%	66.7%	45.0%
Total		Count	96	72	72	240
		% within preferred transportation service	100.0%	100.0%	100.0%	100.0%

**Table 9.** Income (preferred transportation service cross tabulation)

Source: The Authors' Calculation

insecure to book services at night. Companies should increase awareness of their existing security features, and they can partner with law enforcement agencies to improve emergency response using in-app information sharing ([Driving toward equality: women, ride-hailing, and the sharing economy, 2018](#)). The convenience and flexibility provided by

the ride-sharing service providers come at a higher expense (Islam *et al.*, 2019). Fare plays a great role in the consumption decision of users. The expenses of two-wheelers rides are cheaper than that of car rides. Service providers like Uber, Pathao or Shohoz make more sales on the two-wheeler services. If these companies do not carefully design the expense, it may lead to lower than expected growth of ride-sharing services in the future (Islam *et al.*, 2019).

Ride-sharing service is a relatively new concept in Bangladesh, yet a popular one. In this research, the researchers have found out that people generally have a good perception of ride-sharing services. And women, in particular, think that the service is safe for them. In Bangladesh, harassment is very common for women in public transportation. Ride-sharing services try to focus on customer service and that benefits both the driver and the users. Variables like efficiency, safety and reliability have a positive impact on customer's preferences and perception of economy-sharing.

Although many respondents conclude that ride-sharing is not so cheaper service, it is preferable to many working women as it is safer than public buses. Moreover, the cost of traveling by auto-rickshaws and taxis are no less costly. Considering the service and security, women are also now showing eagerness to use ride-sharing apps. If women use more of this service, it will help to boom the industry and also helps the traffic congestion of Dhaka.

This study can be useful to the service providers to understand customer expectations and their perception of the services. The findings may help the companies to improve their strategies to ensure business growth or to identify the potential target customers. The study is based on only female riders from Dhaka City. Companies have been expanding their business to other cities as well. This study may help researchers to conduct future researches on a similar topic in the future.

## References

- Balachandran, I. and Hamzah, I.B. (2017), "The influence of customer satisfaction on ride-sharing services in Malaysia", *International Journal of Accounting and Business Management*, Vol. 5 No. 2, pp. 184-196.
- Berg, C. and Fitter, F. (2015), *Inquiry: How Brands Can Take Advantage of the Sharing Economy*, SAP Center for Business Insight, Warrenton, IL, pp. 1-9.
- Biocchi, N. and Mamei, M. (2014), "Investigating ride sharing opportunities through mobility data analysis", *Pervasive and Mobile Computing*, Vol. 14, pp. 83-94.
- Chaudhry, B., Yasar, A.U.H., Amine, S. and Shakshuki, E. (2018), "Passenger safety in ridesharing services", *Procedia Computer Science*, Vol. 130, pp. 1044-1050.
- Cramer, J. and Krueger, A.B. (2016), "Disruptive change in the taxi business: the case of Uber", *American Economic Review*, Vol. 105 No. 5, pp. 177-182.
- Cruz, D. (2016), "Ride-sharing services: cultural and social impacts on society", available at: <https://medium.com/global-intersection/ride-sharing-services-cultural-and-social-impacts-to-society-1e3909932596> (accessed 07 July 2019).
- Driving toward equality: Women, ride-hailing, and the sharing economy (2018), "The report of IFC", 01 March, available at: [www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/gender+at+ifc/drivingtowardequality#:~:text=On%20March%201%2C%202018%2C%20IFC,than%2011%2C000%20drivers%20and%20riders](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/drivingtowardequality#:~:text=On%20March%201%2C%202018%2C%20IFC,than%2011%2C000%20drivers%20and%20riders) (accessed 30 September 2020).
- Elmeguid, S.M.A., Ragheb, M.A., Tantawi, P.I. and Elsamadicy, A.M. (2018), "Customer satisfaction in sharing economy the case of ridesharing service in Alexandria. Egypt", *The Business and Management Review*, Vol. 9, pp. 373-382.
- Feeney, M. (2015), "Is ridesharing safe?", *Policy Analysis*, Vol. 767, pp. 1-16.

- Geisberger *et al.* (2009), available at: <https://arxiv.org/abs/0907.5269>
- Grybaitė, V. and Stankevičienė, J. (2016), “Motives for participation in the sharing economy – evidence from Lithuania”, *Ekonomiai Zarzadzanie*, Vol. 8 No. 4, pp. 7-17.
- Hamari, J., Sjöklint, M. and Ukkonen, A. (2016), “The sharing economy: why people participate in collaborative consumption”, *Journal of the Association for Information Science and Technology*, Vol. 67 No. 9, pp. 2047-2059.
- Islam, S., Huda, E. and Nasrin, F. (2019), “Ride-sharing service in Bangladesh: contemporary states and prospects”, *International Journal of Business and Management*, Vol. 14 No. 9, pp. 65-75.
- Jet, J. (2018), “Do Uber’s new safety features make ride sharing better?”, *Forbes*, 15 June, available at: [www.forbes.com/sites/johnnyjet/2018/06/15/do-ubers-new-safety-features-make-ridesharing-safer/#11116b482f78](http://www.forbes.com/sites/johnnyjet/2018/06/15/do-ubers-new-safety-features-make-ridesharing-safer/#11116b482f78) (accessed 30 October 2019).
- Khairuzzaman, Z. (2019), “Women’s safety in public transport: a case for the would-be city father”, *The Daily Star*, 18 February, available at: [www.thedailystar.net/opinion/society/news/womens-safety-public-transport-case-the-would-be-city-father-1703476](http://www.thedailystar.net/opinion/society/news/womens-safety-public-transport-case-the-would-be-city-father-1703476) (accessed 30 October 2019).
- Kotler, P. and Keller, K. (2006), *Marketing Management*, 12th ed., Pearson Education Inc, NJ.
- Lichtenstein, S. and Slovic, P. (1971), “Reversals of preference between bids and choices in gambling decisions”, *Journal of Experimental Psychology*, Vol. 89 No. 1, pp. 46-55.
- McGee, J. (2014), “Cabs battle customer perception, too”, *The Tennessean*, 7 November 7, available at: [www.tennessean.com/story/money/2014/11/07/uber-lyft-taxis-nashville-customer-service/1866751/](http://www.tennessean.com/story/money/2014/11/07/uber-lyft-taxis-nashville-customer-service/1866751/) (accessed 16 August 2019).
- Mcknight, C.E., Pagano, A.N. and Paaswell, R.E. (1986), “Using quality to predict demand for special transportation”, *Behavioral Research for Transport Policy: International Conference on Travel Behaviour*, VNU Science Press, Noordwijk, the Netherlands, Utrecht.
- Mack, S. and Seidel, M. (2019), “Role of perception in consumer behavior”, *Houston Chronicle*, 05 March, available at: <https://smallbusiness.chron.com/role-perception-consumer-behavior-67136.html> (accessed 29 October 2019).
- Mamun, M.S. (2019), “Bangladesh struggles to reduce road accidents”, *Dhaka Tribune*, 22 October, available at: [www.dhakatribune.com/bangladesh/2019/10/22/bangladesh-struggles-to-reduce-road-accidents](http://www.dhakatribune.com/bangladesh/2019/10/22/bangladesh-struggles-to-reduce-road-accidents) (accessed 15 June 2019).
- Mohamad, W.N.A.B.W., Fuad, A.F.M., Shahib, N.S., Azmi, A., Kamal, S.B.M. and Abdullah, D. (2016), “A framework of customer’s intention to use uber service in tourism destination”, *International Academic Research Journal of Business and Technology*, Vol. 2 No. 2, pp. 102-106.
- Mothersbaugh, D.L. and Hawkins, D.I. (2016), *Consumer Behavior-Building Marketing Strategy*, 13th ed., McGraw-Hill Education, New York, NY.
- Parasuraman, A., Zeithaml, V. and Berry, L.L. (1985), “A conceptual model of service quality and its implications for future research”, *Journal of Marketing*, Vol. 49 No. 4, pp. 41-50.
- Parsons, A. (2014), “The sharing economy: a short introduction to its political evolution”, *Ecol. Econ.*, Vol. 12, pp. 149-159.
- Rahman, S., Ali, S.B. and Islam, M.T. (2019), “App-based motorcycle ridesharing services in Dhaka city: female users’ opinions and perception”, *Proceedings of the Eastern Asia Society for Transportation Studies*, Vol.12, pp. 1-15.
- Richard, R. (2017), “Factors affecting consumer preferences”, *bizfluent*, 26 September, available at: <https://bizfluent.com/info-8116011-factors-affecting-consumer-preferences.html> (accessed 30 October 2019).
- Schacter, D. (2010), *Psychology*, 2nd ed., Worth Publishers, New York, NY.
- Sturino, F. and Raatikainen, M. (2017), “Opinion: ride-sharing can contribute to public safety”, *The Province*, 14 August, available at: <https://theprovince.com/opinion/op-ed/opinion-ridesharing-can-contribute-to-public-safety> (accessed 16 August 2019).

- Voicu, M.C. (2013), "Characteristics of the consumer preferences research process", *Global Economic Observer*, Vol. 1 No. 1, pp. 126-134.
- White, J. (2017), "Ride sharing is convenient but what happens if there's an accident?", available at: [www.inc.com/john-white/ride-sharing-is-convenient-but-what-happens-if-there-is-an-accident.html](http://www.inc.com/john-white/ride-sharing-is-convenient-but-what-happens-if-there-is-an-accident.html) (accessed 16 August 2019).

**Further reading**

- Bangladesh taxes Uber, Pathao services (2018), "bdnews24", 7 June, available at: <https://bdnews24.com/bangladesh/2018/06/07/bangladesh-taxes-uber-pathao-services> (accessed 03 July 2019).
- Bauer, D. (2017), "Opportunities and barriers of ride-sharing in work commuting – a case study in Sweden", Master Thesis, Sustainable Development at Uppsala University, No. 2017/6, 50 PP.
- Malik, S. (2016), "84% of women commuters experience sexual harassment in Bangladesh", Dhaka Tribune, 19 December, available at: [www.dhakatribune.com/bangladesh/2016/12/19/84-women-commuters-experience-sexual-harassment-bangladesh/](http://www.dhakatribune.com/bangladesh/2016/12/19/84-women-commuters-experience-sexual-harassment-bangladesh/) (accessed 20 September 2019).
- Ride apps to get govt. nod (2018), "The daily star", 15 January, available at: [www.thedailystar.net/frontpage/positive-nod-app-rides-1519921](http://www.thedailystar.net/frontpage/positive-nod-app-rides-1519921) (accessed 03 July 2019).
- Toronto Uber driver charged in two sexual assault investigations (2019), "The Canadian press", 20 April, available at: [www.ctvnews.ca/canada/toronto-uber-driver-charged-in-two-sexual-assault-investigations-1.4387750](http://www.ctvnews.ca/canada/toronto-uber-driver-charged-in-two-sexual-assault-investigations-1.4387750) (accessed 29 October 2019).
- Why women safety in ride sharing matters (2017), Available at: <https://motiondigest.com/2017/03/27/whywomensafetyinridesharingmatters/> (accessed 19 August 2019).
- Williams, R. (2018), "Ridesharing and women: benefits, barriers, and opportunities for progress", available at: <https://medium.com/uber-under-the-hood/ridesharing-and-women-benefits-barriers-and-opportunities-for-progress-e05655269412> (accessed 27 October 2019).

**Corresponding author**

Md. Mukitil Hoque can be contacted at: [orkohoque@gmail.com](mailto:orkohoque@gmail.com)

---

## Appendix

This survey questionnaire is part of a research project to analyze the women's perception towards ride sharing in Dhaka city. The following questions have been designed to find out **Sharing Economy Services in Dhaka: A Change towards Women's Perception of Commuting**. This survey is being conducted only for our research purpose. The authors assume you that provided information will be kept confidential. Your cooperation will be highly appreciated.

### Socio- Demographic Information

#### 1. Gender

- a) Male          b) Female

#### 2. Age

- a) 21-25      b) 26-30      c) 31-35      d) 35-40      e) Above 40

#### 3. Education

- a) SSC                  b) HSC                  c) Undergraduate                  d) Graduate                  e) Post  
Graduate          f) Others (Please Specify) \_\_\_\_\_

#### 4. Profession

- a) Business Person          b) Govt. Employee                  c) Private Employee                  d)  
Student                  e) Others (Please specify) \_\_\_\_\_

#### 5. What is your family monthly income (in BDT)?

- a) 20,001-30,000      b) 30,001-40,000      c) 40,001- 50,000      d) 50,001 -60,000      e) More  
than 60,000

### Psychographic Information

#### 1. What is your hobby?

- a) Watching TV          b) Chatting with friends                  c) Reading books                  d) Using  
Internet

*(continued)*

2. Rank your favorite TV channel according to preference (5= most preferred, 1= least preferred)

- a) National Geography \_\_\_\_\_ b) Star Movies \_\_\_\_\_ c) Channel i \_\_\_\_\_  
d) ATN News \_\_\_\_\_ e) Ten Sports \_\_\_\_\_

3. How frequently do you share a ride using the ride sharing apps (in a week)?

- a) 0 b) 1-2 times c) 3-4 times d) 5-6 times e) Others (please specify)

\_\_\_\_\_

4. What service do you usually prefer for your day to day life?

- a) Public Transportation b) Ride-sharing service c) Own Vehicle d) Rent-a-car service

5) What is your perception towards ridesharing service in Dhaka city?

- a) Worse b) Bad c) Good d) Excellent

6. Will you recommend other women to use ride sharing apps?

- a) Definitely will not recommend  
b) Probably will not recommend  
c) Neutral  
d) Probably will recommend  
e) Definitely will not recommend

**Perception towards Ridesharing**

[Please specify your level of agreement with the following statements in a 5 points Likert Scale and put a tick (√) mark on your respective answer. (5= strongly agree, 1= strongly disagree)]

SN	Statements	Ref	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
1	Convenient (easy to use) App settings means better service.	T1					

(continued)

2	<b>Vehicles' condition</b> has huge impact on satisfaction and experience of service	T2					
3	Real life (instant) <b>GPS tracking</b> ensures efficient ride sharing service.	E1					
4	Using <b>Smart phone technology</b> to share GPS location and riding information with friends and family will ensure safety and make ride sharing more relaxing.	E2					
5	By using customer feedback, service providers provide consistent service level from the beginning of their service.	R1					
6	Drivers come to pick-up points on time.	R2					
7	GPS system shows passengers the scheduled routes that will take them to their destination.	R3					
8	Checking criminal records before recruiting drivers makes the service safer.	S1					
9	I rate drivers to ensure the continued safety of my future rides.	S2					
10	The price I pay for ride-sharing service is reasonable.	F1					
11	There are plenty of <b>promo offers</b> to attract people to purchase the service.	F2					
12	Ride-sharing services help to free-up <b>parking spaces</b> .	C1					
13	The service is always <b>available</b> whenever I want to find a ride.	C2					

Thank You for Your Cooperation!