

# Factors Affecting Student Satisfaction With The Quality of Training Services of The University of Economics, Vietnam National University, Hanoi (VNU)

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## Abstract:

This article studies the factors affecting the level of student satisfaction with the quality of training services at the University of Economics, VNU. The authors used the survey method through questionnaires, collected primary data and included it in a multivariate regression model for analysis and evaluation. Research results show that there are five factors that affect student satisfaction including: Lecturers, facilities, training programs, non-academic factors, and reputation. Among these factors, reputation is the factor that has the strongest impact on student satisfaction, followed by the group of lecturer factors, non-academic factors and training programs, and the remaining impact is facilities. at least. The authors propose a number of solutions to improve the quality of university training.

**Keywords:** *Satisfaction, quality of education, training services*

## 1. Introduction

Training quality is always a top priority for educational institutions, especially higher education and training because it has a direct impact on a country's high-quality human resources. The quality of university training services directly affects students' ability to find jobs and career success. Quality university training services also provide students with a favorable learning environment, equipping them with the necessary knowledge, skills, and attitudes so that students can discover their potential, Ready to become a core member of the high-quality human resources team, participating in serving the country. There are many different perspectives and methods to evaluate the quality of a university's training services, but in general, they all boil down to one scale with the main goal of satisfying the needs of customers and partners, here We are mainly referring to students. Understanding the relationship between the quality of the higher education system and student satisfaction can help institutions identify areas for improvement and make appropriate adjustments in the products offered. out to serve students.

By collecting feedback from students and analyzing their satisfaction levels, universities can make data-driven decisions to improve the quality of education and support services. Research on training service quality helps identify factors that affect training service quality and provide solutions to improve training service quality, helping to ensure that training services of Educational institutions provide and meet the requirements and needs of students as well as the labor market. Student satisfaction plays an important role because students are a factor that represents the training success of an educational institution.

Analyzing student feedback and adapting curriculum, teaching methods, and support services to student expectations will foster a rich learning environment that leads to success for both. side. Therefore,

we conducted research on factors affecting the level of student satisfaction with the quality of undergraduate training services at the University of Economics, VNU. Research results on training service quality help educational institutions have clearer information to orient and adjust the training services they are providing, thereby helping to increase student satisfaction and bring benefits. benefits for many stakeholders.

## **2. Literature Review and Theoretical Framework**

In the current era, education is not simply considered a means of conveying knowledge but has gradually become a professional service provided by educational organizations and institutions. “Quality of education” is the characteristic of the inputs, processes and outputs of an education system that satisfy both internal and external stakeholders by meeting their explicit and implicit expectations. The service quality of education is the exclusivity of the experiences that students engage in as part of their comprehensive human development (Abu et al., 2017). There are many different views when discussing the concept of satisfaction. Researchers have not proposed or agreed on a specific concept for satisfaction with quality training services. However, there is a consensus regarding students as the primary customers of higher education institutions where service activities are central (Abili, K., et al.2012). Student satisfaction is essential to consider strategies that can be used to attract and retain students for future programs (Yuyun Elizabeth Patras and Rais Hidayat 2020). Therefore, higher education institutions can use student satisfaction as a measure to evaluate the effectiveness of the quality of services provided. Currently, there are many different views on the relationship between training service quality and student satisfaction. Students' perception of quality may be the result of comparing formed expectations. before and when receiving and experiencing reality (Bruce Mwiya et al. 2017). And there is also research that suggests that these two concepts cannot be combined, but that they are separate and at the same time closely related. The quality of training services is created first and determines student satisfaction.

Today there are many studies related to factors affecting student satisfaction and the quality of training services. Nguyen Thi Xuan Huong and colleagues (2016) pointed out 5 groups of factors affecting student satisfaction, arranged in descending order of influence: Facilities factors, Trust factors in the School's commitments, Factors of meeting the School's requirements, Factors of service capacity and Factors of attention to students' needs. In addition, Nguyen Hoang Viet and Vu Tuan Duong (2021) researched the impact of educational service quality on student satisfaction at public universities in Economics and Business Administration through Qualitative and quantitative research with the SEM model has shown that except for the business interaction factor, all service quality factors have a positive influence on student satisfaction. Authors team Ha Nam Khanh Giao and Ngo Thanh Tien (2021) Using multiple regression model, the results show that groups of factors have an impact in the same direction for student satisfaction, in which the group of factors related to the teaching staff has the greatest influence on the level of satisfaction, followed by the factors Facilities and Ability to fulfill commitments. , the interest of the School. Ao Thu Hoai and colleagues (2020) using the linear structural model SEM showed that the analysis results have four main groups of factors that reflect students' perceptions of the quality of training services, including: non-factors. academics, academic factors, facilities and training programs. The research article by author Nguyen Ngoc Giau and colleagues (2023) identified 5 groups of independent factors affecting student satisfaction with the quality of accounting training and arranged them according to the level of decreasing influence. Gradually: Interaction between schools and businesses, training programs, teaching staff, facilities. Author Vo Van Viet uses a multivariate regression model to study student satisfaction with the quality of the school's training services and points out four influencing factors in order of importance from high to low: Additional services, training programs, instructors and extracurricular activities.

Through the process of reviewing the research situation, the authors found that studies on factors affecting student satisfaction all use primary data collection methods and quantitative methods such as models. Multivariate regression, SEM model, etc. The determination of influencing factors is based on the theoretical basis of the above models. Therefore, the article will present analysis and assessment of the level of factors affecting student satisfaction using multivariate regression models.

### 3. Research Methodology and Model

Based on the research overview and actual research capabilities, the authors chose a model to research factors affecting satisfaction with the quality of training services at the University of Economics, VNU, including 5 Group of factors, regression model has the form:

$$HL = \beta_0 + \beta_1*GV + \beta_2*CSVC + \beta_3*CT\Delta T + \beta_4*PHT + \beta_5*DT$$

In which: HL: Satisfaction; Teachers: Teaching staff (Academic factors); CSVC: facilities; Curriculum: training program; PHT: Non-academic factors; DT: Reputation factor;  $\beta_i$ : Regression coefficient of variables (with  $i=1\div 5$ ).

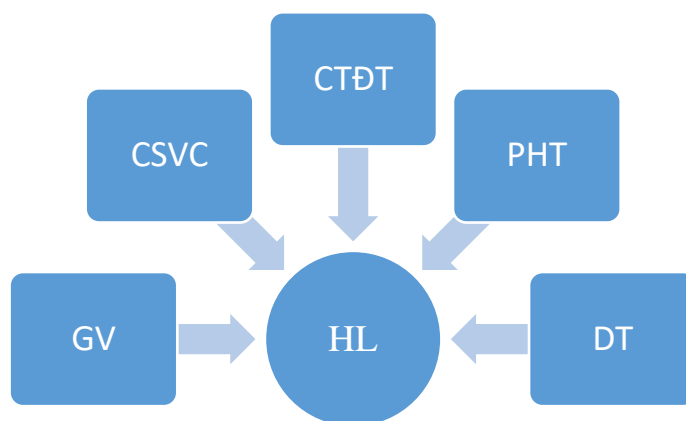


Figure 1. Actual research model (Source: Compiled and developed by the authors)

After building the model, create a survey table with 23 observed variables, each variable is rated on a Likert scale from 1 to 5. In which: 1= completely disagree/completely dissatisfied, 2= disagree/dissatisfied, 3=undecided/neutral, 4=agree/satisfied, 5=completely agree/completely satisfied. The authors used the survey method via questionnaire with 150 students of the University of Economics, VNU. After collecting 150 samples, the data were coded, cleaned and processed on IBM SPSS 23.0 software. Check the quality of the scale using Cronbach Alpha coefficient, EFA exploratory factor analysis and multiple regression analysis with a statistical significance level of 5%. From the above steps, identify the main groups of factors affecting student satisfaction with the quality of school training services. The results of this analysis can serve as a basis for proposing solutions to improve the quality of training services, thereby increasing student satisfaction. At the same time, perform T-test and ANOVA analysis to evaluate the satisfaction of different student groups.

The proposed research hypothesis is:

H01: The better the quality of the teaching staff, the higher the level of student satisfaction.

H02: The better the facilities, the higher the level of student satisfaction.

H03: The better and more specialized the training program, the higher the level of student satisfaction.

H04: Non-academic factors have the same impact on student satisfaction.

H05: The better the reputation, the higher the level of student satisfaction.

### 4. Regression Model Testing and Discussion of Results

Check the quality of the scale using the Cronbach Alpha coefficient: Cronbach's Alpha coefficient reflects the level of close correlation between observed variables in the same factor. It shows which of the observed variables of a factor contribute to the measurement of the factor concept and which other variables do not. The requirement for a scale to be accepted is to eliminate variables with a corrected item-total correlation

coefficient less than 0.3 and a Cronbach's Alpha coefficient of the factor group less than 0.6 (Nguyen Dinh Tho, 2011).

**Table 1. Summary of results of analysis of scale quality using Cronbach's Alpha coefficient**

No.	Variable group	Number of variables	Cronbach's Alpha
1	Teaching staff	5	0.890
2	Infrastructure	4	0.867
3	Education program	5	0.851
4	Non-academic factors	4	0.884
5	Reputation	4	0.770

Through the results of testing the quality of the scale in table 9 above, it shows that the Cronbach's Alpha coefficient of all factor groups is greater than 0.6. Thus, the model still retains 5 scales with 22 observed variables included in EFA exploratory factor analysis.

Results of EFA exploratory factor analysis: The EFA factor analysis method is used to reduce a set of k observed variables into a set F ( $F < k$ ) of more meaningful factors. The basis of this reduction is based on the linear relationship of factors with observed variables.

**Table 2. KMO and Bartlett's test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.811
Bartlett's Test of Sphericity	Sig.	0.000
Percentage of variance		72,115 %

In table 10, the coefficient  $KMO=0.811$  satisfies the condition for exploratory factor analysis to be appropriate for real data. The Bartlett test has a statistical significance level of  $Sig.=0.000 < 0.05$ , so the observed variables in the representative scale are correlated with each other. Cumulative frequency = 72.115% means that the 5 extracted factors explain 72.115% of the data variation of the 22 observed variables participating in EFA.

*Multivariate regression analysis*

**Table 3. Summary of analysis results**

Independent variables	Unstandardized regression coefficient (B)	t value	Statistical significance level (P-value)	VIF	Standardized regression coefficient (Beta)	Absolute value of Beta	Contribution level of variables (%)	Importance of variables

Constant	3.553	92.750	0.000					
GV	0.198	5.145	0.000	1.00 0	0.250	0.250	16.961	2
CTDT	0.183	4.763	0.000	1.00 0	0.232	0.232	15.739	4
PHT	0.197	5.136	0.000	1.00 0	0.250	0.250	16.961	3
CSVC	0.040	1.051	0.295	1.00 0	0.051	0.051	3.460	5
DT	0.546	14.217	0.000	1.00 0	0.691	0.691	46,879	1
Total						1.474	100	
Dependent variable: HL-Student satisfaction								
Observation sample capacity: 150								
F 55,752*** (***)level of significance <0.01)								
R2 coefficient: 0.659								
Adjusted R2 coefficient: 0.648								
Durbin Watson 2,379								

With significance level Sig. < 0.01 of the F test can see that the regression model always exists with a 99% confidence level. The statistical significance column (Sig. column) in Table 12 shows that the variables from Teacher, Training Program, PHT, and DT all have a statistical significance level <0.05, the CSVC factor variable has Sig. =0.295. Thus, all factors except the facilities variable have a significant impact on student satisfaction with the training services of the University of Economics, VNU, with a reliability of 95%. The components of Training Program, Lecturers, Non-Academic Factors, and Reputation are all significant in the model and have the same impact on student satisfaction. Through the results of regression analysis, we have the regression equation:

$$HL = 3.553 + DT*0.546 + GV* 0.198 + PHT *0.197 + CTDT* 0.183 + \varepsilon$$

Based on the model summary table, the adjusted R2 coefficient is 0.648, so the independent variables explain 64.8% of the variation in the dependent variable. The remaining 35.2% is explained by variables outside the model and random errors. The variance inflation factor (VIF) is all less than 10, so the regression model does not have multicollinearity. Durbin Watson coefficient (1<d=2,379<3), shows that the regression model has no autocorrelation phenomenon. Looking at the Histogram chart, we see that the regression model does not have the phenomenon of error variance changing because the distribution of the residuals belongs to the normal distribution.

## 5. Conclusion

Researching the factors affecting student satisfaction with the quality of training services at the University of Economics, VNU, Hanoi is necessary because of the increasing competition between educational institutions and factors such as: Student satisfaction plays an important role in enhancing the reputation and position of the school. The study has shown 5 groups of factors that mainly affect student satisfaction and based on the results of multivariate regression analysis, conclusions about the influence of these factors are drawn, respectively: Reputation, Teaching staff, Non-academic factors, training program. Among them, the Reputation factor has the most impact on student satisfaction. In contrast, facilities factors do not explain the level of student satisfaction.

Based on the influencing factors, it can be seen that to improve the level of student satisfaction, it is necessary to focus most on the school's reputation factor: Encourage and support lecturers and students to participate in activities. research and contribute knowledge. Excellent articles, books and research enhance the school's reputation in the academic community and earn respect from the wider social community. Build strong partnerships with businesses and organizations in the community. Collaborative programs, joint research projects and internship opportunities expose students to industry realities and help the school build its reputation as a training center with close links to business. . Strengthen promotional and marketing activities to introduce the school to the public. Use media, websites, social networks, videos, and events to highlight the school's strengths and features.

Second, besides the reputation factor, the quality of the school's teaching staff also accounts for an important percentage, affecting the level of student satisfaction. Lecturers need to continuously adjust and improve teaching methods to suit the characteristics and goals of each subject to be able to guide and convey knowledge most effectively to students. Lecturers should improve their knowledge to be able to give more in-depth lectures, and organize appropriate activities so that students can absorb knowledge more easily. At the same time, lecturers are also the ones who motivate students to constantly learn, research and be creative in the learning process. Besides, building close and friendly relationships with students, always being ready to answer and support students' questions helps lecturers find each student's strengths and weaknesses and support them. help them improve their learning quality.

Third is the Non-Academic Element, Providing in-depth training and coaching programs to improve the knowledge, skills and abilities of administrative staff. Training may include courses in management, communication skills, information technology, specialized English and other related topics. At the same time, provide support and encouragement for administrative staff for personal development to improve their capacity and working ability. Creating opportunities for administrative staff to interact and work together with lecturers and students helps administrative staff better understand the needs and requirements of both groups, thereby improving professionalism and efficiency. work results.

Fourth is the training program. The School Leadership Board and the Training Department need to coordinate with the Faculties and Subject Groups to regularly update new training programs, especially accessing advanced programs of the universities. universities abroad. Developing training programs must fully meet the requirements of learners, and at the same time be consistent with the labor market, the needs of society, and the actual requirements of businesses.

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