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Examining Student Satisfaction with the Quality of Education Provided: A Case Study

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Abstract

This study focuses on the factors that impact on assessment of student satisfaction with the quality of training services at the College of Commerce in the period from 2014 to 2019. A survey questionnaire was sent to 249 student respondents. The survey period was from April 2019 to the end of May 2019. The research results show that there are 7 elements: Trust, Empathy, Tangible medium, Response, Service capacity. Based on the research results, recommendations for personnel policies have been proposed to improve student satisfaction with the quality of training services at the Da Nang Commercial College in the 2019-2030 periods.

Key words: *Service Quality, Training, Student Satisfaction, Education, Vietnam.*

JEL Classification: M10

PsycINFO Classification: 3550; 3560

FoR Code: 0803; 1301; 1503

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Introduction

Higher education plays an important role in the socio-economic development process of any country in the world because it contributes to creating human resources for that process (Hamdan et al., 2020). The quality of higher education not only determines the investment efficiency of the society but also the responsibility of each higher education institution (Kromydas, 2017). The quality of the training service helps develop students' knowledge and skills that may lead them to their satisfaction with what has been provided to them. Many domestic and foreign studies in the field of education have also pointed out the importance of studying student satisfaction for the quality of training services (Ilias & Rahman, 2008). This activity has been carried out comprehensively by researchers and universities at many levels. Research results are an important basis for managers to plan solutions to ensure the improvement of the quality of training services.

At the global level, the higher education sector is experiencing an increase in recognition as one of the dominant services having possessed all the unique characteristics of a service (DeShields et al., 2005). However, relative to the increase is the challenges faced by higher education institutions in terms of reduced subsidies and competition domestically and globally. Besides, pressures circled shifting from a pure service into a market-oriented institution of learning wherein it would become difficult to extinguish this institution from other service industries for profit. The competitive service environment has urged the education sector to strike a balance between delivering quality service while satisfying the students to meet sustainability objectives (DeShields et al., 2005).

In the the year 2015, the Vietnam government budget for education reached VND 224,826 billion, approximately 20 percent of the total expense of the National Budget (Hoang, 2015). Hoang (2015) further stressed that the investment is considered huge, however; the quality of education is still receiving attention as many students prefer to study overseas and spend a huge amount of money in exchange for knowledge and learning. Hence, colleges, universities, and related institutions need to review and re-evaluate their services to emphasize the quality of service training to satisfy students and other stakeholders.

The vast majority of authors have investigated the relationship between service quality and customer satisfaction in the goods and service industry. Specifically, studies have been conducted in manufacturing, banking, financial institutions, pharmaceutical, hospitality, medical institutions but limited studies were conducted on the educational institutions (Hafeez, 2012). Besides, many models have already been introduced directly and indirectly influencing customer satisfaction but are still to be reckoned with in the education sector. In Vietnam for instance, wide investigations were done on telecommunications, agriculture, supermarkets, and others except for the educational institutions (Cong and Thuy, 2007). So, this paper has been undertaken to primarily investigate the service quality of training on student satisfaction in Da Nang Commercial College.

Da Nang Commercial College had started implementing the credit training model in 2010 however, the administrators felt that there is still a need to re-evaluate the effectiveness of the model institution-wide. The eight years of implementation of this model have revealed the urgency to assess and re-assess the quality of training provided to the students as the basis for determining their level of satisfaction. This study therefore will help the college management to recognize its limitations, weaknesses, and determine areas for improvement. It also aids the management of both the administrative and academic staff to evaluate its current resources, capabilities, and willingness to provide quality service according to the needs of the students.

Research objectives

The main objective of this study is to identify the impact factors and evaluate student satisfaction with the quality of credit training services at the College of Commerce in the period from 2014 to 2018. It also aimed to:

1. Systematize the theory of satisfaction with service quality, focusing on student satisfaction with the quality of training services.
2. Select theoretical models, scales, and testing hypotheses about the relationship between student satisfaction with the components of training service quality at the College of Commerce.
3. Identify factors and measure their impact on student satisfaction with the quality of training services;
4. Propose recommendations to improve student satisfaction with the quality of training services at the College of Commerce in 2019-2030.

Research Questions

The research questions were framed according to the research objectives as follows:

- Q1: What are the factors that influence student satisfaction with the quality of training services at the College of Commerce?
- Q2: How satisfied are students with the quality of training services at the College of Commerce?
- Q3: What are recommendations to improve student satisfaction with the quality of training services at the College of Commerce in 2019-2030?

Literature Review and Research Model

Concept and definitions of service quality and customer satisfaction

Many scholars stressed that there is no universal definition of service quality hence it has been subjected to debates and arguments, however, consensus arises in defining and measuring it (Wisniewski, 2001). Out of the many definitions about service quality, a common definition of the term focused on defining it as the extent to which a service meets the needs and expectations of the customers (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994). It has also been described as the deviation between the perceived service and the customers' expectations referring to the service. Parasuraman, Zeithaml, and Berry (1985) ironed out that attaining customer satisfaction is achieved when the performance exceeds customers' expectations.

The concept of service quality has been defined in the context of higher educations by Harvey and Knight (1996) wherein as a service organization, service quality meets the expectation of customers. Moreover, their findings recommended that quality has produced consistency, transformation, exceptional, value for money, and fitness for purpose. Based on the earlier study of Gronroos (1984), he identified three dimensions of service quality consisting of the company corporate image; the technical

quality of the outcome; and, the functional quality of the encounter. On one hand, Parasuraman et al. (1985) defined the term service quality as a perception of a form of attitude linked with satisfaction that leads to the difference between performance and the perceived service quality. They have introduced the SERVQUAL model that investigates the customers' perceptions and expectations which was later modified in 1988 and 1999 (Berry & Parasuraman, 1991).

However, linking service quality to customer satisfaction has posed a continuous challenge in today's provision of services in different sectors. Particular emphasis is on how customer satisfaction has been understood in the context of the service sector. As defined, customer satisfaction denotes the overall evaluation of the customers regarding the performance of a service (Yu, et al., 2005). They added that individuals' or customers' perception and personal experience towards quality dictates their satisfaction which eventually leads to customer loyalty. Satisfaction refers to the person's feeling of meeting his/her needs or experiencing the fulfillment of one's expectations. It is further described in the context of the educational sector as an experience the students felt when succeeding in an entrance exam for collegiate education and after determining the students needs before entering the university (Beerli Palacio, et al., 2002).

Qureshi et al. (2010) viewed customer satisfaction as bringing teaching and learning into a student-centered education as a symbol of meeting the students' expectations from the colleges or universities. Students are to be viewed as primary customers where all efforts should be exerted to satisfy their needs and further lead them to loyalty to the organization (Juillerat and Schreiner, 1996). From this perspective, the relevance of investigating further the importance of service quality and satisfaction in the education sector is evident until today that, studying in-depth its impact on how the colleges and universities operate as well as improving the service quality through this present study conducted in Vietnam.

Service Quality in Higher Education

As early as 1992, the SERVQUAL model has been applied in the education sector and many researchers have found the suitability of this model to Higher Education Institutions (HEIs). Specifically, quite many studies examined service quality in the HEI context in business schools (Cuthbert, 1996; Saaditul et al., 2000; Soutar and McNeil, 1996). Among the SERVQUAL dimensions (Reliability, Responsibility, Assurance, Empathy, and Tangibles), the study of Cuthbert (1996) has found that tangibility occupies the highest mean rating with 3.34 and seconded by assurance 3.21, then reliability, 3.11; responsiveness comes in the fourth with 3.04; and, lastly empathy (2.58). It was seconded by O'Neill and Palmer (2004) who supported the idea that tangibility ranked as the most determinant of overall performance although their findings cannot be generalized in the entire education sector. However; the study of Pariseau and McDaniel (1997) found that assurance and reliability significantly impact student satisfaction in contrast to the previous findings that consider tangibility as the most predictor. The assurance dimension as mostly preferred by the students encompasses knowledge, the ability to inspire trust and confidence, and courtesy.

Prior studies about service quality on student satisfaction in HEI emphasized on academic rather than the administrative aspect which gives more attention to the effectiveness of course delivery, and the quality of teaching the college courses (Athiyaman, 1997; Cheng and Tam, 1997; Griemel-Fuhrmann and Geyer, 2003; Soutar and McNeil, 1996). Nevertheless, the concept of investigating service quality in higher education has been extended to the administrative side that attempts to measure students' satisfaction in the areas of registration, academic advising, student services, and others thus complementing the academic aspect. This finding has been strongly supported by Ham and Hayduk (2003) in their research on higher education that found a positive correlation between service quality and student satisfaction. They have

identified that reliability has the strongest relationship and is followed by responsiveness, empathy, assurance, and tangibility.

Student Satisfaction

Earlier definitions from Kotler and Clarke (1987) define satisfaction as the fulfillment of his or her expectation derived from a feeling of performance or an outcome. Carey et al. (2002) on the other hand define satisfaction as the perception and experiences by students during their college years and this definition is originally derived from the customer satisfaction theory being modified to justify the meaning of student satisfaction (Hom, 2002). According to William (2002), students are not viewed as customers per se, but considering that higher education has become a marketplace in this current atmosphere, the students have been viewed as customers considering that they pay tuition fees in return for the services provided by colleges and universities. In other words, students are recipients of services that the institution provides regularly to meet their expectations. In this study, student satisfaction has been utilized as a dependent variable to determine how service quality dimensions significantly influence the extent to which satisfaction is perceived by the students in Da Nang College of Commerce.

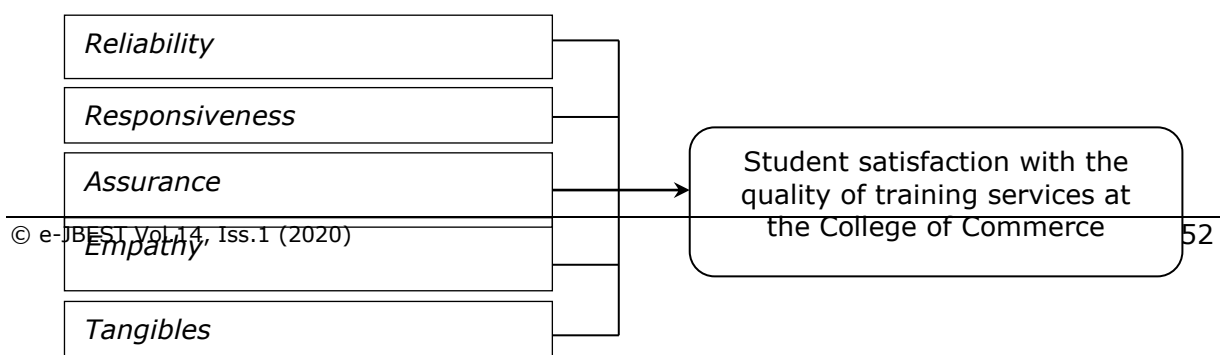
Relationship Between Service Quality and Student Satisfaction

Many studies have used the SERVQUAL tool in measuring service quality in higher education. For example, a study conducted by Zeshan et al. (2010) examined the impact of service quality among eight business schools in Pakistan and findings showed that service quality has been assessed as low quality in all the five service quality dimensions (tangibles, reliability, responsiveness, assurance, and empathy). However; a contrasting outcome was found in Hasan et al. (2009) who postulated that the five service quality dimensions significantly influence student satisfaction in private HEIs. Accordingly, there are no other means that educational institutions consider success than having satisfied and qualified students. Munteanu et. al. (2010) stressed that providing quality service and education to the students should match with the student's feelings and positive learning experiences while studying in the universities. This means that students who are satisfied and gain positive encounters with their universities express greater commitment to finish their studies as evidenced by higher retention rates.

Research Model

From the theoretical models evaluated, the SERVPERF model with 5 quality factors, combined with the practical implementation of training at the College of Commerce, was chosen as the most appropriate for this research. For this model, student satisfaction with the quality of training services will be assessed by 5 quality factors including Trust, Response, Service Capabilities, Empathy, Tangible Media. through 5 main groups of factors are Training Program and Learning Materials, Facilities, Lecturers and teaching methods, Organizing the management of training process, Supporting students.

Figure-1:
The proposed theoretical model



The null-hypotheses to be tested in this study are:

H₀₁: The suitability of the target, the structure, and the content of the training program do not significantly influence students' satisfaction with the training services.

H₀₂: The facilities for learning, skills training, and activities to meet student requirements do not significantly influence students' satisfaction with the training services.

H₀₃: The student's evaluation of faculty quality does not significantly influence students' satisfaction with the training services.

H₀₄: The organization managing the training process does not significantly influence the students' satisfaction with the quality of training services.

H₀₅: The response level of student support activities does not significantly influence students' satisfaction with the training services.

Methodology

Research Design

Primarily, this research utilized the quantitative research method and employed survey questionnaires. To meet the research objectives, the authors determined the factors related to the measurement of 5 quality components according to the theoretical model. The authors also study the school's documents on the training process and references studies on student satisfaction with the training quality of related topics. Since then, they proposed a group of factors to research programs and learning materials; facilities; lecturers and teaching methods; organization management; training process; and student support.

Population and Sample Size

According to the experience of the researchers, if the estimation method is used, the minimum sample size must be from 100-150 (Hair, et al., 2010). Also, the minimum sample size is 5 samples for a parameter to be estimated (Bollen, 1989). However, the sample size depends on the analytical method. To determine the sample size for conventional EFA factor analysis, the number of observations (sample size) is at least 5 times the number of variables in factor analysis. This study has 40 observed variables expected to be included in the factor analysis. Therefore, the sample size is expected to be more than 200 samples.

Data Collection

The self-administered survey was used to gather the data by distributing questionnaires directly to students and collecting after they have been answered the needed information. The survey period is from April 2019 to the end of May 2019. To ensure the size and structure of the sample suitable for the study, the author sent 600 questionnaires and distributed them according to the ratio. There are 249 surveys conducted, however; only 225 questionnaires were retrieved and validated.

Research Instrument and Measurement

The questionnaire consists of 3 pages of A4 paper, including the contents as follows: Part 1: Introducing the reasons for conducting research and the commitment to student privacy; Part 2: Collecting data about students' courses and majors; Part 3: Questionnaire includes 5 issues with 40 questions related to the learning process and students' satisfaction with the quality of perceptual training services after the end of the course. Questions are in the form of affirmative sentences, using the corresponding 5-point Likert scale for students to choose the level of agreement for each affirmation with (1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree, (4) Agree and (5) Strongly agree.

Although personal information of students is quite important to serve the process of research and data analysis. However, the questionnaire does not design a student's information collection section to create a sense of security and to enhance cooperation in the research process for sensitive or sensitive issues. to them personally. The scale used in most service quality studies is the 5-component scale of Parasuraman, Zeithaml, and Berry (1985), including Reliability, Responsiveness, Assurance, Empathy, Tangibles. In higher education, many studies are using this set of criteria for measuring service quality (Chua, 2004); Zafiroopoulos and Vrana, 2007; Jelena, 2010).

Many studies have developed their own set of criteria for evaluating service quality in higher education. This study has built a set of 3 components with 40 criteria: (1) Quality of facilities - 15 criteria, (2) Quality of interaction - 11 criteria, and (3) Quality Collective quality - 14 criteria. Senthilkumar & Arulraj (2010) developed a set of criteria including 4 components: (1) Teaching method, (2) Facilities, equipment, tools, and equipment Academic service, (3) Quality assurance regulations, (4) Job orientation for students. Also, they proposed a scale of 6 components with 41 criteria: (1) Element related to academics, (2) Curriculum, (3) Non-academic factors, (4) Accessibility factors, (5) Reputation, (6) Sympathetic factors, understanding.

Despite the different names, most of the above-mentioned educational service quality measurement scales have certain commonalities, all around the five main elements. (1) *Lecturers and teaching methods*: professional knowledge, behavior, communication and teaching skills of teachers; (2) *Curriculum and learning materials*: appropriate content, structure, number, and types of materials for learners; (3) *Facilities and equipment for learning*; (4) *The process of organizing training*: support students to build, register for study plans, provide information, handle relevant issues during the learning process; tuition, scholarships, policy. (5) *Student support*: guide learning methods, career orientation, soft skills development.

For the most part the educational service quality scales show the 5 components of Parasuraman et al. (1985). Therefore, the author will use this 5-component scale with the adjustment of observed variables in each component to suit the characteristics of the training situation as follows:

Table 1:
Components Tangible Media

Sequence	Observed variables	Symbol
1.	The dormitory is spacious, airy, and fully equipped to serve students	HH1
2.	Spacious and airy classroom, desks and lights are full	HH2
3.	The computer room meets well the practical needs of students	HH3
4.	Playground and gym equipment fully meet the needs of students	HH4
5.	The attitude of the lecturer is proper, friendly, close to students	HH5
6.	The library is full of documents for learning, reference, and research	HH6

Table 2:
Trust Components

Sequence	Observed variables	Symbol
1.	The academic results reflect faithfully students' knowledge	TC1
2.	Tuition fees, scholarships, and policies are implemented per regulations	TC2
3.	The process of organizing exams is serious and fair for each student	TC3
4.	Willing to receive and reasonably handle student recommendations	TC4
5.	Receiving and resolving administrative procedures are quickly and flexibly	TC5
6.	Building a reasonable training plan, creating favorable conditions for students to study	TC6

Table 3:
Component Response

Sequence	Observed variables	Symbol
1.	Administrative employees have good expertise and mastery of training regulations	DU1
2.	The training program has objectives, clear and specific output standards	DU2
3.	The training program meets the requirements of students' knowledge and skills development	DU3
4.	Medical services, canteen meet the requirements of students	DU4
5.	The complete curriculum and content are updated with the latest knowledge	DU5
6.	Training management system meets the needs of students	DU6
7.	The total number of credits in the program is sufficient	DU7
8.	Students easily contact related individuals and departments for assistance	DU8

Table 4:
Composition Service Quality

Sequence	Observed variables	Symbol
1.	Providing full information about the training process for students	NL1
2.	Evaluating students' academic results publicly, fairly, and accurately	NL2
3.	Students are taught the method of self-study under the credit system	NL3
4.	Students are provided with a playground to develop soft skills and career skills	NL4
5.	Students are advised, career-oriented throughout the learning process	NL5
6.	Lecturers have professional knowledge and easy-to-understand teaching methods	NL6
7.	Students are guided to build, register and control the learning process	NL7

Table 5:
Empathy Component

Sequence	Observed variables	Symbol
1.	Administrative employees are friendly, approachable, and respectful students	DC1
2.	Lecturers always encourage and guide students to self-study	DC2
3.	Lecturers whole-heartedly support and answer students' questions during the learning process	DC3
4.	Students play a central role in the teaching process of lecturers	DC4

Student satisfaction on the quality of training services is considered as a dependent variable in the model and is measured by 9 observed variables as follows:

Table 6:
Student Satisfaction on the quality of training services

Numerical order	Observed variables	Symbol
1.	The college always understands and responds well to the needs of students	HL1
2.	The college has guaranteed the rights of students as committed	HL2
3.	The college always creates the best conditions for students to study and train	HL3
4.	I feel satisfied with the college's training program	HL4
5.	I feel satisfied with the college's teaching staff	HL5
6.	I feel happy about the college's facilities	HL6
7.	I feel satisfied with the college's training process	HL7
8.	I feel satisfied with the administrative staff and academic advisors	HL8
9.	Overall, I feel satisfied with the quality of training at the college	HL9

Data Analysis

Survey data were analyzed using SPSS 20.0 software. The analysis process is divided into the following basic steps: Prepare data, check the questionnaire to ensure quality, and data entry. Statistical analysis of 40 variables in the questionnaire. The statistical indicators of interest are the average, standard deviation. These parameters allow a description of the student's overall assessment of the factors covered in the questionnaire. Testing the satisfaction scale (5 factors): checking the reliability (reliability analysis) through Cronbach's Alpha coefficient and exploratory factor analysis (EFA).

Step 1: The observed variables (item) will be analyzed for the reliability of the scale, and the selected variables must satisfy 2 requirements (1) the observed variables have a variable correlation coefficient - total (Corrected Item) -Total Correlation) less than 0.3 will be disqualified and (2) the criteria for choosing a scale when Cronbach's Alpha coefficient is 0.6 or higher (Nunnally & Burnstein, 1994)".

Step 2: After checking the reliability of the observed variables, a factor analysis of student satisfaction scales will be conducted. Factor analysis is performed using the "Principal component" extraction method (the main factor), with the "Varimax" rotation method - this is an accepted method in exploratory factor analysis. For discovery factor analysis: Factor loading (factor load factor-factor weight) must be greater than or equal to 0.5. KMO test (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) and Bartlett test (Bartlett's Test of Sphericity), the total variance explained (Total Variance Explained) must meet the necessary conditions. If KMO is between 0.5 and 1, factor analysis is appropriate. Bartlett's test is to consider the hypothesis H0: "correlation between observed variables is zero in the whole" if this test is statistically significant (Sig. \leq 0.05), the observed variables are correlated. together in the whole (Trong and Ngoc, 2005). For extracting variance, Hair et al. (1998) require that the extracting variance be 50% or more. In this step, observed variables that do not meet the factor analysis requirements will be removed.

Multivariate linear regression and hypothesis test: Satisfaction factor will be regressed according to independent factors of curriculum and learning materials, facilities, lecturers, and teaching and organizing methods. quality management, student support through the above procedures. The necessary tests will be performed to ensure the appropriateness of the model and to ensure the assumptions of multivariate linear regression are followed. Necessary cases need to be handled to ensure the requirements of regression. Finally, assumptions will be made for testing and conclusions.

Results and Discussion

Descriptive statistics

Out of the 249 questionnaires distributed to the students, 225 validated responses were obtained and coded for analysis (See Table 7).

Table 7:

Statistics table of students attending the courses

Classes	Frequency	Percent
Valid		
08	40	17.8
09	112	49.8
10	73	32.4
Total	225	100.0

Table 7 shows that 49 students were registered in class 8 or 17.8% while 112 students in class 9 or 49.8%, and 73 students in class 10 or 32.4%.

Table 8:

Statistics table of student majors participating in the survey

Student Majors		Frequency	Percent
Valid	Business accounting	40	17.8
	Accounting for hotels and restaurants	17	7.6
	Accounting for commerce and services	18	8.0
	Commercial Marketing	16	7.1
	Banking	26	11.6
	Commercial business administration	29	12.9
	Hotel business management	28	12.4
	Petrol and oil business administration	26	11.6
	Business Finance	6	2.7
	International commerce	19	8.4
Total		225	100.0

Table 8 reflects the distribution of the students based on their majors. There are 40(17.8%) students specializing in business accounting; 17(7.6%) students in accounting for hotels and restaurants; 18(8.0%) students majoring in accounting for commerce and services; 16(7.1%) for commercial marketing while 26(11.6%) for banking. Moreover, 29(12.9%) specialize in commercial business administration; 28(12.4%) in hotel business management; 26(11.6%) in petrol and oil business administration; 6(2.7%) from business finance; and, 19(8.4%) major in international commerce.

Accordingly, the distance of the 5-point Likert scale in quantitative research is calculated by the formula: $4/5 = 0.8$. Therefore, to make a relatively accurate assessment of student satisfaction in this study, the values in the scale were uniformly formulated into 5 ranges as follows:

Table 9:

The range of values for the scale and meaning

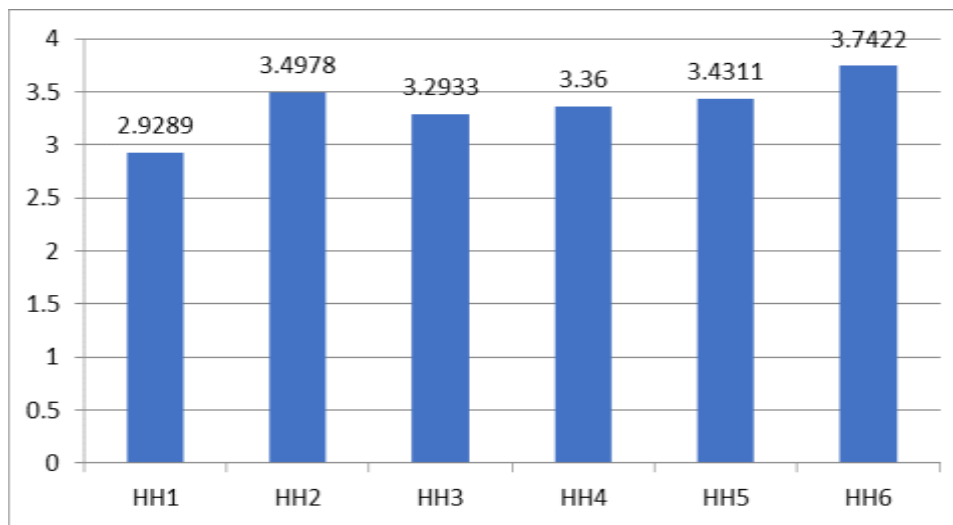
Value range	1.00 - 1.79	1.80 - 2.59	2.60 - 3.39	3.40 - 4.19	4.20 - 5.00
Meaning	Very low	low	medium	High	Very high

Table 10:

Data on the assessment results of students for tangible Media component

Descriptive Statistics					
Symbol	N	Minimum	Maximum	Mean	Std. Deviation
HH1	225	1.00	5.00	2.9289	1.00192
HH2	225	1.00	5.00	3.4978	.91673
HH3	225	1.00	5.00	3.2933	.93694
HH4	225	1.00	5.00	3.3600	.93025
HH5	225	1.00	5.00	3.4311	.87419
HH6	225	1.00	5.00	3.7422	.79353
Total	225				

Figure 1:
Results of students for Tangible Media component

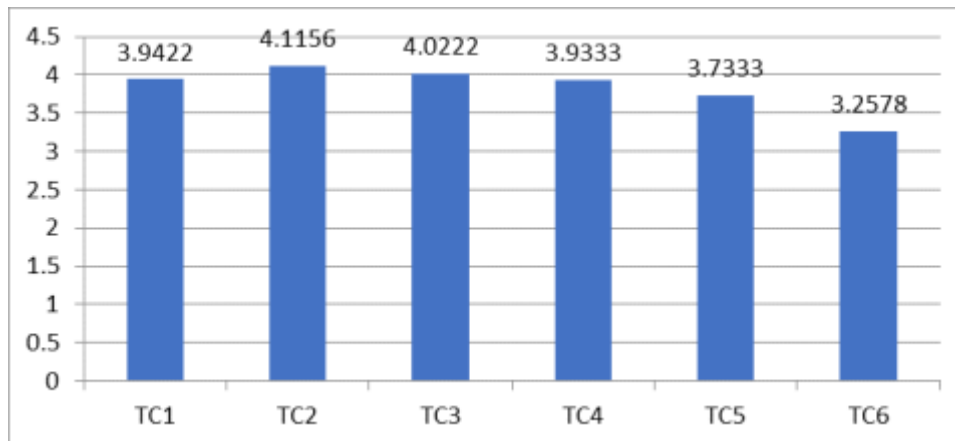


The data show that the level of students' satisfaction with this content is moderate (the average value of the 6 elements is 3.3755). The factors "The dormitory is spacious, airy and fully equipped to serve students", "the computer room meets well the practical needs of students", "playground and gym equipment fully meet the needs of students" which is rated at an average level". In addition, "factors spacious and airy classroom, desks and lights are full", "the attitude of the lecturer is proper, friendly, close to students", "the library is full of documents for learning, reference, and research" is assessed at a high level.

Table 11:
Data on the assessment results of students for Trusted components

Descriptive Statistics					
Symbol	N	Minimum	Maximum	Mean	Std. Deviation
TC1	225	1.00	5.00	3.9422	.87180
TC2	225	1.00	5.00	4.1156	.87371
TC3	225	1.00	5.00	4.0222	.92796
TC4	225	1.00	5.00	3.9333	.99553
TC5	225	1.00	5.00	3.7333	.88135
TC6	225	1.00	5.00	3.2578	.81023
Total	225				

Figure 2:
Results of students for trusted components

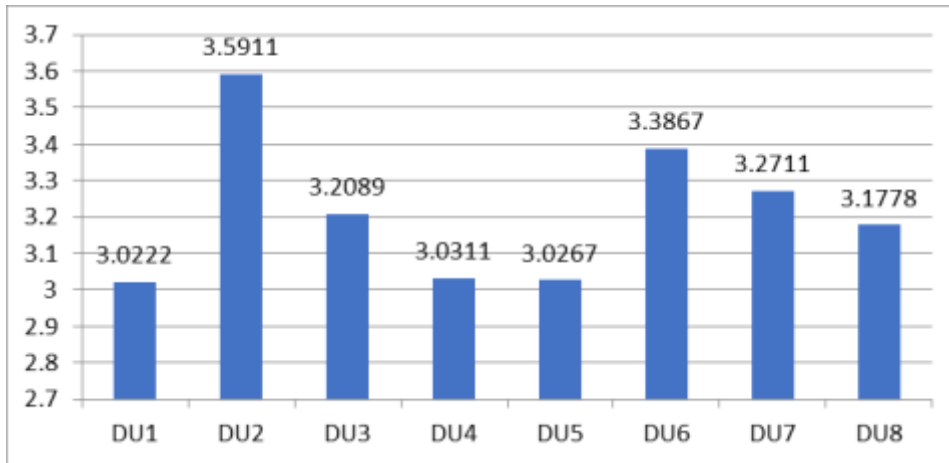


The data shows that the level of students' satisfaction with this content is high (the average value of the 6 elements is 3.8341). The five elements are: "The academic results reflect faithfully students' knowledge", "Tuition fees, scholarships, and policies are implemented per regulations", "The process of organizing exams is serious and fair for each student", "Willing to receive and reasonably handle student recommendations", "Receiving and resolving administrative procedures are quickly and flexibly" are highly rated. On the other hand, only the factor "Building a reasonable training plan, creating favorable conditions for students to study" is rated average.

Table 12:
Data on the assessment results of students to the Response component

Descriptive Statistics					
Symbol	N	Minimum	Maximum	Mean	Std. Deviation
DU1	225	1.00	5.00	3.0222	.87854
DU2	225	1.00	5.00	3.5911	.95521
DU3	225	1.00	5.00	3.2089	.90431
DU4	225	1.00	5.00	3.0311	.93728
DU5	225	1.00	5.00	3.0267	1.05610
DU6	225	1.00	5.00	3.3867	.90475

Figure 3:
Results of students for Response component

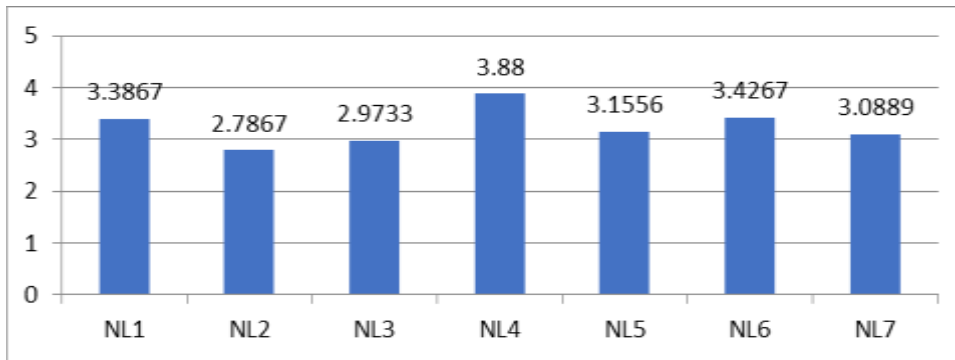


The data shows that the level of student's satisfaction with this content is moderate (the average value of 8 factors is 3.2145). Only the factor "The training program has objectives, clear and specific output standards" is evaluated at a high level. The remaining 7 elements "Administrative employees have good expertise and mastery of training regulations", "The training program meets the requirements of students' knowledge and skills development", "Medical services, canteen meet the requirements of students", "The complete curriculum and content are updated with the latest knowledge", "Training management system meets the needs of students", "The total number of credits in the program is sufficient", " Students easily contact related individuals and departments for assistance" are only rated at an average.

Table 13:
Data on the assessment results of students for the Service Capacity component

Descriptive Statistics					
Symbol	N	Minimum	Maximum	Mean	Std. Deviation
NL1	225	1.00	5.00	3.3867	.97596
NL2	225	1.00	5.00	2.7867	.94434
NL3	225	1.00	5.00	2.9733	.94925
NL4	225	1.00	5.00	3.8800	.81218
NL5	225	1.00	5.00	3.1556	1.11714
NL6	225	1.00	5.00	3.4267	1.16312
NL7	225	1.00	5.00	3.0889	.99153
Total	225				

Figure 4:
Results of students for Service Capacity component

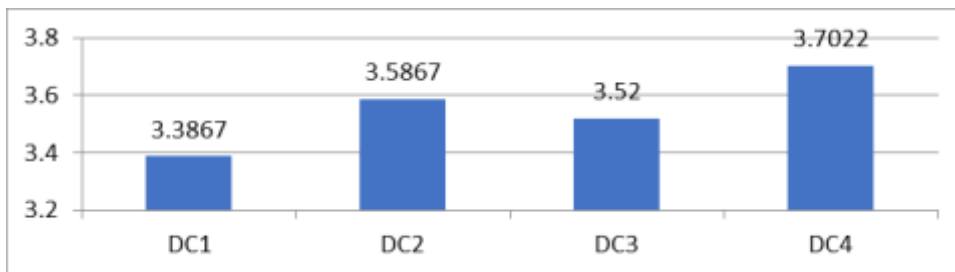


The data shows that the level of student's satisfaction with this content is moderate (the average value of 7 factors is 3.2426). The factors "Students are provided with a playground to develop soft skills and career skills", "Lecturers have professional knowledge and easy-to-understand teaching methods" are evaluated at a high level. The remaining factors include "Providing full information about the training process for students", "Evaluating students' academic results publicly, fairly and accurately", "Students are taught the method of self-study under credit system", "Students are advised, career-oriented throughout the learning process. Students are guided to build, register and control the learning process" are only evaluated at the average level.

Table 14:
Data on the assessment results of students for the Empathy component

Descriptive Statistics					
Symbol	N	Minimum	Maximum	Mean	Std. Deviation
DC1	225	1.00	5.00	3.3867	.90475
DC2	225	1.00	5.00	3.5867	.80888
DC3	225	1.00	5.00	3.5200	.85607
DC4	225	1.00	5.00	3.7022	.83732
Total	225				

Figure 5:
Results of students for Empathy component



The data show that the level of student's satisfaction with this content is high (the average value of the 4 elements is 3.5489). Only the factor "Administrative employees are friendly, approachable and respectful students " is evaluated at an average but asymptotic to a high level (mean = 3.3867). The remaining factors include "Lecturers always encourage and guide students to self-study", "Lecturers whole-heartedly support and answer students' questions during the learning process", "Students play a central role in the teaching process of lecturers " are rated at a high level. From the analysis of

the above 5 elements, students appreciated the components of "Trust" and "Empathy"; in terms of components: "Tangible Media", "Response", "Service capacity" are rated at an average level.

Table 15:
Mean Values of Service Quality Factors

Factors	Mean
Tangible Media	3.3755
Trust	3.8341
Response	3.2145
Service capacity	3.2456
Empathy	3.5489

Regression and Hypothesis Testing

Testing the correlation between dependent variables and independent variables

The statistical analysis indicate that the independent variables positively impact "Satisfaction" because the Sig coefficients of the service quality variables have values <0.05 and the correlation coefficients (Pearson Correlation) of the independent variables and the variables. **Therefore, all the null hypotheses (H₀₁ to H₀₅) are rejected at a 0.05 level of significance.** Dependencies are positive. In particular, the factor that is most strongly correlated with "Satisfaction" is "Response" (R = 0.540), the factor that has the lowest correlation with the overall rating is "Empathy" (R = 0.408). Therefore, the factor variables in the model are eligible to perform regression analysis. The regression equation is presented hereunder:

Sample linear regression model

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + U$$

Inside :

Y: General evaluation factor

X1: Factor of facilities

X2: Standard management factor

X3: Lecturer factor and teaching method

X4: Program elements and learning materials

X5: Student support factor

B₀: Regression blocking factor

B₁, B₂, B₃, B₄, B₅,: angular regression coefficient of X₁, X₂, X₃, X₄, X₅ respectively

U: Errors in the model.

Testing the regression model for conformity

Regression model exists or $R^2 \neq 0$

ANOVA analysis results show that the statistical value $F = 48,219$ is calculated from the R-Square value of the full model, sig value = 0, 000 <0.05 should reject the hypothesis H₀: $R^2 = 0$ or in other words the model exists.

Table 16:
ANOVA analysis results

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.909	5	9.182	48.219	.000 ^b
	Residual	41.702	219	.190		
	Total	87.611	224			
a. Dependent Variable: DGC						
b. Predictors: (Constant), HTSV, CSV, GVPP, CTTL, TCQL						

Examining violation of regression model assumptions:

a. Calibration distribution test:

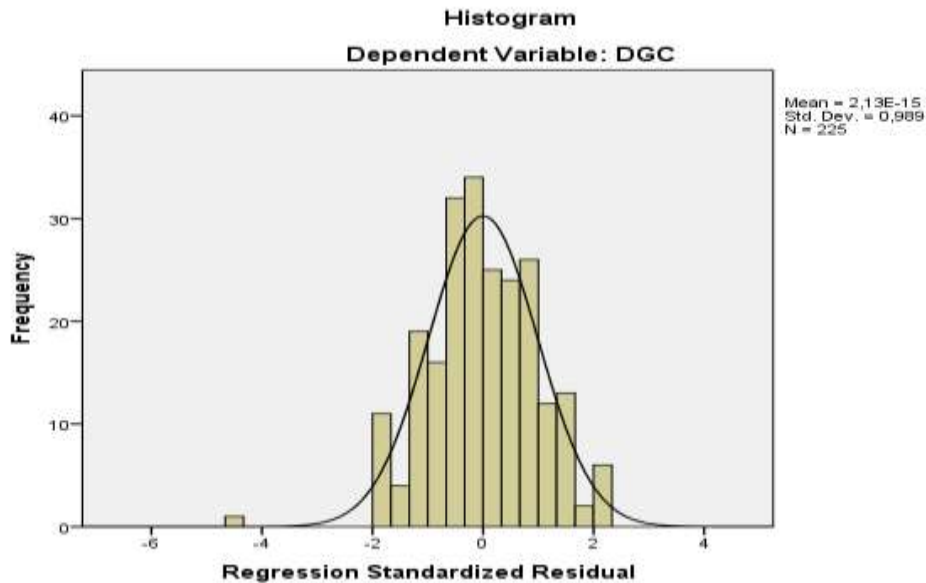
Testing to establish whether the remainder has no normal distribution.

Table 17 below shows Sig. of Kolmogorov-Smirnov is greater than 0.05 so it is possible to accept the H_0 or in other words the standard distribution residual. The Regression Standardized Residual graph is a normal distribution.

Table 17:
Calibration distribution standard test results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		225
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	.43147410
Most Extreme Differences	Absolute	.047
	Positive	.047
	Negative	-.028
Kolmogorov-Smirnov Z		.712
Asymp. Sig. (2-tailed)		.690
a. Test distribution is Normal.		
b. Calculated from data.		

Figure 6:
Histogram of Dependent Variable DGC



b. The average of residuals is equal to 0:
Average value of non-zero residuals

The table below has Sig. = 1 is greater than 0.05 so there is a basis to accept H_0 or in other words, the average of the remainder is 0.

Table 18:
Test result Average of residuals is 0

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Unstandardized Residual	0,000	224	1,000	0E-8	-,0566845	,0566845

c. Model does not occur multi-collinear phenomenon:
Testing the model for a multi-collinear phenomenon

The analysis results in the Table (Coefficients) show that the VIF (Variance Inflation Factor) of the variables in the model are very small, with a value from 1,224 to 1,362 less than 2. Proof The regression does not violate the hypothesis of multi-collinear phenomena, the model has statistical significance.

Table 19:
The model test results do not have a multi-collinear phenomenon

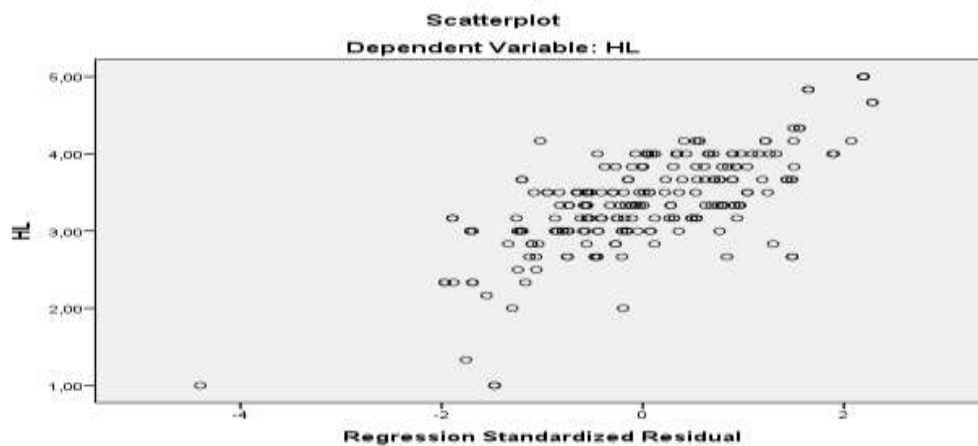
Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.442	0.205		2.157	0.032		
	HH	0.180	0.044	0.219	4.059	0.000	0.744	1.343
	TC	0.179	0.045	0.216	4.026	0.000	0.755	1.325
	DC	0.111	0.051	0.117	2.183	0.030	0.761	1.314
	DU	0.199	0.043	0.253	4.652	0.000	0.734	1.362
	NL	0.207	0.042	0.255	4.943	0.000	0.817	1.224

a. Dependent Variable: HL

d. Testing the phenomenon of heterogeneous variance:

The model exhibits heterogeneous variance phenomenon. Accordingly, the value of Sig. of independent variables has the value Sig. greater than 0.05 should have a basis for accepting the H_0 which means that the model does not exist any heterogeneous variance phenomenon. At the same time, scatter plots are not regular, showing that no variance of variation error (heterogeneous variance) and linear function form are appropriate.

Figure 7:
Scatterplot of Dependent Variable HL



e. Testing the autocorrelation phenomenon:

Testing the model for auto-correlation phenomenon.

Table 20:
Test results of the auto-correlation phenomenon

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.724 ^a	.524	.513	.43637	.524	48.219	5	219	.000	2.298
a. Predictors: (Constant), NL, TC, HH, DC, DU										
b. Dependent Variable: HL										

Durbin-Watson value is in the range of 1-3, the model does not occur the autocorrelation phenomenon (Pham Chi Cao), the Durbin-Watson value in the model = 2,298 is in the range [1; 3] so the model regression does not occur auto-correlation. The result of the regression summary by the Enter command shows that adjusted R² (Adjusted R square) = 0.513, so the research model is consistent with the research data at 51.3%.

Verifying the existence of regression coefficients:

$$B_k \text{ regression coefficients} = 0$$

$$B_k \text{ regression coefficients} \neq 0$$

Table 21:
Test results for the existence of regression coefficients

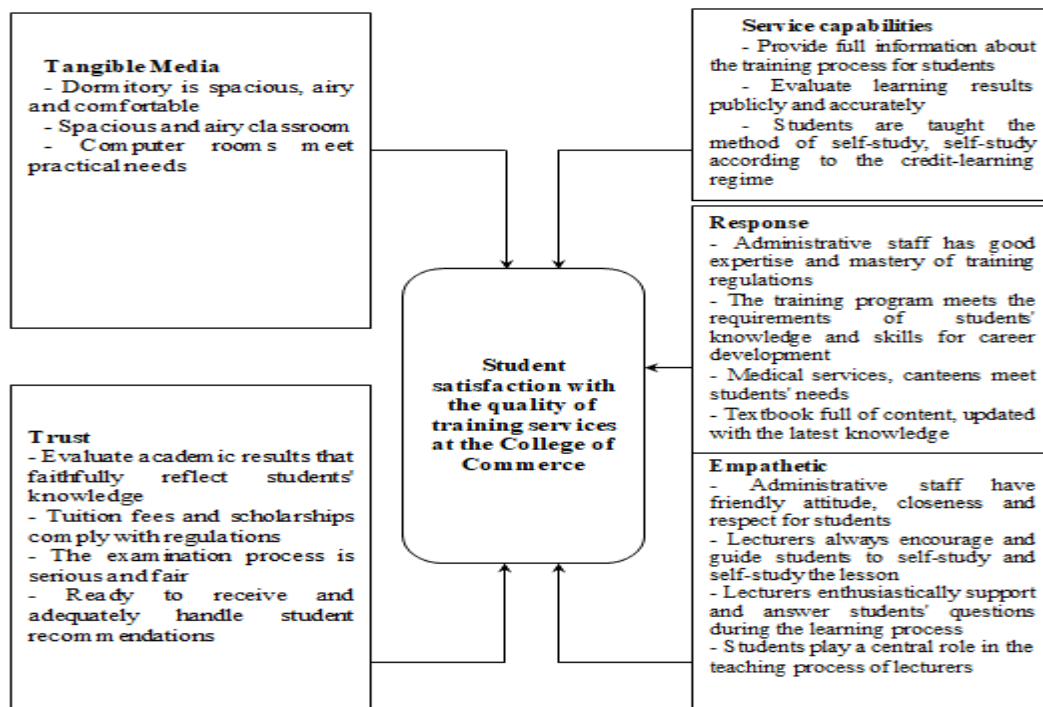
Coefficients								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
(Constant)	0.442	0.205		2.157	0.032			
HH	0.180	0.044	0.219	4.059	0.000	0.744	1.343	
TC	0.179	0.045	0.216	4.026	0.000	0.755	1.325	
DC	0.111	0.051	0.117	2.183	0.030	0.761	1.314	
DU	0.199	0.043	0.253	4.652	0.000	0.734	1.362	
NL	0.207	0.042	0.255	4.943	0.000	0.817	1.224	
a. Dependent Variable: HL								

The regression coefficients of the factors "tangible means", "trust", "response", "service capacity" and "empathy" are all less than 0.05. Therefore, we can conclude that regression coefficients exist for these factors. Moreover, the component "Service capacity" has the strongest influence on the "Satisfaction" of students. Specifically, when "Service capacity" increases or decreases by 01 unit (other factors remain constant), the average value "Satisfaction" increases and decreases by 0.207 units. The component "Respond" has the second strongest influence on the "Satisfaction" of students. Specifically, when "Response" increases or decreases by 1 unit (other factors remain constant), the average value "Satisfaction" increases and decreases by 0.199 units.

Specifically, when "Tangible Media" increases or decreases by 1 unit (other factors remain constant), the average value "Satisfaction" increases and decreases by 0.180 units. The component "Trust" has a fourth strong influence on the "Satisfaction" of students. Specifically, when "Trust" increases or decreases by 1 unit (other factors remain constant), the average value "Satisfaction" increases and decreases by 0.179 units. The component "Empathy" has the fifth strongest influence on the "Satisfaction"

of students. Specifically, when "Empathy" increases and decreases by 1 unit (other factors remain constant), the average value "Satisfaction" increases and decreases by 0.111 units. With the value $R^2 = 0.524$. We can conclude that the factors in the model account for 52.4% of consumer behavior; The rest are due to factors other than the model:

Figure 8:
Factors affecting the quality of training services at the College of Commerce



Conclusion and Recommendations

Findings

The study systematized the theoretical basis of service quality, training service quality, and customer satisfaction on service quality. Analysis and evaluation of views on service quality and customer satisfaction as a basis for assessing the quality of training services and student satisfaction. Besides, the study also analyzes, compares, and evaluates theoretical models of customer satisfaction research on service quality. From service quality theory and customer satisfaction research models to service quality, the study identified theoretical models and scales to assess student satisfaction for the quality of training services at the College of Commerce. Along with that, the study also identifies the research process, the sample size, selects the research sample per the actual situation at the school, and proposes research data analysis techniques.

The research results show that the level of student's satisfaction with the quality of training services at the College of Commerce is moderate and high; As reflected in the descriptive statistical analysis, it is shown that about 1/2 of the variables are rated at a high level and about 1/2 of the variables rated at average. The results of the analysis of 6 component factors with 40 observed variables have extracted 6 factors with 24 observed variables to ensure the value of the scale. These factors continue to be used as independent variables and be included in linear regression analysis. The regression analysis results show that the model built is appropriate, does not violate the theoretical

assumptions necessary to ensure reliability. From the regression equation, all 5 factors have a positive impact on satisfaction. Testing the hypothesis of research shows that if there is a solution to improve the relevance of the training program; improve the quality of teaching staff; continue to invest in upgrading material facilities for study, daily life, and self-study; organizing the training process to meet the needs of students will enhance the student's satisfaction with the quality of training services at the school.

Some recommendations to improve student satisfaction with the quality of training services at the school in the period 2019-2030

Tangible Media component

Expanding the computer system, building multimedia rooms, improving the quality of the wireless internet system to meet the information search needs of students. Investing in procurement and ensuring the operation process of machines, tools, and teaching and learning support facilities of lecturers and students. Investing in expanding the library to create a large and airy space for students to self-study; promote plans to bring e-library to serve officials, lecturers, and students. Invest in facilities for activities and health training for students such as playgrounds, soccer fields, gymnastics, and sports equipment. Expanding the dormitory system to meet the needs of student dormitories.

Trust component

Innovating the method of assessing learning results in the direction of evaluating the entire process to detect students' knowledge gaps; to have a "filling" measure; use various forms of assessment to determine the learners' ability and accumulated knowledge; develop scientific and public assessment criteria for students at the beginning of the module's curriculum.

Research and apply methods of assessing academic results to ensure fairness, honesty, properly reflect the competency and accumulated knowledge of each student. Academic evaluation should be done throughout the process rather than at the end of each current term.

Quickly solve issues related to tuition, scholarships, policies, administrative procedures towards reducing paperwork, reducing the number of signatures, reducing the number of "doors". Officials and staff of the administrative division should be more friendly and open, build an administrative culture of service with the implementation of 4 "knowing": hello, smile, explain and thank in the process of receiving and handling requests from students.

Response component

Review and revise the training program in the direction of structuring the content related to professional expertise (accounting for at least 60%), reducing the number of general knowledge blocks based on the framework program according to regulations, bravely eliminating the less necessary modules in the program. Raising the practice rate to at least 40% with practice content must be associated with the requirements for establishing occupational skills and demands from employers. Contact businesses (employers) to jointly develop training programs, minimize the difference between training and employers as today;

Continue to promote the compilation of curriculum and lectures and provide time for students; Update new knowledge into the curriculum and lectures. Enhancing the provision of textbooks, lectures, professional documents, books, and newspapers ... for students to self-study and study. Also, limiting to the maximum conditions binding on

the implementation of the training program; build a scientific, reasonable, and consistent learning process; guide students to find out the content of the training program to build a reasonable personal study plan based on each student's capabilities and conditions.

Moreover, the need to develop, complete, and decentralize the implementation of management processes in the training process in the direction of reduction, flexibility, towards "one door"; shift the current administrative model to the administrative service model, taking lecturers and students as main service subjects, creating the best conditions for these two subjects to well perform their tasks. And, expand and enhance services at the canteen to meet the eating and shopping needs of students.

The "Service capacity" component

There should be a solution to develop the teaching capacity of lecturers, train teachers to implement the method of teaching according to credits, learner-centered, lecturers play the role of guidance, advice, and support, and assess the learning outcomes, ability to accumulate knowledge, and career skills formation of students.

The school needs to develop administrative and financial support regimes for lecturers who have made many improvements in teaching, learning, and research. Set up teacher development and evaluation programs to serve as a basis for implementing remuneration. Also, it is necessary to create a favorable working environment to attract and retain lecturers who have been well-trained, have good expertise, high expectations, and dedication to their careers. Combining different types of training such as long-term, regular training (PhDs and masters); continuous training and retraining to suit the development needs of each school and faculty; lecturers self-study and foster to constantly improve their capacity.

The teaching process must combine theory and practice; using theory to explain and prove facts and avoid "missionary" education. To solve this problem, lecturers need to gain practical experience in dealing with issues related to their teaching expertise. Schools need to adhere to the policies and regulations to facilitate lecturers in practical penetration teaching to gain experience, especially young teachers.

Guide students to develop a personal learning roadmap and plan, helping students control and timely adjust issues arising concerning the implementation of the study plan.

The "Empathy" component

Supporting students is not a new task, but it has only received attention to investing in the school in recent years. This activity helps bring high added value to students, thereby helping them to satisfy and improve satisfaction. Research results show that students do not appreciate this activity, showing that the support activities do not make students feel its true value.

In addition, while quite many academic staff showed dedication, friendly attitude, openness, and high sense of responsibility, there are still some lecturers who are not dedicated and lack the sense of responsibility. The University should have measures to manage, capture and timely handle student concerns.

Need to enhance the role and responsibilities of academic advising staff in student support and advice. Focus on time management and assisting students in solving problems that arise during the learning process. Advice, career orientation, and guidance on credit-based learning.

Schools, lecturers, and academic advisors need to guide students to become familiar with active learning methods (applied in training models), career orientation, and job placement (including employment), provide information to answer questions during the learning process, provide advice on dealing with complex handling procedures, introduce students to practice, internship, and internship practice. Also, each individual or unit is responsible for assisting students according to their assigned professional or functional duties. And the need to identify the above is the task of all staff and units in the school. Need to demonstrate calmness when contacting for support whenever problems arise beyond their ability to handle.

References

- Athiyaman, A. (1997). Linking student satisfaction and service quality perceptions: the case of university education. *European Journal of Marketing*, 31(7), 528-540.
- Beerli Palacio, A., Díaz Meneses, G., & Pérez Pérez, P. (2002). The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational Administration*, 40(5), 486-505.
- Berry, L., & Parasuraman, A. (1991). *Marketing Services*. New York: Free Press.
- Bollen, K. A. (1989). *Wiley series in probability and mathematical statistics. Applied probability and statistics section. Structural equations with latent variables*. Washington, DC: John Wiley & Sons. <https://doi.org/10.1002/9781118619179>
- Carey, K., Cambiano, R. L., & De Vore, J. B. (2002). *Student to faculty satisfaction at a Midwestern university in the United States. HERDSA*, 93-97. Available at: www.ecu.edu.au/conferences/herdsa/main/papers/ref/pdf/Carey.pdf [Accessed 21 February 2021]
- Cheng, C. Y., & Tam, M.W. (1997). Multi-models of quality in education. *Quality Assurance in Education*, 5(1), 22-31.
- Chua, C. (2004). *Perception of quality in higher education*. In Proceedings of the Australian Universities Quality Forum (pp. 181–187). Melbourne, Australia: AUQA Occasional Publication.
- Cong, N., & Thuy, P. (2007). Factors affecting customer loyalty with mobile-phone brands. *Journal of Science and Technology Development*, 8, 42-50.
- Cuthbert, P. F. (1996). Managing service quality in HE: Is SERVQUAL the answer? Part 2. *Managing Service Quality*, 6(3), 31-35.
- DeShields, O., Kara, A., & Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's two-factor theory. *International Journal of Educational Management*, 19(2), 128-139.
- Dotchin, J., & Oakland, J. (1994). Total Quality Management in Services. *International Journal of Quality & Reliability Management*, 11(3), 9-26.
- Griemel-Fuhrmann, B., & Geyer, A., 2003. Students' evaluation of teachers and instructional quality-analysis of relevant factors based on empirical evaluation research. *Assessment & Evaluation in Higher Education*, 28 (3), 229-238.
- Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. *European Journal of Marketing*, 18(4), 36-44. <https://doi.org/10.1108/EUM0000000004784>
- Hafeez, S. (2012). The Impact of Service Quality, Customer Satisfaction and Loyalty Programs on Customer's Loyalty: Evidence from Banking Sector of Pakistan. *International Journal of Business and Social Science*, 3(16), 200-209.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. 5th edition. Upper Saddle River, NJ: Prentice-Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective*. New Jersey: Pearson Prentice Hall.

- Ham, L., & Hayduk, S. (2003). Gaining competitive advantages in higher education: analyzing the gap between expectations and perceptions of service quality. *International Journal of Value-Based Management*, 16 (3), 223-242.
- Hamdan, A., Sarea, A., Khamis, R., & Anasweh, M. (2020). A causality analysis of the link between higher education and economic development: empirical evidence. *Heliyon*, 6(6), 1-6. <https://doi.org/10.1016/j.heliyon.2020.e04046>
- Harvey, L., & Knight, P. (1996). *Transforming Higher Education*. Buckingham: Society for Research into Higher Education.
- Hasan, H., Ilias, A., Rahman, R., & Razak, M. (2009). Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions, *IBR*, 1, 163.
- Hoang, M. (2015). *Ensuring 20 percent of the national budget for education*. Available at: <http://thoibaotaichinhvietnam.vn/pages/nhip-songtai-chinh/2015-09-21/dam-bao-20-tong-chi-ngan-sach-cho-giao-duc-dao-tao-24570.aspx> [Accessed 30 April 2021].
- Hom, W. (2002). *Applying Customer Satisfaction Theory to Community College Planning of Student Services*. Available at: http://www.ijournal.us/issue_02/ij_issue02WillardHom_01.htm [Accessed 25 May 2021].
- Ilias, A., & Hasan, H.F.A. (2008). Student Quality and Student Satisfaction: A Case Study of Private Higher Education institutions. *International Business Research*, 1(3), 163-175.
- Jelena, L. (2010). Determinants of service quality in higher education. *Interdisciplinary Management Research*, 6, 631-647.
- Juillerat, S., & Schreiner, L. (1996). The role of student satisfaction in the assessment of institutional effectiveness. *Assessment Update*, 8(1), 8-9.
- [Lewis, B.R.](#), & [Mitchell, V.W.](#) (1990). Defining and Measuring the Quality of Customer Service. *Marketing Intelligence & Planning*, 8(6), 11-17. <https://doi.org/10.1108/EUM0000000001086>
- Kotler, P., & Clarke, R. N. (1987). *Marketing for health care organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Kromydas, T. Rethinking higher education and its relationship with social inequalities: past knowledge, present state, and future potential. *Palgrave Commun* 3, 1 (2017). <https://doi.org/10.1057/s41599-017-0001-8>
- Munteanu, C., Ceobanu, C., Bobâlcă, C., & Anton, O. (2010). An analysis of customer satisfaction in a higher education context. *International Journal of Public Sector Management*, 23(2), 124-140.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory*. 3rd edition. New York, NY: McGraw-Hill
- O'Neill, M. A., & Palmer, A. (2004). Importance-performance analysis: A useful tool for directing continuous quality improvement in higher education. *Quality Assurance in Education*, 12(1), 39-52.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49 (4), 41-50.
- Pariseau, S., & McDaniel, J. (1997). Assessing service quality in schools of business. *International Journal of Quality and Reliability Management*, 14(3), 204-218.
- Qureshi, T., Shaukat, M., & Hijazi, S. (2010). Service Quality SERVQUAL model in Higher Educational Institutions, what factors are to be considered? *Interdisciplinary Journal of Contemporary Research in Business*, 2(5), 60-67.
- Saaditil I., Shamsinar, M. S., & Meng, W. C. (2000). *Customer satisfaction towards service quality of higher education in Malaysia*. Seminar FEP 2000 Pulau Pinang, 20 - 23 October 2000. Available at: <http://www.econ.upm.edu.my/repport/mgm11b.html> [Accessed 21 May 2021].
- Senthilkumar, N., & Arulraj, A. (2010). Service Quality M-HEI – Determination of Service Quality Measurement of Higher Education in India. *Journal of Modeling in Management*, 6(1), 60-78.

- Soutar, G., & McNeil, M. (1996). Measuring service quality in a tertiary institution. *Journal of Educational Administration*, 34(1), 72-82.
- Trong, H., & Ngoc, C.N.M. (2005). *Research data analysis with SPSS*. Ho Chi Minh City: Hong Duc Publishing House.
- William, J. (2002). *The student satisfaction approach: student feedback and its potential role in quality assessment and enhancement*. 24th EAIR Forum, Prague, 8-11 September.
- Wisniewski, M. (2001). Assessing customer satisfaction with local authority services using SERVQUAL. *Total Quality Management*, 12(7-8), 995-1002.
- Yu, C., Wu, L., Chiao, Y., & Tai, H. (2005). Perceived quality, customer satisfaction, and customer loyalty: the case of Lexus in Taiwan. *Total Quality Management & Business Excellence*, 16(6), 707-719.
- Zafiropoulos, C., & Vrana, V. (2007). [Service quality assessment in a Greek higher education institute](#). *Journal of Business Economics and Management*, 9(1), 33-45
- Zeshan, A., Afridi, T., & Khan, S. (2010). Assessing service quality in business schools: implications for improvement. *The 3rd International Conference on Assessing Quality in Higher Education*, Lahore, Pakistan.