Service Quality and Students Level of Satisfaction in Private Colleges in Vietnam

Hung Van Truong[1], Cuong Hung Pham[2] & Nhan Hoang Vo[3]

[1] Duc Tri College, Vietnam

[2] Foreign Trade University, Ho Chi Minh City Campus, Vietnam

[3] University of Medicine Pham Ngoc Thach, Vietnam

Correspondence: Nhan Hoang Vo, University of Medicine Pham Ngoc Thach, #86/2 Thanh Thai, District 10, Ho Chi Minh City, Vietnam.

Received: April 9, 2016 Accepted: May 4, 2016 Online Published: May 13, 2016

doi:10.5430/ijfr.v7n3p121 URL: http://dx.doi.org/10.5430/ijfr.v7n3p121

Abstract

The study of service quality and students level of satisfaction in selected private colleges in Vietnam conducted during the period from April 2013 to December2015. The research result showed that there were 500 students (463 processed and 37 missed) who to be interviewed and answered nearly 24 questions. The researcher had analyzed KMO test, the result of KMO analysis used for multiple regression analysis. The student responses measured through an adapted questionnaire on a 5-point Likert scale. Hard copy and interviewstudent by questionnaire distributed among students of the private colleges in Vietnam. The regression analysis results showed that there were five factors, which included of factors following: Tangibility; Guarantee; Reliability; Responses and Empathyactually affected students' satisfaction with 5 % significance level. The main objectives of this study were following:

- to find factors that affecting the students' satisfactionof the private colleges in Vietnam.

- to identify some factors that affected on the students' satisfaction of the private colleges in Vietnam.

- to analyze and to test some factors that affected the students' satisfaction of the private colleges in Vietnam.

Keywords: service quality, student satisfaction, private colleges, Vietnam

1. Introduction

In Vietnam, the 2010-2011 school year, there were 413 universities and colleges, 2.27 million students, the unemployment rate has reached 40% of trained, "Education Development Strategy 2011-2020" to 2020, there will be 900 universities and colleges with a total of 4.5 million students, the percentage of workers through vocational training and universities reached 70% (doubling in 10 years). When the economy opens towards a market economy, the education sector is also regarded as a service. The school autonomic ally provides educational services for learners and learners are considered as customer or as users of educational services. Therefore, the school must create, innovate to improve quality.

Nowadays, education is considered as a service, which is an important source of revenue for many countries with developing economies. Therefore, the competition among educational institutions to attract foreign and domestic students becomes more and more competitive. Dr. Tom Verhoeff (1997) suggests that education and competition are two global entities, in which education plays a huge role and profound impact on people's lives. There are many different components of society to invest in education and so many people have benefits more than just state investment in education. Do not have a monopoly in the business of educational products (books, textbooks, equipment ...). There is the Impact of the law of supply and demand in education. Families and students have the right to choose schools. Combined with the practical requirements of the teaching job, the researchers has chosen service quality and students level of satisfaction in private colleges in Vietnam for study.

2. Literature Review

Parasuraman et al. (1985) suggested SERVQUAL as a determinants and measuring instrument of service quality. It considered as a good starting point for providing more detail to a description of service quality. They defined "determinants of service quality as a measure of how well the service level delivered matches customer expectations". They designed SERVQUAL based on studies in America. They described ten determinants of service quality as reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customers and tangibles.

Later, Parasuraman et al. (1988) reduced the ten attributes to five attributes. The model of changed SERVQUAL was reliability, responsiveness, assurance, empathy and tangibles.

Firdaus developed HEdPERF model by comparing with SERVPERF (HEdPERF-SERVPERF) in order to access the relative advantages and disadvantages of each instrument, to identify the most superior instrument. SERVPERF is another service quality-measuring instrument developed by Cronin & Taylor (1992). Cronin & Taylor criticized the framework of SERVQUAL and developed their own model "SERVPERF", consisting of 22 items, and kept only the perception of service quality. Fridaus categorized five determinants of service quality in higher education. They are non-academic aspect, academic aspect, reputation, access and program issues.

The concept of quality has evolved from "excellence" to "value", to "conformance to specification" and to "meeting and exceeding customer expectations" (Reeves & Bendnar, 1994). The first two definitions of quality are quite similar in that they both have common views on assessing and measuring the quality of both products or services, whereas the third is more appropriate for assessing only the quality of products (Pariseau & McDaniel, 1997).

Service quality may be conceptualized as customers or consumers overall feeling about the superiority or inferiority of the services they received from the service provider (Zeithaml et al., 1990). The most commonly referred to definition of service quality is the difference between customer expectations of what a customer will receive from a service provider and the perceptions about the services received by customer from the service provider.

Quality, performance and satisfaction are considered to be the key factors and these factors are interrelated in a causal relationship or some time these three factors are used as synonymously due to the similarity in meaning (Cronin et al., 2000; Bitner and Hubert, 1994). Still there is no precise definition of service quality from an educational point of view.However, according to O'Neill and Palmer (2004, p: 42), service quality in education can be defined as "the difference between what a student expects to receive and his/her perceptions of actual delivery" (cited in A. Ijaz, S.M. Irfan, S. Shahbaz, M. Awan, M. Sabir, 2011).The measurement parse concept of quality services into five elements:

- Tangibility: Facilities, equipment, appearance of staff.…
- Reliability: The ability to do services on time and fit right at the first time.
- Responsiveness: Being ready to help and respond to customer's need.
- Assurance: Employee's ability to get customer's trust.
- Empathy: Demonstrate the care to each client.

In this framework, the students' satisfactionof the private collegesisthe dependent variablebutTangibility; Guarantee; Reliability; Responses and Empathythat are independent variables.

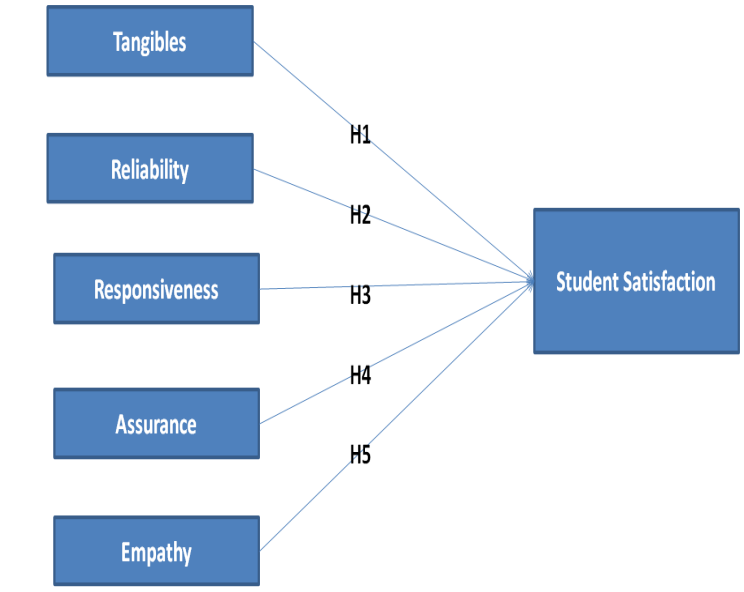

Figure 1. Research model for the students' satisfaction of the private colleges

Based on the aforementioned research questions the following hypotheses used to investigate each question:

H_1: There is a positive relationship between Tangibles and the students' satisfaction of the private colleges.

H_2: There is a positive relationship between Reliability and the students' satisfaction of the private colleges.

H_3: There is a positive relationship between Responsiveness and the students' satisfaction of the private colleges.

H_4: There is a positive relationship between Guarantee (assurance) and the students' satisfaction of the private colleges.

H_5: There is a positive relationship between Empathy and the students' satisfaction of the private colleges.

3. Research Method

The preliminary study for students conducted in 10/2013, using qualitative methods to interview 30 students of the CPD and CDAto examine the content and meaning of the words used in the scale. Following this, the formal study conducted in May 2014, using qualitative methods to interview 500 students to examine the content and meaning of the words used in the scale.

The population of this study was all students of the CPD and CDA (4.000 students) that the values of the random variable of interest could possibly be determined. This notion corresponds directly to the frame in sample survey literature. The difference between the attributes of interest in the study population and the corresponding attributes in the target population called the study error. This is a simple quantitative assessment for numerical attributes but can be challenging to define for graphical ones.

After preliminary investigations, formal research done by using quantitative methods questionnaire survey of 500 students of the CPD and CDA who related and 30 educational managers. The reason tested measurement models, model and test research hypotheses. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower<0.30 and variable coefficient Cronbach's alpha<0.60), factor analysis explored (remove the variable low load factor<0.50). The hypothesis tested through multiple regression analysis with linear Enter method. The observed data was calculated by minimizing the sum of the squares of the vertical deviations from each data point to the line (if a point lies on the fitted line exactly, then its vertical deviation is 0). Because the deviations are first squared, then summed, there are no cancellations between positive and negative values. The least-squares estimates b_0, b_1... b_n are usually computed by statistical software. Regression:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5.$$

Y: The students' satisfaction of the CPD and CDA

X_1: Responsiveness;

X_2: Tangibles;

X_3: Reliability;

X_4: Guarantee and

X_5: Empathy

In this research, the confident level is 95 % (Significance = 0.05, t-test) for confidence interval.

4. Research Results

Table 1. Descriptive statistics for the service quality

Code	N	Minimum	Maximum	Mean	Std. Deviation
RES1	463	1	5	3.31	.892
RES2	463	1	5	3.30	.889
RES3	463	1	5	3.27	.969
RES4	463	1	5	3.25	.934
RES5	463	1	5	3.55	.957
RES6	463	1	5	3.16	.935
TAN1	463	2	5	3.68	1.293
TAN2	463	2	5	3.58	1.190
TAN3	463	1	5	3.39	1.332

TAN4	463	1	5	3.56	1.213
GUA1	463	1	5	3.19	1.094
GUA2	463	1	5	3.17	1.226
GUA3	463	1	5	3.13	1.041
GUA4	463	1	5	3.44	1.252
REL1	463	1	5	3.35	1.004
REL2	463	1	5	3.34	.998
REL3	463	1	5	3.35	.934
REL4	463	1	5	3.08	.947
EMP1	463	2	5	3.42	1.291
EMP2	463	1	5	2.97	.872
EMP3	463	1	5	2.83	1.449
SAT1	463	2	5	3.33	.655
SAT2	463	2	5	3.29	.734
SAT3	463	2	5	3.42	.675
Valid N (listwise)	463				

Source: The researcher's collecting data and SPSS

Table 3 showed that there were 500 students of CPD and CDA interviewed from 10/2014 to 6/2015. There were 463 students processed. The results showed that max value is 5, minimum is 1, mean is around 3.0 and Std. Deviation is around 1.0.

Table 2. Results of analysis of Cronbach Alpha coefficients

Indicators		Average scale if removal variables	Scale variance if the removal variables	The correlation coefficient of the total variations	Cronbach alpha coefficient if the removal variables
Responsive	RES1	16.53	14.392	.821	.869
	RES2	16.54	14.374	.827	.868
	RES3	16.57	14.310	.749	.879
	RES4	16.59	14.839	.699	.887
	RES5	16.30	15.327	.601	.901
	RES6	16.68	14.913	.686	.888
Alpha = 0.900					
Tangibles	TAN1	10.53	10.808	.871	.853
	TAN2	10.62	11.607	.846	.864
	TAN3	10.82	11.485	.734	.904
	TAN4	10.65	12.211	.732	.903
Alpha = 0.909					
Reliability	REL1	9.77	5.773	.902	.781
	REL2	9.78	5.865	.883	.790
	REL3	9.77	6.799	.710	.860
	REL4	10.04	7.596	.506	.932
Alpha = 0.881					
Guarantee	GUA1	9.74	9.174	.705	.821

	GUA2	9.77	8.140	.772	.791
	GUA3	9.80	9.805	.637	.847
Alpha = 0.859					
Empathy	EMP1	5.79	4.116	.457	.611
	EMP2	6.25	5.290	.530	.576
	EMP3	6.38	3.297	.528	.527
Alpha = 0.931					

Source: The researcher's collecting data and SPSS

The Table 2 revealed that all of components are very good for this research. Continue author analyzed the EFA to assess more accurately the scale, helping the uniform scale in research. Thus, based on the authors EFA analysis will evaluate the homogeneity of the observed variables and can be classified because of specific variables. Besides, Cronbach alpha coefficient if the removal variables is more than 0.6. In addition, the correlation coefficient of the total variations is more than 0.3.

KMO & Bartlett's Test of Sphericity is a measure of sampling adequacy that recommended checking the case to variable ratio for the analysis conducted. In most academic and business studies, KMO & Bartlett's test play an important role for accepting the sample adequacy. While the KMO ranges from 0 to 1, the world-over accepted index is over 0.6. In addition, the Bartlett's Test of Sphericity relates to the significance of the study and thereby shows the validity and suitability of the responses collected to the problem addressed through the study. For Factor Analysis recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05.

Table 3. KMO and Bartlett's Test for factors affecting the students' satisfaction

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	7722.151
	Df	210
	Sig.	.000

Total Variance Explained

Com.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.583	26.584	26.584	5.583	26.584	26.584	4.988
2	3.724	17.734	44.317	3.724	17.734	44.317	3.331
3	2.593	12.350	56.667	2.593	12.350	56.667	4.187
4	1.654	7.874	64.541	1.654	7.874	64.541	3.076
5	1.458	6.945	71.486	1.458	6.945	71.486	2.163
6	.801	3.813	75.299				
7	.710	3.380	78.679				
8	.677	3.222	81.901				
9	.616	2.932	84.834				
10	.571	2.721	87.555				
11	.482	2.293	89.848				
12	.444	2.114	91.962				
13	.341	1.622	93.584				
14	.300	1.427	95.011				

15	.260	1.240	96.252
16	.246	1.172	97.423
17	.202	.963	98.386
18	.181	.860	99.246
19	.119	.564	99.810
20	.023	.110	99.920
21	.017	.080	100.000

Source: The researcher's collecting data and SPSS

Table 3 showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.795> 0.6). This result was very good for data analysis. Table 4 showed that Cumulative percent was statistically significant and high data reliability was 71.486 % (> 60 %).

Table 4. Structure Matrix for factors of the students' satisfaction

Code	Component				
	1	2	3	4	5
RES1	.887				
RES2	.877				
RES3	.863				
RES4	.829				
RES6	.725				
RES5	.683				
TAN1		.931			
TAN2		.920			
TAN4		.850			
TAN3		.842			
REL2			.968		
REL1			.961		
REL3			.765		
REL4			.672		
GUA2				.889	
GUA1				.848	
GUA4				.835	
GUA3				.783	
EMP1					.792
EMP2					.786
EMP3					.768

Source: The researcher's collecting data and SPSS

Table 4 showed that Structure Matrix for the Factors affecting the students' satisfaction had 5 Components. Component 1 was Responsiveness (X1), Component 2 was Tangibles (X2), Component 3 was Reliability (X3), Component 4 is Guarantee (X4) andComponent 5was Empathy (X5) for affecting the students' satisfaction.

Table 5. KMO and Bartlett's Test for the students' satisfaction

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.664
Bartlett's Test of Sphericity	Approx. Chi-Square	273.453
	df	3
	Sig.	.000

Source: The researcher's collecting data and SPSS

Table 5 showed that KMO and Bartlett's Test for the students' satisfaction showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significantandhigh datareliability (KMO = 0.664> 0.6). This result was very good for data analysis. The students' satisfaction showed that Cumulative percent was statistically significantandhigh datareliabilitywas 63.805 % (> 60 %).

Table 6. KMO and Bartlett's Test for factors affecting the students' satisfaction

Indicators		KMO and Bartlett's Test
FACTORS	Responsiveness	0.814
	Tangibles	0.762
	Reliability	0.731
	Guarantee	0.748
	Empathy	0.660

Source: The researcher's collecting data and SPSS

This result was very good for data analysis. The students' satisfaction showed that Cumulative percent was statistically significant and high data reliability and KMO and Bartlett's Test was over 0.60.

5. Conclusion

The importance of measuring student satisfaction with private college services has evolved beyond theoretical discussion. The consequences of increased competition among higher education institutions, diminished state funding, mounting attention by governing bodies on institutional accountability, and changes in student body demographics have all contributed to an atmosphere of growing private inquiry of institutions of higher education.

Besides, students' satisfaction is a feeling of happiness or pleasure because you have achieved something or got what you wanted. This study wants to identify students' overall satisfaction with the key features with the private colleges; student perceptions, teaching quality, enrolment, learning environment, learning systems, research facilities. The results from data analysis revealed that respondents consider the followingfactors as the most influential factors:

- Tangibles; Standardized Coefficients of Beta is 0.413.
- Empathy; Standardized Coefficients of Beta is 0.396.
- Responsiveness; Standardized Coefficients of Beta is 0.392.
- Reliability; Standardized Coefficients of Beta is 0.159.
- Guarantee; Standardized Coefficients of Beta is 0.156.

All five most influential factors related to the students' satisfaction of the private collegeswith significance level of 5 %. This result confirmed what found in the tangiblesthat was the most important factor to the students' satisfaction of the private colleges.

All five most influential factors related to the students' satisfaction of the private colleges with significance level of 5 %. This result confirmed what found the guaranteethat was the less important factor to the students' satisfaction of the private colleges.

After the analysis of the survey of all the collected data, we can conclude that theseservice quality variables have significant relationships with the overall satisfaction of thestudents who were studying atthe private colleges. The service qualityvariables and student satisfaction have a moderately positive correlation that meansthere is still room for continuous improvement.

References

Ahrens, L., & Kemmerer, F. (2002). Higher education development. *CambodiaDevelopment Review.*

Altbach, P. (Ed.). (1999). *Private Prometheus: Private higher education and developmentin the 21st century*. Westport, Conn. Greenwood Press.

Ansell, T. (1993). *Managing for quality in the financial services industry*. London: Chapman & Hall.

Ari Warokka. (2011). Service Quality and Students' Satisfaction at Higher Learning Institutions: The Competing Dimensions of Malaysian Universities' Competitiveness. *Journal of Southeast Asian Research.*

Ato. GebreSorsaTakaro. (2014). *Measuring Service Quality and Students' Satisfaction-A Case Study on Hawassa University*. SPC ERA International Journal of Business and Management.

Becket, N., & Brookes, M. (2006). *Evaluating quality management in university departments*. Quality Assurance in Education.

Bell, J. E. (1989). *Projective Techniques: A. Dynamic Approach to the Study of Personality*. New York: Longmans.

Best, John W., & Kahn, James V. (1986). *Research in Education* (5th ed.). New Delhi: Prentice-Hall of India.

Biggs, J. (1995). *Teaching for better learning. Classroom Learning: Educational Psychology for the Asian Teachers*. Singapore: Prentice Hall.

Chapman, D. W. (1981). A model of student college choice. *The Journal of Higher Education.*

D. Patrick Saxon. (2014). Student Satisfaction and Academic Performance in Armenian Higher Education. *American International Journal of Contemporary Research.*

Fosnot, C. T. (1996). *Constructivism: Theory, perspectives, and practice*. New York, NY: Teachers College Press.

Gruber. (2001). *Examining Student Satisfaction with Higher Education Services Using a New Measurement Tool*. Institute for Educational Science Jena, Germany.

Harvey, L., & Green, D. (1993). *Assessment and Evaluation in Higher Education*.

Hishamuddin Fitri Abu Hasan. (2008). Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. *International Business Research.*

Ilias, A., Hasan, H. F. A., Rahman, R. A., & Yasoa, M. R. (2008). Student Satisfaction and Service Quality: Any Differences in Demographic Factors? *International Business Research.*

Kallio R. E. (1995). Factors Influencing the College Choice Decisions of Graduate Students. *Research in Higher Education.*

Karen Swan. (2001). Design factors affecting student satisfaction and perceived learning in Asynchronous Online Courses. *International Journal of Humanities and Social Science.*

Karen Swan. (2001). Vitrual interactivity: design factors affecting student satisfaction and perceived learning in Asynchronous Online Courses. *International Journal of Humanities and Social Science.*

Kusumawati, A. (2013). A Qualitative Study of the Factors Influencing StudentChoice: The Case of Public University in Indonesia. *Journal of Basic and Applied Scientific Research.*

Lokman Coskun. (2014). Investigating the Essential Factors on Student Satisfaction: A Case of Albanian Private University. *Journal of Educational and Social Research.*

Marvin J. Burns. (2006). *Factors influencing the college choice of africanamerican students admitted to the college of agriculture, food and natural resources*. A Thesis presented to the Faculty of the Graduate School.University of Missouri, USA.

MuhammedEhsan Malik. (2010). The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab. *Journal of Management Research.*

Perna, L., & Titus, M. (2004). Understanding Differences in the Choice of College Attended: The Role of State Public Policies. *The Review of Higher Education.*

Song, C., & E. Glick, J. (2004). College Attendance and Choice of College Majors Among Asian-American Students. *Social Science Quarterly.*

Suleiman Al Khattab. (2006). Assessing students' satisfaction with quality of service of students information system. *Journal of Research in Business and Management.*

Tarik Hossain. (2012). Students' Satisfaction: A Study among Private University Students of Bangladesh. *World Journal of Social Sciences.*

Usman, A. (2010). The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab. *Journal of Management Research.*

Watkins, A. E., Richard L. Scheaffer, & George W. Cobb. (2008). *Statistics in action: understanding a world of data*. Emeryville, CA: Key Curriculum Press.

Yi-Ju Chen. (2007). Effects of Online Interaction on Adult Students' Satisfaction and Learning. *The Journal of Human Resource and Adult Learning.*

Yousef Mehdipour. (2013). Student satisfaction at Osmania University. *International Journal of Advancements in Research & Technology.*