CÁC YẾU TỐ ẢNH HƯỞNG ĐẾN SỰ HÀI LÒNG CỦA SINH VIÊN ĐỐI VỚI CHẤT LƯỢNG DỊCH VỤ THU HỌC PHÍ QUA VIETCOMBANK: NGHIÊN CỨU TẠI TRƯỜNG ĐẠI HỌC AN GIANG

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Tóm tắt

Nghiên cứu nhằm xác định các yếu tố ảnh hưởng đến mức độ hài lòng của sinh viên Trường Đại học An Giang đối với dịch vụ thu học phí tại Vietcombank. Dựa trên mô hình SERVQUAL, nhóm tác giả tiến hành khảo sát 318 sinh viên đã sử dụng dịch vụ thu học phí trực tiếp tại quầy của ngân hàng. Sau khi kiểm định độ tin cậy của thang đo bằng Cronbach's Alpha, các phương pháp phân tích nhân tố khám phá (EFA) và hồi quy tuyến tính bội được áp dụng để phân tích dữ liệu. Kết quả cho thấy có năm yếu tố ảnh hưởng đến sự hài lòng của sinh viên, bao gồm: Phương tiện hữu hình (HH), Sự cảm thông (DC), Tính đáp ứng (DU), Sự đảm bảo (NL) và Độ tin cậy (TC). Trong đó, Tính đáp ứng có tác động mạnh nhất (β = 0,388), trong khi Phương tiện hữu hình có tác động yếu nhất (β = 0,084). Những phát hiện này mang lại hàm ý thực tiễn cho Ngân hàng Vietcombank trong việc xây dựng chính sách và kế hoạch hành động nhằm nâng cao chất lượng dịch vụ thu học phí và gia tăng sự hài lòng của sinh viên, đặc biệt là đối với sinh viên Trường Đại học An Giang.

FACTORS INFLUENCING STUDENT SATISFACTION WITH THE QUALITY OF TUITION FEE COLLECTION SERVICES AT VIETCOMBANK: A CASE STUDY AT AN GIANG UNIVERSITY

Abstract

This study aims to identify the factors influencing student satisfaction with tuition fee collection services at Vietcombank, specifically among students at An Giang University. Based on the SERVQUAL model, a survey was conducted with 318 students who had used the bank's over-the-counter tuition payment service. After assessing the reliability of the measurement scale using Cronbach's Alpha, exploratory factor analysis (EFA) and multiple linear regression were applied. The results reveal five factors affecting student satisfaction including Tangibles (HH), Empathy (DC), Responsiveness (DU), Assurance (NL), and Reliability (TC). Among these, Responsiveness had the strongest impact (β = 0.388), while Tangibles had the weakest effect (β = 0.084). The findings provide practical implications for Vietcombank to develop policies and action plans aimed at improving the quality of tuition collection services and enhancing student satisfaction, particularly for students at An Giang University.

1. Introduction

Paying tuition fees is a critical academic obligation for students at An Giang University, directly affecting their academic progression and administrative eligibility. With the advancement of the banking sector, universities, including An Giang University, have benefitted from improved efficiency in tuition fee collection and management. However, students primarily make payments in person at Vietcombank transaction counters, which often results in service congestion—particularly during peak registration periods. This manual process, involving form completion and data entry by bank staff, frequently leads to long wait times and reduced service efficiency.

Given these challenges, a key question arises: Does the current quality of Vietcombank's tuition fee collection service meet students' expectations and satisfaction levels?

To address this, the study titled *"Factors Influencing Student Satisfaction with the Quality of Tuition Fee Collection Services at Vietcombank – A Case Study at An Giang University"* was conducted. Using the SERVQUAL model as a theoretical foundation, the research empirically investigates the dimensions of service quality that most significantly impact student satisfaction. The findings aim to offer

practical insights for Vietcombank to improve service delivery, reduce procedural inefficiencies, and enhance customer satisfaction—particularly for the student segment, whose needs are highly time-sensitive and service-dependent. This underscores the strategic importance of continuous service quality improvement in maintaining institutional reputation and customer loyalty in the banking sector.

The study employed a quantitative survey method, targeting 318 students currently enrolled at An Giang University who have previously used Vietcombank's tuition fee collection service. Data were collected through structured questionnaires administered directly to the participants, ensuring clarity of responses and enhancing the reliability of the collected data.

2. Theoretical background

2.1. Overview of the Service

According to Pham and Nguyen (2023), a service is defined as a transactional process in which an intangible product is simultaneously delivered from the provider to the customer, with the purpose of fulfilling consumer needs and expectations. Thus, services are inherently process-oriented rather than product-based. Similarly, Zeithaml and Bitner (2000) describe a service as a series of actions, processes, or methods that generate value and satisfy customer needs. In line with this, Kotler (2000) emphasizes that a service is "any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything," and its production may or may not be associated with a tangible product.

Synthesizing these perspectives, a service can be understood as an intangible, non-ownership-based exchange process in which the provider delivers value to the customer by fulfilling specific needs through interaction and experience.

2.2. Overview of Service Quality

According to Phạm Thị Liên (2016), service quality is defined as the level of customer satisfaction determined by the discrepancy between expected service quality and the actual quality received. Similarly, Parasuraman, Zeithaml, and Berry (1988) conceptualized service quality as the extent to which a service meets or fails to meet customer expectations, highlighting the gap between customers' expectations and their perceptions of the service delivered.

Thus, service quality can be viewed as a function of the gap between expected and perceived service performance. Accurately identifying and understanding customer expectations is essential for designing and delivering services that meet or exceed those expectations. Prior studies emphasize the critical importance of developing systematic approaches to capture customer expectations, which form the foundation for constructing effective service quality improvement strategies.

Service quality is fundamentally shaped by two dimensions: customer expectations and actual service perceptions. The degree of alignment or misalignment between these two dimensions determines the perceived quality of the service. According to Nguyen Thi Loan and Nguyen Kim Phung Hoang (2011), service quality exhibits several key characteristics, including superiority, specificity of service products, consistency in delivery, and the ability to fulfill customer needs. These attributes underscore the multidimensional nature of service quality and its central role in achieving customer satisfaction.

2.3. Customer Satisfaction and the Relationship Between Service Quality and Customer Satisfaction

According to Yang and Peterson (2004) and Chen and Tsai (2008), customer satisfaction is conceptualized as the overall evaluation of a customer's experience with a service provider, encompassing all interactions throughout the service delivery process. It serves as a cumulative measure reflecting the degree to which customer expectations are met or exceeded after the entire service engagement.

Yüksel and Yüksel (2001) further distinguish customer satisfaction into two dimensions: satisfaction with the final outcome of the service (i.e., post-consumption evaluation of the product) and satisfaction with the service delivery process (i.e., the experience during the interaction with the service provider). This distinction highlights the multifaceted nature of customer satisfaction.

Zeithaml and Bitner (2000) define customer satisfaction as a broad psychological state that reflects customers' contentment following the consumption of a service. In contrast, service quality refers to specific

attributes of the service delivery, such as reliability, responsiveness, and assurance.

Empirical studies by Oliver (1993) and Cronin and Taylor (1992) confirmed a positive relationship between service quality and customer satisfaction, demonstrating that perceived service quality is a significant antecedent of satisfaction. While service quality pertains to the performance and characteristics of the service itself, satisfaction is evaluated after consumption. Despite being conceptually distinct, these two constructs are interrelated—higher perceived service quality leads to greater customer satisfaction.

2.4. Research model on service quality

The SERVQUAL model is a widely utilized instrument for measuring service quality and customer satisfaction. Developed in the early 1980s by researchers Zeithaml, Parasuraman, and Berry within the domain of service marketing, the model aims to provide a framework for improving service quality in sectors such as retail and other service-based industries.

SERVQUAL comprises five core dimensions: (1) Tangibles – reflected in physical facilities, equipment, and the appearance of personnel; (2) Reliability – the ability to perform the promised service dependably and accurately; (3) Responsiveness – the willingness to help customers and provide prompt service; (4) Assurance – encompassing employees' competence, courtesy, and ability to inspire trust and confidence; and (5) Empathy – the provision of caring, individualized attention to customers.

The SERVQUAL scale is designed to measure the gap between customers' expectations and their perceptions of actual service received. This gap analysis enables organizations to identify specific areas for quality improvement, ultimately enhancing customer experience and satisfaction. However, applying the SERVQUAL model requires adaptation to the specific characteristics of different service industries, cultural contexts, and target customer groups. In this study, the model is applied in the context of banking services, specifically examining the case of over-the-counter tuition fee collection services provided to university students.

3. Research Process and Research Model

3.1. Research Process

The preliminary research (qualitative research) was conducted with the aim of establishing and refining the questionnaire. The research was carried out by directly surveying students at An Giang University who paid tuition fees at Vietcombank counters and transferred tuition fees to Vietcombank's designated accounts.

The in-depth interview questionnaire consisted of questions based on theoretical foundations and practical information, used to gather additional information related to the research topic. After the questionnaire was completed, it was tested, evaluated for reasonableness, adjusted, and refined.

The official survey was then conducted using the finalized questionnaire. The collected data will be cleaned, coded, and analyzed using SPSS software.

3.2. Research Model
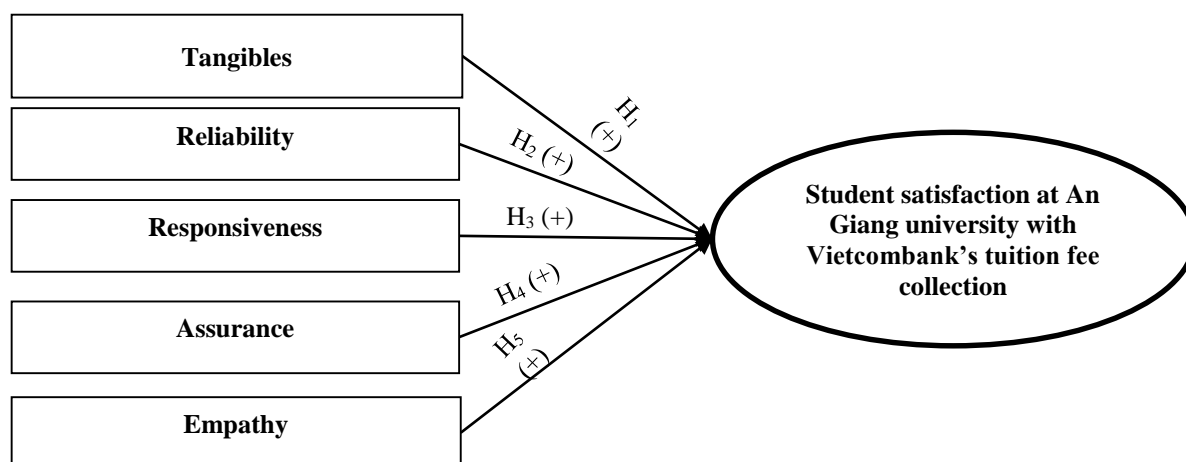
Picture 1: Reasearch model

The five hypotheses are grounded in the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988), which is widely recognized for measuring service quality across five key dimensions: Tangibles, Reliability, Responsiveness, Assurance (often referred to as service capability), and Empathy (Picture 1). This model posits that service quality is perceived through the gap between customer expectations and actual service performance, and that each dimension contributes to the overall evaluation of customer satisfaction.

Hypothesis H1 is based on the assumption that tangible elements, such as facilities, equipment, and the appearance of personnel, play a vital role in shaping customer perceptions. A professional and modern physical environment can enhance trust and comfort, thereby increasing satisfaction.

Hypothesis H2 is derived from the notion that reliability, or the ability to perform promised services dependably and accurately, is a core determinant of customer trust. When services are delivered consistently and correctly, customers perceive higher value, which leads to greater satisfaction.

Hypothesis H3 is supported by the idea that responsiveness, or the willingness to help and provide prompt service, influences how efficiently customer needs are addressed. Quick and proactive responses are often interpreted as signs of customer orientation, contributing positively to satisfaction.

Hypothesis H4 is based on service capability (assurance), which reflects employee competence, courtesy, and the ability to instill confidence. Customers tend to feel more secure and satisfied when service personnel demonstrate professionalism and knowledge.

Hypothesis H5 draws on the importance of empathy, which involves providing caring and personalized attention. When customers feel understood and valued, their emotional connection to the service improves, leading to increased satisfaction.

Collectively, these hypotheses aim to empirically test the relationship between perceived service quality dimensions and customer satisfaction in the specific context of tuition fee collection services at Vietcombank.

4. Research results

The survey was conducted by distributing questionnaires directly to students in the classes who have used or are currently using the tuition fee collection service at Vietcombank. The results showed that 318 out of 400 distributed questionnaires from students at An Giang University met the requirements. The data were analyzed and the results were reported.

4.1. The results of the reliability test using Cronbach's Alpha

Table 1: The results of the reliability test using Cronbach's Alpha

Number	Scale	Observed variables	Cronbach's Alpha
1	Tangibles	5	0.812
2	Reliability	5	0.785
3	Responsiveness	5	0.803
4	Assurance	4	0.768
5	Empathy	4	0.826
6	Satisfaction	5	0.809

The results of data analysis using SPSS

After completing the scale reliability test using Cronbach's Alpha, the remaining number of observed variables is 23, with the 5 independent variables (Tangible, Reliability, Responsiveness, Assurance and Empathy) and the dependent variable (Customer satisfaction) unchanged (Table 1).

Table 2: Kaiser-Meyer-Olkin coefficient

Coefficient	Value
KMO	0.901
Sig. Bartlett's Test	0.000

The results of data analysis using SPSS

4.2. Results of Exploratory Factor Analysis

4.2.1 Results of EFA analysis for independent variables

The analysis results show that the KMO coefficient is high ($1 > 0.901 > 0.5$), indicating that the factor analysis is suitable for the research data (Table 2). Bartlett's Test has a Sig. coefficient of $0.000 < 0.05$, which demonstrates that the factor analysis results meet the statistical significance level (Table 2). At Eigenvalues of $12.399 > 1$, the exploratory factor analysis (EFA) extracted 5 factors from 23 observed variables, with a total extracted variance of $64.231\% > 50\%$

(meeting the requirement), meaning that these 5 factors account for 64.231% of the variance in the observed variables. Therefore, after the official evaluation, the measurement scales consist of 5 factors and 23 observed variables, all of which have factor loadings greater than 0.5. Specifically as follows:

From the results of the EFA analysis, it is observed that the factors are rearranged across the groups, specifically as follows:

Factor 1: Includes 5 observed variables:

DU1, DU2, DU3, DU4, and DU5. This factor is labeled as Responsiveness and denoted as DU (Table 3). The observed variables emphasize the bank's ability to provide prompt service during the tuition payment process. For instance, DU1 and DU2 reflect the readiness of staff to assist students, while DU3, DU4, and DU5 measure timeliness in service delivery, minimizing delays, and ensuring smooth transactions. These elements collectively capture how efficiently the bank responds to student needs during peak payment periods.

Table 3: *The results of the EFA*

Observed variable	Factors				
	1	2	3	4	5
DU1	0.794				
DU2	0.769				
DU3	0.754				
DU4	0.721				
DU5	0.684				
DC1		0.805			
DC2		0.792			
DC3		0.766			
DC4		0.739			
NL1			0.801		
NL2			0.789		
NL3			0.745		
NL4			0.698		
TC1				0.804	
TC2				0.776	
TC3				0.735	
TC4				0.699	
TC5				0.673	
HH1					0.826
HH2					0.814
HH3					0.781
HH4					0.754
HH5					0.719

The results of data analysis using SPSS

Factor 2: Includes 4 observed variables: DC1, DC2, DC3, and DC4. This factor is labeled as Empathy and denoted as DC (Table 3). These variables reflect the bank's capacity to understand and care about student concerns. For example, DC1 and DC2 assess whether staff take the time to understand student issues, while DC3 and DC4 evaluate whether communication is done clearly and respectfully. This factor highlights the importance of personal attention and respectful interaction in shaping service satisfaction.

Factor 3: Includes 4 observed variables: NL1, NL2, NL3, and NL4. This factor is labeled as Assurance and denoted as NL (Table 3). The observed variables measure the bank's ability to inspire confidence and ensure transaction safety. NL1

refers to trust in the tuition fee process, NL2 and NL3 relate to knowledge and professionalism of the staff, and NL4 reflects the perceived safety of financial transactions. These aspects contribute to the perception that the service is secure and trustworthy.

Factor 4: Includes 5 observed variables: TC1, TC2, TC3, TC4, and TC5. This factor is labeled as Reliability and denoted as TC (Table 3). These variables emphasize the consistency and dependability of the service. For instance, TC1–TC3 assess the bank's ability to provide services as promised and accurately, while TC4 and TC5 measure whether errors are minimized and resolved appropriately. The presence of reliability fosters long-term student confidence in using the service.

Factor 5: Includes 5 observed variables:

HH1, HH2, HH3, HH4, and HH5. This factor is labeled as Tangibles and denoted as HH (Table 3). The variables focus on the physical facilities, equipment, and appearance of personnel. For example, HH1–HH3 assesses the modernity and cleanliness of the counter area, while HH4 and HH5 evaluate the professionalism in staff appearance and clarity of guidance provided. These elements represent the visual and physical components of service quality.

4.2.2. Results of EFA analysis for the satisfaction variable

The KMO coefficient in the analysis is $0.774 > 0.5$, indicating that the factor analysis results are appropriate.

The Bartlett's Test has a Sig. coefficient of $0.000 < 0.05$, which shows that the factor analysis results meet the statistical significance level.

The Eigenvalue of the satisfaction factor is $2.896 > 1$, and the extracted variance is 57.132% $> 50\%$. Therefore, the extracted variance meets the required criteria.

Table 4: *Results of EFA analysis for the satisfaction variable*

Observed variable	Factor 1
SHL1	0.793
SHL2	0.781
SHL3	0.754
SHL4	0.723
SHL5	0.677

The results of data analysis using SPSS

The results of the EFA analysis for the dependent variable "satisfaction" show that the factor loading coefficients of the observed variables all meet the condition for factor analysis, which is a Factor Loading > 0.5. The

factor analysis resulted in 1 factor, and no observed variables were excluded (Table 4).

4.3. Correlation Analysis Results

The Pearson Correlation Coefficient (r) is used to examine the relationship between variables. The absolute value of r indicates the strength of the linear relationship (r ranges from -1 to 1).

If the absolute value of r is greater than 0.6 and approaches 1, it indicates a strong linear correlation between the variables. If it is less than 0.3, it suggests a weak correlation (Hoang Trong & Chu Nguyen Mong Ngoc, 2005).

In examining the correlation between the dependent variable Customer Satisfaction (SHL) and the five independent variables, the results of the Pearson correlation analysis indicate that all independent variables are positively and significantly correlated with SHL. Specifically, the correlation coefficients are as follows: Responsiveness (DU) has the highest correlation with SHL (r = 0.712), followed by Empathy (DC) (r = 0.735), Assurance (NL) (r = 0.603), Reliability (TC) (r = 0.526), and Tangibles (HH) (r = 0.471) (Table 5).

All of these relationships are statistically significant at the 0.01 level (Sig. < 0.01), indicating a strong linear association between each independent variable and customer satisfaction. These findings support the assumption that improvements across all five service quality dimensions are associated with increased levels of student satisfaction with the tuition fee collection service at Vietcombank.

Table 5: *Correlation analysis*

		SHL	HH	TC	DU	NL	DC
Pearson Correlation	SHL	1.000	0.471	0.526	0.712	0.603	0.735
	HH	0.471	1.000	0.394	0.336	0.319	0.412
	TC	0.526	0.394	1.000	0.485	0.472	0.508
	DU	0.712	0.336	0.485	1.000	0.593	0.624
	NL	0.603	0.319	0.472	0.593	1.000	0.548
	DC	0.735	0.412	0.508	0.624	0.548	1.000

The results of data analysis using SPSS

4.4. Regression Analysis Results

After completing the factor analysis and evaluating the reliability of the new measurement scale, the research model and measurement scale were adjusted to include 05 independent factors: HH (Tangibles), DC (Empathy), DU (Responsiveness), NL (Assurance), (TC) Reliability and 1 dependent factor, customer

satisfaction (SHL). The model fit test results were analyzed using multiple regression with the Enter method in SPSS to determine the specific weights of each factor's impact on customer satisfaction. The values of the factors were used to run the regression, and the regression analysis was performed using the overall regression method for all variables. Assuming that all service quality

components affect satisfaction, we have the following linear regression equation:

Linear regression equation (unstandardized form):

$$SHL = \beta_0 + \beta_1 HH + \beta_2 DC + \beta_3 DU + \beta_4 TC + \beta_5 NL + \varepsilon$$

Where:

HH: Tangibles
DC: Empathy
DU: Responsiveness
NL: Assurance
TC: Reliability
β: Standardized Beta coefficient

Table 6: R Coefficient

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	0.826[a]	0.682	0.672	0.36924	1.812

The results of data analysis using SPSS

The research results show that the R^2 coefficient is 0.682 and the adjusted R^2 coefficient is 0.672. The adjusted R^2 is smaller than R^2, so the adjusted R^2 will be used to more accurately reflect the goodness of fit of the multiple linear regression model. The adjusted R^2 does not necessarily increase when more variables are added to the model; it is a fit measure used for multiple linear regression situations because it does not rely on the inflation bias of R^2 (Table 6).

Therefore, using the adjusted R^2 coefficient to assess the model's goodness of fit is safer, proving that the regression model is appropriate for explaining the factors HH, DC, DU, NL and TC. The significance of the adjusted R^2 coefficient is that 67.2% of the variation in the satisfaction of students at the University of An Giang (ĐHAG) is explained by the five independent variables presented in the model. Additionally, the adjusted R^2 also explains the impact of the tangible factors, trust, and empathy on customer satisfaction.

Table 7: Regression analysis

Model	Observed variable	β	Standard error	Standardized β	t	Sig.	VIF
1	Cont	0.382	0.112		3.411	0.001	
	HH	0.092	0.039	0.084	2.359	0.020	1.402
	TC	0.138	0.048	0.126	2.851	0.004	1.483
	DU	0.396	0.055	0.388	7.200	0.000	2.215
	NL	0.174	0.053	0.162	3.283	0.001	1.957
	DC	0.334	0.049	0.347	6.816	0.000	2.076

The results of data analysis using SPSS

The results also show that the linear relationship between the factors and customer satisfaction is statistically significant (Sig. < 0.05) (Table 7). The regression equation reflects the relationship between the dependent variable 'Customer Satisfaction' and the five independent variables explained through the standardized regression equation as follows:

$$SHL = 0.388DU + 0.347DC + 0.162NL + 0.126TC + 0.084HH$$

Responsiveness (DU) – β = 0.388

This factor has the highest standardized coefficient, indicating that responsiveness is the most influential variable on student satisfaction. This reflects the importance of promptness, willingness to help, and readiness of staff to provide services. When students perceive the service as quick and responsive to their needs, their satisfaction increases significantly. This aligns with the SERVQUAL model, which identifies responsiveness as a core dimension of perceived service quality.

Empathy (DC) – β = 0.347

Empathy ranks second in terms of influence, showing that personalized attention, understanding of customer needs, and friendly attitude greatly contribute to satisfaction. In the context of tuition payments, where students may have diverse needs and concerns, empathetic service increases the feeling of being valued and respected.

Assurance (NL) – β = 0.162

Although it has a moderate impact, assurance—which involves competence, courtesy, and the ability to inspire trust and confidence—still plays an important role. Students are more satisfied when they feel that

bank employees are professional, knowledgeable, and trustworthy during transactions involving their tuition fees.

Reliability (TC) – β = 0.126

Reliability refers to the ability to perform promised services dependably and accurately. This includes correctly processing transactions and meeting deadlines. While important, its effect is less than that of responsiveness and empathy, perhaps because students may prioritize speed and support more than precision in this specific service context.

Tangibles (HH) – β = 0.084

Tangibles have the least impact on satisfaction. Although the physical facilities, equipment, and appearance of staff are noticeable, they do not significantly affect the overall satisfaction in this case. Students likely consider service performance and interaction quality more important than visual aspects when evaluating a service like tuition payment.

The regression model reveals that all five dimensions of service quality positively influence student satisfaction, but with varying degrees of impact. Responsiveness and empathy are key drivers, suggesting that improving customer interaction and support will yield the highest returns in satisfaction. Tangibles, while still relevant, should be considered a secondary priority in service improvement initiatives.

This model serves as an evidence-based framework for service quality enhancement and provides strategic guidance for Vietcombank to optimize its tuition fee collection service, particularly when serving student customers at An Giang University.

5. Conclusion and recommendations
5.1. Conclusion

This study aims to examine the factors influencing student satisfaction with the quality of tuition fee collection services provided by Vietcombank at An Giang University. The research framework is grounded in the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988), which identifies five core dimensions of perceived service quality: Tangibles (HH), Empathy (DC), Assurance (NL), Reliability (TC), and Responsiveness (DU). These dimensions were operationalized as independent variables, while Student Satisfaction (SHL) served as the dependent variable.

To validate the measurement constructs, the study employed Cronbach's Alpha for internal consistency testing, followed by three rounds of Exploratory Factor Analysis (EFA). As a result, all five dimensions were retained, indicating the appropriateness of the SERVQUAL model in this specific context. Correlation analysis further confirmed statistically significant relationships ($p < 0.05$) between each independent factor and the dependent variable, suggesting that all five service quality dimensions positively contribute to student satisfaction.

The final multiple regression model is expressed as:

$$SHL = 0.388DU + 0.347DC + 0.162NL + 0.126TC + 0.084HH$$

This equation reveals the relative impact of each factor, with Responsiveness (β = 0.388) and Empathy (β = 0.347) exerting the strongest influence on student satisfaction, followed by Assurance, Reliability, and finally Tangibles. These findings underscore the critical role of interpersonal service quality—particularly the speed of service and the ability to understand and respond to students' individual needs—in shaping satisfaction levels in the context of tuition payment services.

The results of this study are consistent with prior research by Cronin and Taylor (1992), and Zeithaml and Bitner (2000), which emphasized the centrality of service quality perceptions—especially responsiveness and empathy—in determining customer satisfaction. Furthermore, the relatively lower impact of Tangibles aligns with the work of Yüksel and Yüksel (2001), who found that while physical attributes are relevant, they are often secondary to service performance in educational service contexts.

This study provides practical implications for Vietcombank, particularly in designing strategies to improve customer satisfaction with tuition payment services. Enhancing responsiveness and empathy should be prioritized, while improvements in tangibles—such as the transaction environment and staff appearance—can serve as complementary measures.

Future research could extend this study by applying the same model across different universities to compare student satisfaction levels and assess whether service quality perceptions vary by institutional context or regional differences.

Additionally, future studies could incorporate qualitative methods to gain deeper insights into student expectations and experiences, thereby enriching the understanding of customer satisfaction in the education–banking interface.

5.2. Recommendations

Responsiveness ($\beta = 0.388$) is the strongest factor influencing student satisfaction, showing that students value timely and efficient service. Vietcombank should continue building a professional, well-trained team, clearly assign tasks to optimize workflow, and ensure adequate staffing during peak tuition periods.

Empathy ($\beta = 0.347$) ranks second, reflecting students' appreciation for understanding and personalized service. The bank can improve this by creating a supportive work environment, prioritizing both customer and employee feedback, fostering long-term customer relationships, and offering policies that motivate staff.

Assurance ($\beta = 0.162$) indicates moderate satisfaction with staff competence and transaction safety. Vietcombank should enhance training, standardize procedures, display service commitments, and promote professionalism through performance monitoring and reward systems.

Reliability ($\beta = 0.126$) shows the importance of accurate, dependable service. The bank should implement real-time verification, improve process consistency, provide clear payment instructions, and establish protocols for resolving issues promptly.

Tangibles ($\beta = 0.084$) have the least impact but remain relevant. Vietcombank should maintain modern, comfortable facilities and consider offering early payment incentives or small rewards to improve the overall customer experience.

Limitations and Future research directions

This study has several limitations. First, the data was collected only from students at An Giang University, limiting the generalizability of the findings to other institutions. Second, the study focused solely on the traditional in-person payment method at Vietcombank counters, excluding online or mobile payment services. Third, the research relied entirely on quantitative methods, which may not fully capture the depth of student experiences and perceptions.

Future studies should expand the sample to include students from other universities across different regions for broader applicability. In addition, comparative analysis between traditional and digital payment channels should be conducted to reflect changing service preferences. Incorporating qualitative methods, such as interviews or focus groups, can also provide deeper insights into customer expectations and service experiences.

Competing interests

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. Journal of marketing, 56(3), 55-68.

Hoàng Trọng và Chu Nguyễn Mộng Ngọc. (2008). *Phân tích dữ liệu nghiên cứu với SPSS Tập 2*. Hồ Chí Minh: Nhà xuất bản Hồng Đức.

Kim, N. T. T. L. P., & Hoàng, P. (2011). Nâng cao sự hài lòng của khách hàng sử dụng dịch vụ tại Ngân hàng Nông nghiệp và Phát triển nông thôn Việt Nam-chi nhánh tỉnh Bình Dương. Luận văn thạc sĩ, Trường Đại học Kinh tế Tp. Hồ Chí Minh).

Nguyễn Đình Thọ. (2011). *Phương pháp nghiên cứu khoa học trong kinh doanh: Thiết kế và thực hiện*. Hà Nội: Nhà xuất bản Lao động – Xã hội.

Parasuraman, A., Zeithanml, V.A. & Berry L.L. (1988). SERVQUAL: A multiple item Scale for measuring consumer perception of service quality. Journal of Retailing, 12-40.

Parasuraman, Valarie A. Zeithaml & Leonard L Berry. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, Vol.64, 01.

Phạm Thị Liên (2016), Chất lượng dịch vụ đào tạo và sự hài lòng của người học Trường hợp Trường Đại học Kinh tế, Đại học Quốc gia Hà Nội. Tạp chí Khoa học ĐHQGHN: Kinh tế và Kinh doanh, Tập 32, Số 4 (2016) 81-89,

Philip Kotler, 2001. Quản trị Marketing. Nhà xuất bản Thống kê, Hà Nội.

Pham, L., Limbu, Y. B., Le, M. T. T., & Nguyen, N. L. (2023). E-government service quality, perceived value, satisfaction, and loyalty: evidence from a newly emerging country. Journal of Public Policy, 43(4), 812-833.

Richard L. Oliver (1993) - Cognitive, Affective, and Attribute Bases of the Satisfaction Response

Vietcombank (2024) Website chính thức của Vietcombank. https://www.vietcombank.com.vn/vi-VN/Ve-Vietcombank.

Weng, J. R., Tsai, C. H., Kulp, S. K., & Chen, C. S. (2008). Indole-3-carbinol as a chemopreventive and anti-cancer agent. Cancer letters, 262(2), 153-163.

Yang, Z. & Peterson, R.T. (2004), 'Customer perceived value, satisfaction, and loyalty: The role of switching costs', *Psychology & Marketing*, 21, 799-822.

Yüksel, A., & Yüksel, F. (2001). The expectancy-disconfirmation paradigm: a critique. Journal of hospitality & tourism research, 25(2), 107-131.

Zeithaml., V.A & Bitner., M.J. (2000). Services Marketing: Integrating Customer Focus Across the Firm. *Irwin McGraw-Hill*.

Zeithaml., V.A, Parasuraman., A, and Malhorta (2002). An empirical examination of the service quality-value-loyalty chain in an electronic channel. U*niversity of North Carolina*.

Zeithamp & Britner. (2000). Technology's Impact on the Gaps Model of Service Quality. *Handbook of Service Science.*

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