

# FACTORS INFLUENCING SERVICE QUALITY ON CUSTOMER SATISFACTION AT THE SCHOOL SPORTS CLUB IN PHU NHUAN DISTRICT, HO CHI MINH CITY

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## Summary

This study employs regression analysis and Pearson correlation coefficient testing to identify the SERVQUAL model and five key factors influencing service quality and customer satisfaction at the School Sports Club in Phu Nhuan District. The identified factors include reliability, responsiveness, assurance, empathy, and Tangibility. Among these, "tangibility" emerged as the most significant determinant, while "empathy" was identified as the least influential factor affecting customer satisfaction.

**Keywords:** Service quality, customer satisfaction, influencing factors.

## INTRODUCTION

In recent years, Ho Chi Minh City, particularly Phu Nhuan District, has witnessed a proliferation of enterprises offering sports products and services characterized by substantial scale, high quality, and diverse activities supported by modern facilities. To achieve a competitive advantage in this dynamic market, fostering robust customer relationships and enhancing service quality is imperative rather than solely focusing on product offerings. A plethora of domestic and international studies have investigated the relationship between service quality and customer satisfaction in the context of sports services. Noteworthy among these are the works of Yanni Thamnopoulos, George Tzetzis, and Sakis Laios, (2012) [4]. Phạm Xuân Trường (2017). However, existing studies lack a comprehensive examination of the specific service quality factors that impact customer satisfaction in this context. Therefore, this study of the factors influencing service quality and customer satisfaction at the School Sports Club in Phu Nhuan District is necessary to adapt to the increasingly sophisticated demands of customers engaging in activities and training at the club.

## RESEARCH METHODS

This research employs those methods:

document review, expert interviews, sampling techniques, and statistical analysis methods (descriptive statistics, Cronbach's Alpha analysis, exploratory factor analysis, correlation analysis, and regression analysis).

## RESULTS AND DISCUSSION

### 1. Establishing the Service Quality Assessment Model at the Phu Nhuan District School Sports Club

#### 1.1. Establishing the Service Quality Assessment Model at the Phu Nhuan District School Sports Club.

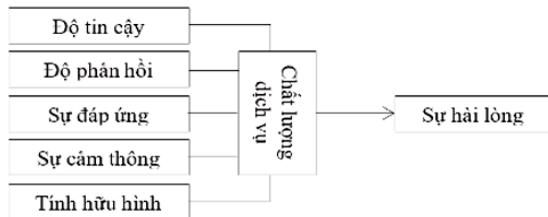
In the field of service quality assessment and customer satisfaction within sports services, numerous models have been developed. Among them, the SERVPERF model proposed by Cronin & Taylor (1992) stands out as a significant framework. The SERVPERF scale identifies five dimensions of service quality: Reliability (REL), Responsiveness (RES), Assurance (ASS), Empathy (EMP), and Tangibility (TAN) with 22 observed variables that measure the aforementioned dimensions. Through the analysis of internal reliability using Cronbach's Alpha, along with variable correlation coefficients and Exploratory Factor Analysis (EFA), this study has validated the reliability of the scale. The analyses ensured both convergent and discriminant validity, thus

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confirming the appropriateness of the SERVPERF model for evaluating service quality and customer satisfaction.

Consequently, the SERVPERF model has been chosen as the foundational basis for this research. The proposed research model is outlined as follows:



**Figure 1. Model of service quality and satisfaction of the School Sports Club in Phu Nhuan District**

**1.2. Evaluation of Model Appropriateness**  
 In this model, the R-value is 0.759, indicating a high level of appropriateness. The adjusted R<sup>2</sup> value is 0.571, which is lower than the R<sup>2</sup> value (see Table 1). This suggests that using the adjusted R<sup>2</sup> is more prudent, as it doesn't exaggerate the model's appropriateness level. Consequently, the appropriateness of the model is considered acceptable. However, to determine whether the model can be generalized to the broader population, it is necessary to test its overall appropriateness through an F-test.

**2. Identifying Factors Affecting Service Quality on Customer Satisfaction at the School Sports Club in Phu Nhuan District**

To identify the factors affecting service

**Table 1. Summary of the Regression Model**

Model	R	R <sup>2</sup>	R <sup>2</sup> adjusted	Standard Error of Estimate	Durbin-Watson
1	.759 <sup>a</sup>	0.577	0.571	0.42362	1.792

**Table 2. Model Appropriateness Assessment**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.204	5	18.441	102.76	0.000
	Residual	67.655	377	0.179		
	Total	159.859	382			

**Table 3. Correlation Matrix of Model Factors**

		REL	ASS	RES	EMP	TAN	SAT
REL	Pearson correlation	1.000	.479**	.377**	.460**	.278**	.484**
	significance level		0.000	0.000	0.000	0.000	0.000
ASS	Pearson correlation	.479**	1.000	.438**	.453**	.383**	.539**
	significance level	0.000		0.000	0.000	0.000	0.000
RES	Pearson correlation	.377**	.438**	1.000	.382**	.358**	.557**
	significance level	0.000	0.000		0.000	0.000	0.000
EMP	Pearson correlation	.460**	.453**	.382**	1.000	.348**	.495**
	significance level	0.000	0.000	0.000		0.000	0.000
TAN	Pearson correlation	.278**	.383**	.358**	.348**	1.000	.594**
	significance level	0.000	0.000	0.000	0.000		0.000
SAT	Pearson correlation	.484**	.539**	.557**	.495**	.594**	1.000
	significance level	0.000	0.000	0.000	0.000	0.000	

quality and customer satisfaction at the School Sports Club in Phu Nhuan District, the study performed Pearson correlation analysis to quantify the strength of relationships. The results of the correlation analysis are presented in Table 3:

The results in Table 3 demonstrate that there are statistically significant correlations between the dependent variable "Satisfaction" and the independent variables at the 5% level of significance ( $p < 0.05$ ). The independent variables have a positive correlation with the dependent variable (correlation coefficients are greater than 0.4 and less than 0.6). The variable "Tangibility" has the strongest correlation with satisfaction ( $r = 0.594$ ). Therefore, these variables can be included in the model to explain the dependent variable "Satisfaction."

**2.1. Testing the Theoretical Model and Research Hypotheses**

*2.1.1. Development of the Regression Model*

The linear regression equation that represents the relationship between the five influencing factors (independent variables) and satisfaction

is structured as follows:  $Y = 0 + 1*REL + 2*ASS + 3*RES + 4*EMP + 5*TAN$  (1)

*2.1.2. Testing for Regression Assumption Violations*

The study performed the following steps to test the assumptions: the assumption of linear relationships, the assumption of no correlation between residuals, the assumption of normally distributed residuals, and multicollinearity. The results indicate that the assumption of a linear relationship is satisfied; the null hypothesis of no first-order autocorrelation in the model is accepted; the multiple linear regression model meets all assumptions, including the absence of multicollinearity, meaning the relationships between the independent variables do not affect the model's explanatory power.

*2.1.3. Regression Results*

To test the appropriateness of the five service quality factors influencing customer satisfaction at the club, a multiple linear regression model using the Enter method was employed. The results of the multiple regression analysis are presented in Table 4.

**Table 4. Regression Analysis Results**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Multicollinearity Test	
		B	Std. Error	Beta			Tolerance	VIF
1.000	Constant	0.165	0.176		0.938	0.349		
	REL	0.156	0.041	0.153	3.763	0.000	0.679	1.472
	ASS	0.156	0.041	0.160	3.802	0.000	0.631	1.584
	RES	0.243	0.038	0.252	6.391	0.000	0.723	1.384
	EMP	0.131	0.040	0.133	3.270	0.001	0.679	1.472
	TAN	0.288	0.031	0.354	9.352	0.000	0.785	1.274

The regression analysis results shown in Table 4 indicate that all standardized regression coefficients in the regression equation are non-zero and have a significance value ( $Sig.$ )  $< 0.05$ . This confirms that all five independent variables significantly influence customer satisfaction at the club: Reliability (REL), Assurance (ASS), Responsiveness (RES), Empathy (EMP), and Tangibility (TAN). According to Nguyễn Đình

Thọ (2011), using unstandardized coefficients may not allow for an accurate comparison of the impacts of independent variables, as their measurement scales may differ. Therefore, we must use the standardized regression coefficient  $\beta$  to make more precise comparisons. By comparing the values of the standardized coefficients in the Beta column, it is evident that Tangibility ( $\beta = 0.354$ ,  $sig. = 0.000$ ) has the

strongest impact, followed by Responsiveness ( $\beta = 0.252$ , sig. = 0.000), while Empathy ( $\beta = 0.133$ , sig. = 0.001) has the weakest effect.

The regression equation for the model, based on the standardized coefficients  $\beta$ , is as follows:

$$Y = 0.165 + 0.153*REL + 0.160*ASS +$$

$$0.252*RES + 0.133*EMP + 0.354*TAN \quad (1).$$

### 2.2. Results of Hypothesis Testing

Based on the  $\beta$  coefficients and significance values (sig.) from the regression analysis (Table 4), we conducted hypothesis testing for the research hypotheses (see Table 5).

**Table 5. Hypothesis Testing Results**

Hypothesis	Statement	Standardized Beta Coefficient	p-value	Conclusion
H1	Reliability has a positive impact on customer satisfaction at the Phú Nhuận School Sports Club	0.153	0	Accepted
H2	Assurance has a positive impact on customer satisfaction at the Phú Nhuận School Sports Club	0.16	0	Accepted
H3	Responsiveness has a positive impact on customer satisfaction at the Phú Nhuận School Sports Club	0.252	0	Accepted
H4	Empathy has a positive impact on customer satisfaction at the Phú Nhuận School Sports Club	0.133	0.001	Accepted
H5	Tangibility has a positive impact on customer satisfaction at the Phú Nhuận School Sports Club	0.354	0	Accepted

The results in Table 5 demonstrate that hypotheses H1, H2, H3, H4, and H5 positively impact customer satisfaction at the Phú Nhuận School Sports Club. All of the hypotheses are supported, as the standardized regression coefficients have sig. ( $\beta_1$ ) = 0.000 < 0.05. This confirms that all five service quality factors—reliability, assurance, responsiveness, empathy, and tangibility—affect customer satisfaction. Among these, tangibility has the strongest effect ( $\beta = 0.354$ , sig. = 0.000), followed by responsiveness ( $\beta = 0.252$ , sig. = 0.000), and empathy has the weakest effect ( $\beta = 0.133$ , sig. = 0.001).

### CONCLUSION

Through a comprehensive review of the theoretical foundations and the use of various testing and analytical methods, the study has identified that the service quality evaluation model applied to the School Sports Club in Phu Nhuan district is the SERVPERF model. The hypothesis testing results have determined five

factors of service quality that influence customer satisfaction at the club, including reliability, assurance, responsiveness, empathy, and tangibility. Of these, tangibility has the greatest influence, while empathy has the least.

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