IMPACT OF SERVICE QUALITY ON CUSTOMERS' SATISFACTION WITH SECURITIES BROKER SERVICES

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ABSTRACT

The study's objective is to evaluate the impact of securities broker service quality on customer satisfaction; through a review of relevant documents, the study has developed a model including five factors of securities brokerage service quality affecting customer satisfaction. Through survey results of 248 customers who have used securities brokerage services, reliability analysis techniques, and exploratory factors, five factors of the service quality model are included in the regression model multivariate rule. The analysis results show that customer satisfaction is most affected by the Responsiveness factor, the second is the Reliability factor, the third is Service capacity factor, and the last is empathy factor. However, the results did not show any impact of the Tangibles factor on customers' satisfaction. Besides, the results show the difference between the variables of education level and gender on customer satisfaction. The research results, the study's conclusions, limitations, and future research directions are also analyzed at the end of this study.

KEYWORDS: Service quality, Customer satisfaction, Securities broker services.

1. INTRODUCTION

Vietnam's stock market is exciting and volatile. When the stock market develops to a certain extent, the trading needs of investors also become more complex and require more attentive care. Therefore, the stock brokerage service has also gradually become familiar and developed (Anh & Gan, 2020). The issue of stockbrokers accounts for most investors' buying and selling transactions in the stock market.

Transactions in the market. Securities brokerage activities help reduce transaction costs thanks to the advantage of specialization. In the market in general and the stock market in particular, buyers and sellers who want to conduct transactions must have the opportunity to meet and assess the quality of goods and prices ((Anh & Gan, 2020). However, securities trading are different from markets because of intangible transactions. So it is challenging for buyers and sellers to match the demand for the quality, price, terms of sale, and exchange of securities with each other, as well as

complete transactions, settlement, and transfer of securities at low cost. Therefore, to find buyers and sellers and appraise the quality of goods, it is necessary to spend considerable money to collect and process information, train in analytical skills, and conduct procedures (Anderson et al., 1994). With that feature, the stock market requires stockbrokers to find partners and assist in trading securities at a low cost.

Service quality and customer satisfaction have always been of particular interest and research by business managers because this is the leading and most effective competitive method of financial institutions, including financial institutions' securities companies (Chau et al., 2001; Kotler & Manceau, 2012). Service quality is a focused assessment that reflects the customer's perception of specific aspects of the service (Parasuraman et al., 1985). It is an assessment of whether a service is in line with the customer's needs and satisfaction. Understanding service quality also helps managers realize that service quality is essential in any industry, field, and business activity (van Quyet et al., 2015). Service industries, especially financial services, are considered critical to help create a sustainable competitive advantage and build customer trust. Measuring service quality helps to benefit the company both qualitatively and quantitatively. Achieving a high level of service quality will also increase customer loyalty, helping to increase market share, and return on investment, reduce costs and ensure competitive advantage.

2. LITERATURE REVIEW

Increase competitive advantage for the company. According to Bahadori et al., (2013), service quality is a tool to measure the gap between the service provided and the customer's expectations. (Berry et al., (1988) define service quality as "the outcome of the customer's evaluation process by comparing their expectations with the service they experience." Agreeing with this view, Parasuraman et al. (1985) developed a conceptual framework for service quality to demonstrate that "quality is a comparison between expectations and actual experiences," leading to customer satisfaction. (Udo et al., 2011) defined service quality as a way to control business processes to ensure overall customer satisfaction at all levels, increasing customer satisfaction. Therefore, the establishment of a service quality measure is essential thing in several empirical and theoretical studies in the field of service marketing.

In business activities, businesses need to understand how customers feel about service quality and the factors that affect service quality. In order to achieve customer satisfaction in service quality management, businesses need to combine both expected quality and perceived quality. Grönroos, (1984) suggested that the service quality of an enterprise is determined by three components: technical quality, functional quality, and image. In which

1. Technical quality: Is the value that customers receive from the service of the supplier or what the customer receives;
2. Functional Quality: Represents how the service is delivered to the consumer by the service provider or how the customer receives the service;
3. Image: plays a significant role for service providers and this factor is built mainly on two components of technical quality and functional quality.

When the SERVQUAL scale of Parasuraman et al., (1985) was published, there were debates about best-measuring service quality. Nearly two decades later, many researchers have tried to prove the effectiveness of the SERVQUAL scale. The SERVQUAL scale set aims to measure service perception through five service quality components, including (i) Reliability: showing the ability to perform the service appropriately and on time at the first time. ; (ii) Responsiveness: showing the willingness of service staff to provide timely service to customers. (iii) Assurance: showing professional qualifications and polite and welcoming customer service. (iv) Empathy: showing care for each customer; (v) Tangibles: shown through appearance, the dress of service staff, and equipment to perform the service.

According to Barsky & Labagh (1992); Preko et al. (2014); Torres & Kline (2013); Yaqub et al. (2019), consumer satisfaction is the emotion toward a service provider when transacting and interacting with that business. Customers will feel satisfied when their needs are met. From there, it affects the intention of buying behavior and creates a trust index for the quality of service that that business provides to customers. According to Oliver (1999) customer satisfaction is defined as a summary psychological state when the emotions surrounding expectations are combined with the consumer's prior feelings about the consumption experience. According to Anderson et al. (1994); Bao & Vinh (2017; Preko et al. (2014) satisfaction is the customer's emotional state after experiencing a specific experience or achieving the desired result, related to different degrees between the desired and the felt.

Customer satisfaction is a psychological concept related to emotional well-being and pleasure resulting from getting what the customer hopes and expects from an attractive product and or service. Customer satisfaction is often defined as post-consumer evaluations regarding a particular product or service.

Satisfaction is the degree to which a person's sensory state begins by comparing the results obtained from a product/service with his or her expectations (Kotler & Manceau, 2012). In summary, satisfaction is the comparison between actual perceived benefits and expectations. The customer will be disappointed if the benefits differ from what is expected. The customer will be satisfied if the actual benefits meet the set expectations. If the actual benefits exceed the customer's expectations, it will create higher satisfaction or satisfaction that exceeds expectations.

Service quality and customer satisfaction are topics discussed by many researchers over the past decades. Numerous studies on customer satisfaction in service industries have been carried out. Some authors believe that there is an overlap between service quality and customer satisfaction, so these two concepts can be used interchangeably.

However, through many studies, service quality and customer satisfaction are two distinct concepts. There are some differences between service quality and customer satisfaction, the main difference being the "cause and effect" issue. Furthermore, Ha Nam Khanh, (2020); van Quyet et al., (2015); Yaqub et al., (2019) argue that customer satisfaction is affected by many factors, such as product quality, service quality, price, situational, and personal factors. Service quality and satisfaction are two different concepts but closely related in service research. Previous studies have shown that

service quality is the cause of satisfaction (van Quyet et al., 2015). The reason is that service quality is related to service delivery, while satisfaction can only be assessed after using the service.

Customer satisfaction is considered an outcome and predictive, while service quality is considered the cause. Customer satisfaction is a general concept expressing satisfaction when consuming a service. Meanwhile, service quality focuses only on specific service components. Although there is a relationship between service quality and satisfaction, few studies focus on testing the explanatory level of service quality components for satisfaction, especially for industry service. Baber, (2019) concluded that perceived service quality is an antecedent of satisfaction and showed a significant factor affecting satisfaction. The causal relationship between these two factors is critical in most customer satisfaction studies.

3. METHOD

SERVQUAL model provides a logical process by which an organization can measure and improve service quality. In finance service, the SERVQUAL model has been verified and applied such as Baber, (2019); Bao & Vinh, (2017) and van Quyet et al., (2015).

Based on surveying previous studies on service quality affecting customer satisfaction, the SERVQUAL model with five aspects is selected (1) Reliability; (2) Responsiveness; (3) Service capacity; (4) Empathy; (5) Tangible.

In this study, the author uses a 5-point Likert scale (from 1: strongly disagree to 5: completely agree) to measure the impact of stock broker service quality on customer satisfaction. Five factors are included in the model, including 1) Reliability (5 observed variables); 2) Responsiveness (5 observed variables); 3) Service capacity (4 variables observed); 4) Empathy (4 observed variables); 5) Tangible(4 observed variables). Customer satisfaction is adjusted to 4 observed variables. Besides, the questions related to the demographic information of the survey sample are also built into the questionnaire. Figure 1 shows the research framework.
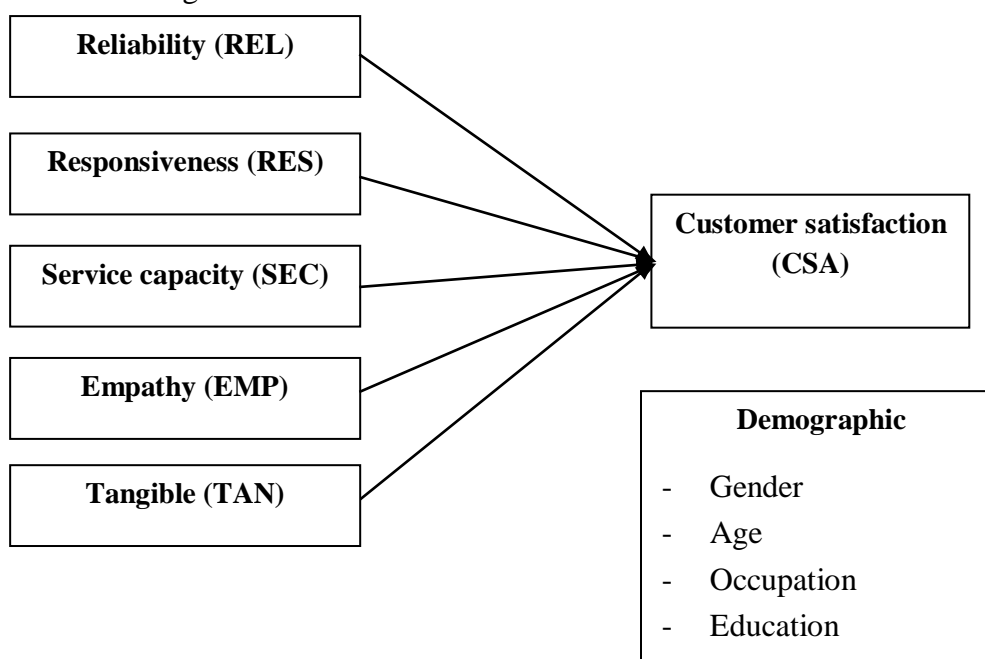
Figure 1 Research framework

Research hypothesis:

H_1: Reliability has a positive impact on customer satisfaction for securities brokerage services

H_2: Responsiveness has a positive impact on customer satisfaction for securities brokerage services

H_3: Service capacity has a positive impact on customer satisfaction for securities brokerage services

H_4: Empathy has a positive impact on customer satisfaction for securities brokerage services

H_5: Tangible positively impacts customer satisfaction for securities brokerage services.

H_6: There are differences between the demographic variables for customer satisfaction.

According to Hair Jr et al., (2021), the sample size is determined based on the minimum level and the number of variables included in the model. Based on the number of scales built, the author determines the minimum size. The research sample size can be 130 (26*5). The study surveyed 252 customers who have used securities brokerage services at securities companies in Hanoi from 2019 to 2021.

The statistical software SPSS version 26.0 is used to synthesize and analyze the data collected from the survey results. The analysis process steps include: 1) the scale's reliability is assessed by the internal consistency method through Cronbach's Alpha coefficient. 2) Exploratory factor analysis, 3) correlation analysis, 4) regression analysis, and 5) t-test and ANOVA analysis.

4. RESULTS ANALYSIS

4.1. Demographic information of the survey sample

The total number of votes collected is 252 survey votes from customers who have used securities brokerage services at securities companies in Hanoi. After removing invalid questionnaires, the total number of valid votes used in this study is 248, with a ratio of valid to the total of 91.18%, showing that this ratio is reasonable to include in the study.

Regarding gender: 60 people surveyed are female, accounting for 24.19%. Males participating in this study are 188 people, accounting for 75.81%.

Relating to the age of respondents: 22 people (8.87%) are under 25 years old, from 25-35, with 71 people (28.63%), 100 people from 36 to 45 years old, accounting for 40.32%. The number of people over 45 is 55 (22.18%).

Regarding education level: The number of customers participating in securities brokerage services with a degree lower than university accounts for only 2.82% (7 people), of which the number of customers with university degrees accounts for 85.08% (100 people). Customers with master's and doctoral degrees accounted for 8.87% (22 people) and 3.23% (8 people), respectively.

Regarding occupation: the research results show that there are 28.23% of people doing freelance (70 people), the number of customers working as staff - office is 27.42% (68 people). Public servants accounted for 23.39% (58 people), and business – owner accounted for 20.97% (52

people). Table 1 shows the results of the descriptive statistics for the survey sample's demographic variables.

Table 1 .Survey sample's demographic information

Characteristics		Frequency	Percentage
Gender	Male	188	75.81
	Female	60	24.19
Age	Under25	22	8.87
	25-35	71	28.63
	36-45	100	40.32
	Over 45	55	22.18
Education	Lower than university	7	2.82
	University	211	85.08
	Master	22	8.87
	Doctoral	8	3.23
Occupation	Freelance	70	28.23
	Staff - office	68	27.42
	Public servants	58	23.39
	Business – owner	52	20.97
Total		248	100

4.2 Reliability testing and exploratory factor analysis

Test the scale's reliability (Cronbach Alpha test) on five service quality factors with 26 observed variables. The Cronbach Alpha coefficient reached from 0.791 to 0.847, proving that the scale is reliable for conducting exploratory factor analysis. All observed variables have correlation coefficients with the total variable greater than 0.3. Thus, at the end of the scale's reliability step, the original 22 observed variables are kept the same. In the next step, all 22 observed variables belonging to 5-factor groups in the official research model are included in the exploratory factor analysis (EFA).

Table 2. Factor analysis of service quality

	Factors				
	1	**2**	**3**	**4**	**5**
RES1	.848				
RES4	.833				
RES2	.811				
RES3	.740				
RES5	.637				

	Factors				
	1	**2**	**3**	**4**	**5**
REL1		.823			
REL3		.772			
REL2		.766			
REL4		.754			
REL5		.707			
EMP3			.868		
EMP2			.825		
EMP1			.814		
EMP4			.784		
SEC1				.819	
SEC4				.814	
SEC3				.800	
SEC2				.732	
TAN1					.828
TAN3					.771
TAN 2					.759
TAN4					.742
Cronbach Alpha	.847	.830	.847	.828	.791
Total explanatory variance = 71.737; KMO= .808; p = .000					

The result shows that KMO is 0.808, more significant than 0.5, and the Sig of Bartlett's test is less than 0.05, so it can be concluded that the survey data are guaranteed conditions to conduct EFA exploratory factor analysis and can use those results. EFA results on the scale of independent variables (impacting factors) by Principal components extraction method and varimax rotation showed that: 22 observed variables measuring 05 influencing factors were extracted into 05 factors at Eigenvalue = 1,847 (> 1), and the extracted variance is 71.737%. The ability to use these five factors containing 22 observed variables will explain the explained variable at 71.737% (> 50%).

4.3 Hypothesis testing

Pearson's correlation coefficient was used to test the correlation of the independent variables with the dependent variable.

Table 3 Correlation

		CSA	REL	RES	SEC	EMP	TAN
CSA	Pearson Correlation	1					
REL	Pearson Correlation	.440**	1				
RES	Pearson Correlation	.542**	.181**	1			
SEC	Pearson Correlation	.419**	.152*	.356**	1		
EMP	Pearson Correlation	.232**	.113	.154*	.115	1	

		CSA	REL	RES	SEC	EMP	TAN
TAN	Pearson Correlation	.224**	.111	.112	.192**	.082	1

**. Correlation is significant at the 0.01 level (2-tailed)

According to the results of correlation analysis between variables, the independent variables included in the model include Reliability; Responsiveness; Service capacity; Empathy; Tangible, that influence customer satisfaction with securities brokerage services. Therefore, at least one independent variable with a significant linear correlation with the dependent variable was guaranteed. Besides, the analysis results also show that no independent variables are correlated, so this model has no multicollinearity.

Regression analysis was performed with five independent variables: Reliability; Responsiveness; Service capacity; Empathy; Tangible. The values of the factors used to run the regression are the mean values of the scales. Enter method was used for regression analysis.

$R2$ Adjusted = 0.618 is significant. It means that the independent variables in the model explained 61.8% of the variation of the dependent variable. In addition, F =88.294, P = 0.000 (< 0.05), this result shows that at least one independent variable has a statistical significance for the dependent variable. The regression model fits perfectly, so there can be confirmed that the model does not have autocorrelation. Table 4 shows the Regression analysis results.

Table 4.Regression analysis results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
		B	Std. Error	Beta			
1	(Constant)	-.216	.268		-.769	.443	
	REL	.315	.048	.334	6.758	.000	
	RES	.384	.054	.376	7.213	.000	2.049
	SEC	.174	.046	.201	3.819	.000	2.353
	EMP	.126	.042	.148	3.015	.003	1.608
	TAN	.079	.041	.095	1.923	.056	1.951

R^2 = 0.625; $R^2_{Ajusted}$ = 0.618; F= 88.294; Durbin-Watson = 2.024 (P = 0.000)

Dependent variable: CSA

The regression equation is shown below:

SHL = 0.334*REL + 0.376*RES+ 0.201*SEC+0.148*EMP

Regression results show that 4 out of 5 independent variables of broker service quality influence the dependent variable (Customer satisfaction with securities broker services) ($p < 0.05$ and t value > 1.96). In other words, improving any of the four factors affects customer satisfaction with broker services. Specifically, customer satisfaction is most affected by the responsiveness factor ($\beta_2 = 0.376$, t = 7,213, $p < 0.05$); if the responsiveness factor is improved by one unit, customer satisfaction will increase to 0.376 units. The second is the Reliability factor ($\beta_1 = 0.334$, t=6,758, $p < 0.05$), which means that if the Reliability factor improves by one unit; the customer's satisfaction will increase to 0.334 units. The third is Service Capacity ($\beta_3 = 0.201$, t= 3.819, $p < 0.05$), which means that if service capacity improves by one unit, customer satisfaction will increase by 0.201 units. The last is Empathy ($\beta_4 = 0.148$, t=3.015, $p < 0.05$), which means that if the empathy factor improves by one unit; the customer's satisfaction goods will increase to 0.148 units.

In addition, the multivariable regression results did not show any impact of the Tangibles factor on customer satisfaction with securities broker services.

The difference of demographic variables on customer satisfaction for securities broker services.

The t-test and ANOVA were applied to test the difference in demographic variables (gender, age, occupation, education) in customer satisfaction for securities broker services.

Table 5 the difference of demographic variables on customer satisfaction for securities broker services

	Method	P – value	Result
Gender	t- test	0,005<0,05	Difference
Age	Anova	0,468>0,05	No difference
Occupation	Anova	0.160>0.05	No difference
Education	Anova	0.020<0.05	Difference

Table 5 shows no significant difference between different customer groups regarding age and occupation. However, the results show the difference between groups of education and gender on customer satisfaction (P<0.05). For a more detailed analysis of the Mean Difference (MD) between customers with different education levels and genders on customer satisfaction, the study uses the Tukey HSD method.

Table 6. Tukey HSDmethod results

Education	N	Subset for alpha = 0.05		Gender	N	Subset for alpha = 0.05	
		1	2			1	2
Lower than university	7	3,2917		Nam	188		3,6875
University	211	3,4610	3,4610	Nữ	60	3,3214	
Master	22	3,6990	3,6990				
Doctoral	8		3,9500				

Research results show that there is no significant difference between those with a university degree (M=3.46), a master's degree (M=3.69), and less than a university degree (M=3.29) with p>0.05. Also, there is no difference between doctoral degrees (M= 3.95), master's degrees, and lower than university degrees (p>0.05). However, the research results show that there is a significant difference between the doctoral degree and the university degree (MD = 0.6583; P<0.05), looking at the mean value (Mean-M) can be seen. Customers with university and post-graduate degrees have higher satisfaction than customers with lower university degrees.

Regarding the gender of customers using stock broker services, the research results show a gap in the satisfaction of male and female customers. Male customers are more satisfied than female customers. The results of this study suggest that securities companies need to take specific measures to increase customer satisfaction with female customers and those with less than a university degree.

5. CONCLUSIONS AND SUGGESTIONS

The study's objective is to evaluate the impact of service quality variables on customer satisfaction using securities brokerage services through the survey and study of relevant documents. Research has proposed a model of 5 service quality factors: Reliability, Responsiveness, Service Capacity, Empathy, and Tangible.

From the research results, hypotheses H1, H2, H3, and H4 show that reliability, Responsiveness, Service Capacity, and Empathy impact customer satisfaction in securities brokerage services. The result is consistence with the studies of Baber, (2019); Bao & Vinh, (2017) and van Quyet et al., (2015). Besides, the results show the difference in gender and education variables for customer satisfaction. The result shows that females have lower satisfaction compared to male customers. The study also showed that the more highly qualified customers, the higher satisfaction than those with lower qualifications.

Reliability is essential in creating customer satisfaction because it creates directly for the benefit of customers. Reliability creates customers' trust in the company when performing securities brokerage services and helps customers feel secure when using consulting and brokerage services of securities companies. In order to improve the trust of customers, securities companies need to pay attention to ensure that investors receive advice, investment guidance, and answers to securities-related issues from a professional broker who is well-versed in the stock market and has rich experience. Market information, analysis, and consulting knowledge must be objective, honest and transparent.

Although the study has specific contributions to academic and management practice, there are some limitations, including the sample being only in the Hanoi area; The independent factors only explained 62.5% of the dependent factor variation and No explanation of why the satisfaction level of female customers is lower than male customers.

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