THE IMPACT OF LOGISTICS SERVICES ON CUSTOMER SATISFACTION: AN EMPIRICAL STUDY IN THE COVID 19 PANDEMIC

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ABSTRACT

During the Covid-19 pandemic, Vietnam implemented social distancing measures to prevent the spread of the disease. Ordering, delivery, and transportation services through applications of logistics technology develop rapidly. This study aims to determine how factors of delivery service affect customer satisfaction in the context of the Covid-19 pandemic. Qualitative and quantitative research was carried out to determine the quality factors of ordering and delivery services via Grab's application in order to propose a research model. Surveyed data from 259 customers who are using Grab's app services in Ho Chi Minh City during the lockdown period. Research results have shown that all five factors of delivery service quality via the Grab application have a significant impact on customer satisfaction. In particular, assurance and price policy are the most influential factors in customer satisfaction, followed by service competence and responsiveness. The research implications have been proposed to improve and enhance Grab customer satisfaction.

Keywords: Service quality, Delivery service, Customer satisfaction, Grab's services, COVID-19.

INTRODUCTION

It appeared in Vietnam in 2014 with the original name GrabTaxi, but it did not attract attention. To cater to Vietnamese demand, GrabBike, a service of GrabTaxi, is a new, safe motorbike taxi service with the motto "Cheaper, more convenient," launched in November 2014 in Ho Chi Minh City and Hanoi, in May 2015. According to ABI Research's report on Vietnam's ride-hailing market in the first six months of 2020, Grab is still the market leader in ride-hailing and completed 62.5 million rides, accounting for 74.6% of the market share, a small donation compared to 73% in the first half of 2019. This market position is firm in a big city such as Ho Chi Minh City—the economic center in Vietnam with a population of over 8.6 million people in 2020—where Grab holds 82% of the market and becomes the most attractive market not only for the domestic but also the foreign company.

However, the coronavirus, which appeared in December 2019 in Wuhan, China, has challenged the global health system, and the worldwide economy has also been impacted significantly. Vietnam is no exception. Especially with the 4th outbreak, which started in late April 2021, the number of Vietnamese infections in the community recorded 97.370 cases as of July 2021, including Ho Chi Minh City, the epicenter, and witnessed 62.139 instances of the impact of the

Delta variant. Ho Chi Minh City authorities have been imposing measures and directives 15 and 16, depending on the difficult period of the pandemic. During the citywide social distancing period, Ho Chi Minh City authorities required both traditional and app-based motorbike taxi services for passenger transport and food delivery to be suspended. In contrast, services for goods delivery like GrabMart and GrabExpress are still available to ensure food supply for dwellers. Customers have more requirements and demands in today's competitive economy. Many analysts feel that customers are the decisive element in a business's survival. Grab providers that want to compete in the long run must focus on retaining current customers and gaining new ones. Knowing the value of customers, it consistently strives to provide customer happiness while providing services and attracting new customers to utilize the service. As a result, Grab needs to discover and measure client satisfaction variables. Thus, this research examines the influence of Grab's services on customer satisfaction in Ho Chi Minh and makes suggestions for managerial implications.

Literature Review

Service Quality and Customer Satisfaction

According to The International Organization for Standardization (ISO), the quality definition has been given as follows: "Quality is the ability of a set of characteristics of a process, system, and product to meet the requirements of the customers and stakeholders." Thus, according to the above definition, if customers do not accept a product for any reason, it is called low quality, even if the technological level of creating that product is good and current. There are several advantages to measuring product quality over service quality. When purchasing items, the client can inspect the physical object before making a decision, such as its style, hardness, label, and packaging. At the same time, service quality has little actual data to appraise, such as physical buildings, equipment, and employees (Parasuraman *et al.*, 1985). Service quality is a measure of how well a service continuously meets and conforms to customer demands. Gronroos (1984) developed a model in which consumers compared their assessment of received service to their expectations.

With different characteristics compared to the above tangible products, services have caused customers to evaluate before, during, and after consumption. Moreover, due to the intangible nature of the service, the service provider also faces difficulties in knowing the customer's feelings and evaluating the service quality. While consuming a service, service quality is reflected in the customer and the service provider (Svensson, 2002). Parasuraman *et al.* (1985, 1988) discovered this concept among researchers on service quality after conducting many studies. According to Parasuraman *et al.* (1985), service quality is the difference between consumers' expectations of service and their perception of its outcome.

Customer satisfaction is a customer's overall attitude towards a service provider or an emotional response to the difference between what the customer expects and what they receive to fulfill their needs, goals, or desires (Hansemark & Albinsson, 2004). According to Kotler and Armstrong (2012), customer satisfaction is the level of a person's sensory state resulting from comparing the results obtained from consuming a product/service with their expectations. The range of satisfaction depends on the difference between the received results and the expectations. If the expectation is higher than the actual results, the customer is dissatisfied, and if the results match the expectations, the customer is satisfied.

Customer satisfaction includes two components (Parasuraman *et al.*, 1988; Carman, 1990). One is the satisfaction achieved when purchasing quality goods or services at a reasonable price. The second is the relationship gained from the business transaction process accumulated over time, such as trust in service providers, the professional ability of employees, and the service attitude of customers. According to Zeithaml and Bitner (2000), service quality and customer satisfaction are two concepts; while service quality focuses specifically on service components, the customer's satisfaction level is a general concept.

Hypotheses and Conceptual Model

Service Quality Factors Affecting Customer Satisfaction
Reliability is the capacity to offer accurate, on-time service and reputation, and it needs consistency in executing service, respecting commitments, and maintaining promises for customers (Parasuraman *et al.*, 1988). It means that the company delivers on its promises about delivery, service provision, problem resolution, and pricing (Zeithaml *et al.*, 2017). The reliability of the transportation services, such as journey length, arrival at the destination, scheduled routes, and communications, can consider the taxi service quality dimensions (McKnight *et al.*, 1986). Yao and Ding (2011) found that reliability is of the highest importance in appraising taxi services. Hayder (2020) concluded that reliability significantly impacted customer satisfaction. Besides, Govender (2014), in a comparative study of service quality between public bus and mini-bus taxi services, also found that reliability also influenced both the overall former and latter service quality.

H₁: Reliability Has a Positive Impact on Customer Satisfaction
According to Parasuraman *et al.* (1988), responsiveness refers to the willingness of the company to help its customers provide them with good quality and fast service. Every customer feels valued if they get the best possible quality of service. Masrurul (2019) believes that excellent service embraces responsiveness, employees showing passion for service and their work, and the ability to deal with emergencies. Customers judge company responsiveness by assessing the time it takes and attention given in response to their requests, questions, complaints, and problems. Responding quickly to requests or complaints leads to a higher rating on this dimension. Hussein (2016) found that responsiveness is the critical factor of taxi service on customer satisfaction, while Yao and Ding (2011) and Mensah and Ankomah (2018) found that responsiveness is the lowest point of appraisal of taxi service.

H₂: Responsiveness Has a Positive Impact on Customer Satisfaction
The concrete manifestation of the service's quality was demonstrated by its physical proof. It covered the equipment utilized for the service, staff appearance, and the actual facilities (Parasuraman *et al.*, 1985). Customers, particularly new customers, will use tangibles to assess the quality of the service by seeing actual pictures or representations of it. Retail businesses, entertainment companies, and establishments where customers visit to obtain services are examples of service sectors that prioritize tangibles in their strategy. While tangibles are frequently used by service companies to improve their image, maintain continuity, and communicate quality to customers, most businesses combine tangibles with another dimension

to develop an enterprise-wide service quality plan (Zeithaml *et al.*, 2017).

H₃: Tangibles Have a Positive Impact on Customer Satisfaction

Empathy is the willingness and capability to respond to individual customer desires (Parasuraman *et al.*, 1988). Empathy service quality is how the company cares and gives individualized attention to their customers to make them feel extra valued and unique. Understanding customers is one of the important things for the firm to provide their services to the customer. Personnel at small service firms often know customers by name and build relationships that reflect their knowledge of customer requirements and preferences. When the competition is between small and large-scale companies, there is a clear advantage for the small-scale company given the ability to be empathetic (Zeithaml *et al.*, 2017). The factor of humans should be at the core of this success, and the more a business cares about its customers, the more empathy will increase.

H₄: Empathy Has a Positive Impact on Customer Satisfaction

According to Parasuraman *et al.* (1988), assurance refers to the degree of erudition and courtesy held by the employee and the facility to inspire trust among customers. This factor is essential in services customers usually perceive as high-risk services, such as ride-hailing. Yao and Ding (2011) found that assurance is the highest point in the performance appraisal of taxi services, as with Mensah and Ankomah (2018), whereas Hussein (2016) concluded that it had the slightest influence on passenger satisfaction.

H₅: Assurance Has a Positive Impact on Customer Satisfaction

Price is a vital indicator of quality and leads to customer value (Parasuraman *et al.*, 1988). According to Turel and Serenko (2006), different product prices or services can affect the brand's standard. Button and Hensher (2001) said that price is an essential indicator in the transportation industry that involves the affordability between service and fares charged. Besides, Khuong and Dai (2016) concluded that price directly acted on customer satisfaction and loyalty, at 0.363 and 0.296, respectively. Khairani and Hati (2017) posit that perceived value for money, service quality, and e-service quality positively and significantly impact customer satisfaction.

H₆: Price Policy Has a Positive Impact on Customer Satisfaction

According to the hypotheses above, the conceptual model is shown in **Figure 1**.
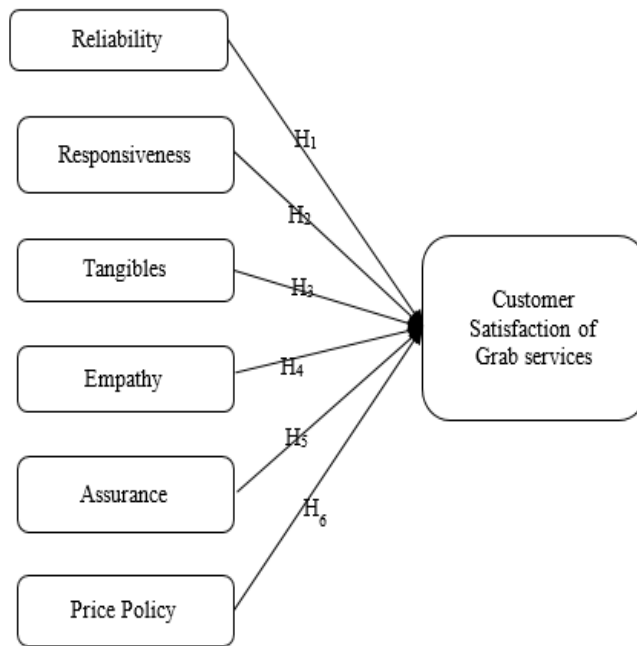
Figure 1. Research Model

MATERIALS AND METHODS

The sample is selected according to the convenience (non-probability) sampling method, in which the researcher approaches the research subjects by the convenience method. According to Hair, Black, Babin, Anderson, and Tatham (2010), the sample size must be at least 5 times the number of observed variables for exploratory factor analysis. There are 28 observed variables in the above study, so the minimum sample size is N = 5 x 28 = 140.

With 259 surveys sent through Google Forms, 259 answers were obtained, and the number of valid votes was 259 (100%). The sample number is larger than the minimum sample size of 140. Thus, the sample of the study meets the research requirements. The structure of the study sample is presented in **Table 1**.

Table 1. Sample Descriptive

Criteria		Gender		Total	
		Male	Female	Count	%
Age	From 18 to 24	41	131	172	66.5
	From 25 to 34	25	41	66	25.5
	From 35 to 44	5	6	11	4.2
	From 45 to 55	3	3	6	2.3
	Above 55	1	3	4	1.5
Occupation	Student	38	124	162	62.6
	Unskilled labor	1	4	5	1.9
	Freelancer	7	8	15	5.8
	Officer	29	48	77	29.7
Spending per month	Less than 500.000VND	39	114	153	59.1

	From 500.000 to 1.000.000VND	26	51	77	29.7
	Above 1.000.000VND	10	19	29	11.2
	Once per month	18	35	53	20.5
Frequency	From 2 to 4 times per month	29	93	122	47.1
	5 times and more per month	28	56	84	32.4
Are Grab services essential during COVID 19	Yes	74	173	247	95.4
	No	1	11	12	4.6
Total of respondents		**75**	**184**	**259**	**100**

All collected data will be processed using SPSS 20.0 software. After being encrypted and cleaned, all data goes through the following analysis steps:

Step 1: Evaluate the reliability of the scale. The scale's reliability is assessed through Cronbach's alpha coefficient and the total variable correlation coefficient. In this study, variables with a total correlation coefficient < 0.3 will be removed, and the scale is acceptable in terms of reliability if Cronbach's alpha coefficient > 0.6 (Hair *et al.*, 2010).

Step 2: Exploratory factor analysis. Exploratory factor analysis is used to test the discriminant validity of the component variables. Variables with a total correlation coefficient < 0.3 are considered garbage variables and will be removed from the scale. The scale will be accepted when the Kaiser-Meyer-Olkin coefficient (KMO) meets the following conditions: $0.5 \leq KMO \leq 1.0$; Bartlett's test has statistical significance (Sig. < 0.05); eigenvalue stops ≥ 1; total variance extracted > 50%; factor loading factor ≥ 0.45 (for the case of sample number from 150 to 200) (Hair *et al.*, 2010).

Step 3: Correlation and regression analysis. Correlation and regression analysis are used to confirm the suitability of the research model and test the hypotheses to clearly determine the degree of influence of each factor on the dependent variable. The normalized regression equation has the form $Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6$, in which Y is customer satisfaction, X1 is reliability, X2 is responsiveness, X3 is tangibles, X4 is empathy, X5 is assurance, and X6 is price policy.

RESULTS AND DISCUSSION

Result of Reliability Test by Cronbach's Alpha

The results show that the Cronbach's Alpha coefficient of the scales has the following values: reliability (0.754), responsiveness (0.828), tangibles (0.779), empathy (0.825), assurance (0.861), price policy (0.832), and customer satisfaction (0.818). Considering the correlation coefficient of the total variable, the observed variables all have a correlation coefficient of the total variable greater than 0.30. Thus, the above scales are reliable and continue to be included in the exploratory factor analysis step.

Result of Exploratory Factor Analysis

The service quality of the Grab variables scale was included in the exploratory factor analysis by principal component extraction with Varimax rotation. Performing exploratory factor analysis for the first time showed that there was 1 observed variable, EM4, which was excluded because the load factor was smaller than the standard load factor. Performing the second exploratory factor analysis, the results were shown in **Tables 2-4**.

Table 2. KMO and Bartlett's Test for Independent Variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,920
Bartlett's Test of Sphericity	Approx. Chi-Square	3117,306
	df	253
	Sig.	,000

Table 3. Eigenvalue and Covariance Deviations for Independent Variables

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	9,503	41,319	41,319
2	1,718	7,468	48,787
3	1,414	6,149	54,936
4	1,251	5,440	60,376
5	1,102	4,790	65,166

Table 4. Result of Independent Factor Analysis with Principal Varimax Rotation

Items	Component				
	SC	RE	RS	AS	PP
1	,763	,771	,790	,859	,752
2	,749	,672	,743	,807	,689
3	,709	,663	,712	,698	,671
4	,679	,653	,594		
5	,654	,644	,568		
6	,567	,579			

Table 2 shows that the results of Bartlett's test have high significance Sig. = 0.000 and KMO coefficient = 0.920 (> 0.5). **Table 3** shows the stop point Eigenvalues = 1.102; the total variance extracted is 65.166%. **Table 4** shows that the factor loading coefficient has a rather high value (from 0.567 to 0.859). This result indicates that exploratory factor analysis is appropriate. In the end, there are 5 factors created, including:

Factor 1 included EM1, EM2, EM3, TA1, TA4, and TA2, focusing on Grab employees' attitudes, operations, and skills. Thus, this factor was renamed "Service Competence - SC."

Factor 2 included RE1, RE2, RS1, RS2, RS3, and RS4, focusing on Grab employees' responsiveness to users. Thus, this factor was renamed to "Responsiveness—RS."

Factor 3 included AS1, AS2, AS3, AS4, and TA3, focusing on employees' assurance to users. Thus, this factor was renamed to "Assurance—AS."

Factor 4 included PR1, PR2, and PR3 related to the price policy of Grab. Thus, this factor kept the name "Price Policy—PR."

Factor 5 included RE3, RE4, and RE5 related to the reliability of Grab to customers. Thus, this factor kept the name "Reliability—RE."

Factor analysis for customer satisfaction has 4 observed variables included in the exploratory factor analysis, which has high convergence. These variables all have satisfactory factor loading coefficients and have quite high values (from 0.789 to 0.844). The total variance extracted is 65.473%, Sig. = 0.000, and KMO coefficient = 0.792; stop Eigenvalues = 2.619 (>1). This result

indicates that the scale of customer satisfaction has convergent value.

Result of the Test Model

The results of the correlation analysis between the independent variables and the dependent variable showed that the independent variables (SC, RS, AS, PR, RE) were all correlated with the dependent variable (CS). The lowest Pearson correlation coefficient is 0.574, and the highest is 0.654. On the other hand, the correlation coefficients are statistically significant at the 0.01 level (Sig. < 0.01). Thereby, it shows that there is a close correlation between the independent and dependent variables in the model, and between the independent variables, there is also a correlation with each other **(Table 5)**.

Table 5. Pearson Correlation Analysis

		SC	RS	AS	PR	RE
	Pearson Correlation	,574**	,616**	,654**	,618**	,579**
CS	Sig. (2-tailed)	,000	,000	,000	,000	,000
	N	259	259	259	259	259

To identify the factors affecting customer satisfaction of Grab's users in Ho Chi Minh City, regression analysis was conducted with independent variables such as SC, RS, AS, PR, and RE, with CS being the dependent variable. The results of the regression analysis are presented in **Tables 6-8.**

Table 6. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,776ᵃ	,601	,594	,42767	1,915

Table 7. ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	69,831	5	13,966	76,360	,000ᵇ
1	Residual	46,273	253	,183		
	Total	116,104	258			

Table 8. Results of Dependent Variable's Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	,301	,224		1,345	,180		
SC	,197	,062	,164	3,167	,002	,587	1,704
RS	,165	,061	,154	2,688	,008	,479	2,087
1 AS	,226	,060	,222	3,758	,000	,452	2,213
PR	,215	,037	,287	5,882	,000	,663	1,509
RE	,151	,050	,155	2,987	,003	,585	1,710

Table 6 shows that the regression model has an $R^2 = 0.601$, with an adjusted $R^2 = 0.594$. The

adjusted R^2 value indicates that the model explains 59.4% of the variation of the job satisfaction variable. **Table 7** shows F value = 76.360, Sig. = 0.000. The sum of squares of the regression (69.831) is larger than the sum of squares of the residuals (46.273), indicating that the model explains most of the variance of the dependent variable. **Table 8** shows that the independent variables SC, RS, AS, PR, and RE meet the requirements (Sig. < 0.05).

This result showed that among the 5 factors used to conduct the analysis affecting customer satisfaction of Grab's users in Ho Chi Minh City, all these 5 factors affect customer satisfaction. These factors are all significant and positively correlated with the dependent factor. Price policy (β = 0.287) has the strongest influence on customer satisfaction, followed by factors of assurance (β = 0.222), service competence (β = 0.164), reliability (β = 0.155), and lastly responsiveness (β = 0.154).

From the results of regression analysis in **Table 8**, the results of hypothesis testing are analyzed in detail as follows:

- Hypothesis H1: There was a relationship between service competence and customer satisfaction. The regression analysis results show that β = 0.197 (t = 3.167, Sig. = 0.002), which means that the relationship between service competence and customer satisfaction is positive. Therefore, H1 is accepted with 95% confidence.

- Hypothesis H2: There was a relationship between reliability and customer satisfaction. The regression analysis results show that β= 0.151 (t = 2.987, Sig = 0.003) means that the relationship between reliability and or customer satisfaction is positive. Therefore, H2 is accepted with 95% confidence.

- Hypothesis H3: There was a relationship between responsiveness and customer satisfaction. The regression analysis results show that β = 0.165 (t = 2.688, Sig = 0.008) means that the relationship between t responsiveness and customer satisfaction is positive. Therefore, H3 is accepted with 95% confidence.

- Hypothesis H4: There is a relationship between price policy and customer satisfaction. The regression analysis results show that β = 0.215 (t = 5.882, Sig = 0.000) means that the relationship between price policy and customer satisfaction is positive. Therefore, H4 is accepted with 99% confidence.

- Hypothesis H5: The regression analysis results show that β = 0.226 (t = 3.758, Sig = 0.000). The relationship between responsiveness and customer satisfaction is positive. Therefore, H5 is accepted with 99% confidence.

CONCLUSION

The research results show that all 5 hypotheses, H1, H2, H3, H4, and H5, are accepted, i.e., the factors of service competence, reliability, responsiveness, price policy, and assurance positively impact customer satisfaction. The level of impact of each factor is determined through the regression model below:

$$CS = 0.164*SC + 0.154*RS + 0.222*AS + 0.287*PR + 0.155*RE \qquad (1)$$

According to the research result, six factors impacting customer satisfaction with Grab services are listed in the theoretical model. After conducting a survey and analyzing data, these five elements—service competence, responsiveness, assurance, price policy, and reliability—are valid in reality. These factors have different impacts on customer satisfaction. The most influential factor is assurance, which means that survey takers agreed that assurance has the most impact on their happiness, which took up 22.6%. This result is the same as the findings of Yao and Ding (2011) and Menash and Ankonah (2018), and assurance showed that customers would keep using Grab services in the future. Turning to price policy, it is evident that its figure impacts 21.5%, following behind assurance in effects on customer satisfaction, similar to Khuong and Dai (2016). The third, fourth, and fifth factors belong to service competence, responsiveness, and reliability, respectively.

Regarding the studied demographic characteristics, such as the personality of each survey interviewee, the criteria, such as gender, age, occupation, average cost, frequency, and opinion about Grab services, are essential or not and are also assessed through the survey. The results showed that gender, age, and occupations have no difference in customer satisfaction with Grab services. In contrast, there is a disparity between frequency groups, advocates, and opponent groups about Grab services during COVID-19.

Implications

First, price policy (PR) has the most significant impact on customer satisfaction with Grab's services. It means that Grab cannot be ignored to improve customer satisfaction. With PR2 = 3,37, it has the smallest mean, which means that all survey takers neither agree nor disagree with the fare of Grab during peak hours, although they also agree that their received services are in line with the amount of money they spent, with the highest mean is PR3 = 3.71. It also means that Grab should consider price increases during peak hours, reasonable to customers' pockets. Therefore, Grab should transparently announce their condition for peak hours and specific price increase rates of each rush hour zone through the app or e-mail. Customers can then use this information to make proper decisions based on their schedules and improve their satisfaction (Ashurko *et al.*, 2021; García, 2021; Yudhawati & Yuniawati, 2021).

Second, assurance is a sensitive factor in Grab customer satisfaction, following behind the price policy factor (Beta = 0.222). From the data supplied, it is evident that most respondents agree that they can trust Grab services. However, it does not mean that Grab can ignore this factor. AS3 = 3.72 has the lowest means, which means that most survey takers slightly agree that they trust employees and drivers of Grab.

In contrast, they strongly agree that behaviors and physical appearances enhance their satisfaction with Grab, with AS1 = 4.04. It also means that training courses on relevant skills and knowledge for Grab's employees and drivers are necessary, especially for drivers, to ensure compliance with road traffic regulations. By doing this, customers can feel safe for themselves and their stuff when using mobility services such as GrabCar, GrabBike, GrabFood, and GrabExpress. With customer service staff, they should know the processes of each kind of service to handle customers' complaints. If problems come from Grab's side, they can offer customers vouchers or Grab's points to relieve their irritation. By doing this, customers can enhance their satisfaction and get good feedback by word of mouth.

Third, the regression coefficient of service competence impacts customer satisfaction with Grab's

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distribution services (Beta = 0.164). It is seen that all survey takers are highly satisfied with the service competence factor; all means are higher than 4, with EM3 = 4.11, related to customer understanding of Grab, being the lowest. To know well about customer needs, Grab should get more user feedback. By doing this, Grab can find out why customers are dissatisfied with their services and improve on them or launch services suitable to customers' needs, increasing Grab's competitive advantages over other competitors.

Reliability is the fourth factor impacting customer satisfaction of Grab's users, with a standardized coefficient = 0.155. Reliability is the fourth element influencing Grab's customer satisfaction, with a standardized value of 0.155. With RE3 = 3.71 as the lowest mean, the majority of respondents modestly agree that Grab services are free of errors. It indicates that some survey respondents made mistakes when utilizing the Grab service. It also means that Grab should regularly review and maintain its software in order to avoid system issues. This creates advantageous settings for customers that use processes, increasing their satisfaction.

Finally, responsiveness has the least influence on customer satisfaction, with a normalized value of 0.154. The underrated item connected to Grab's employees and driver support has an RS4 of 3.75, and some respondents may be dissatisfied with their assistance. Similar to dependability, Grab should use voting mechanisms to track the attitudes of employees and drivers while engaging with customers in order to determine how poor settlements may affect their satisfaction.

Limitations and Future Research

This study has several limitations in the study process. The first limitation was the time and location of the survey. Therefore, many users of Grab services in Ho Chi Minh City could not be reached. Secondly, this study only focused on five factors of service quality: assurance, price policy, service competence, reliability, and responsiveness, so it could only explain 59.4%. The remaining 40.6% were other factors. Thirdly, a limitation related to the study is the sampling method employed because convenience sampling is a non-probability sampling that was not representative enough of the entire population in Ho Chi Minh City. Finally, the current study only used a sample of 259 consumers. This sample size was just guaranteed according to the theory of choosing samples. The value of this study will be higher if the sample size is larger. This study proposed some methods for future research to overcome the limitation, such as increasing the sample size by conducting more surveys of consumers who used Grab's services and extending the study by adding other factors that may influence satisfaction when using Grab's services.

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