

Service Quality of Higher Education Institutions and Its Impact on Students Satisfaction

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Abstract - Student satisfaction assessment is essential in determining service quality at Higher Education Institutions (HEIs). To remain competitive, it requires HEIs to continuously acquire, maintain, and build stronger relationships with students. The dimension of service quality is still debated among the academic researchers. The purpose of this study is to examine the different dimensions used and applied in the process of analyzing the service quality under in the higher education sector and to find out its impact on student satisfaction. Specifically, the study found significant relationship between the five dimensions of service quality (tangibility, reliability, responsiveness, assurance, and empathy) or SERVQUAL and students' satisfaction. The findings generally indicate that the majority of students are satisfied with the facilities provided by colleges in and around Puducherry. Such findings should help universities make better strategic plan as to enhance students' satisfaction in particular and its overall performance in general. In general, the results indicated that all the five dimensions of service quality were correlated with student satisfaction.

Keywords: Service Quality, Tangibility, Assurance, Student Satisfaction

I. INTRODUCTION

The higher education system in India has witnessed remarkable growth; it is being considered as the third largest in the world, next to the United States and China. However, the system continues to be burdened with numerous issues. There are the issues concerning management, which include aspects like quality, access, equity, reputation and relevance. The assessment of institutions and their accreditation is something that the regulators need to care about. There are several issues related to financing and ensuring that education in the country continues to be a public service. It should not be allowed to be reduced to into a profit making organization.

Taylor and Baker in 1994 explained in his research work that a large number of additional students after completing their School Education continue to knock at the doors of our institutions for higher education. As a developing nation we can't escape the moral responsibility of providing high quality higher education to each and every student of this country. New policies and strategies that will give rise to larger number of high quality institutions are the need of the hour. It is imperative that we find the solutions to these problems, as we are now engaged in the using higher

education as a powerful tool for creation of a knowledge-based information society that will take India into a bright new future.

In absolute numbers and diversity, India is home to one of the largest higher education systems in the world. The possibilities seem great for higher education institutes in the country that are charged with equipping our graduates to compete in today's knowledge based society. Distance education, cutting edge learning-management systems and the prospect of collaborating with important institutions from other parts of the world are just some of the transformational benefits that public and private universities in the country have started embracing but lack of quality has pushed the standard to below par.

However, significant challenges also impend. Some of these challenges have to do with issues related to management and regulation. The most major challenge before us is to bring equity in the quality of education that is available across the country. The idea of quality education is more close to the heart of students in rural, semi-urban and urban areas, as they are also eager to become stakeholders in the enduring economic revolution in the country. A large number of additional students are knocking at the doors of our educational institutions. The system must grow at a rapid speed in order to cater to the educational needs of these students but with quality inherent in it (Zeithaml *et al.*, 2008).

II. LITERATURE REVIEW

Education is an instrument of crafting a soul at an individual level and a nation or a civilization at the larger level (Singh; 2016). It is considered as one of the fastest growing services of an economy. A progressive increase is seen in higher education worldwide. In the last five decades, the enrolment of students has increased many folds. This is due to inclusion of a variety of different courses in the upcoming institutions, although, without undergoing a proper analysis. An indispensable role is played by both public as well as private sector which has helped in improving the students-teacher ratio. Despite notable achievements, higher education is seen to be plagued by severe deficiencies in the areas of high quality faculties, adequate physical resources,

proper utilization of resources etc (Gupta and Kaushik; 2017, Muthukrishnan; 2016).

Lack of awareness about the quality of education and the level of institutions providing it, is deviating students from their aim, resulting in under-skilled graduates and post graduates. In the present scenario, providing quality education to young students and shaping them into skilled professionals has become a frightening challenge. To overcome this challenge, many researchers from different parts of the globe have put forwards their efforts. They have developed a variety of instruments to assess the quality of higher education. Out of which the SERVQUAL instrument serves as the basis for analyzing service quality in higher education too.

A. Higher Education Institutions

Higher education is defined as education beyond secondary level. Higher education courses are usually studied at universities, university colleges and higher education institutions. Higher education also includes certain college-level institutions which include vocational schools and career colleges that award academic degrees or professional certifications. The difference between education institutions and higher education institutions need not be looked at only from the higher-grade degrees perspective.

Bebedelis (2008) says that higher education is a process of eliciting and rearing the human values latent in every individual. This underpins the additional responsibility for higher education institutions to prepare students from a holistic perspective, making them readily acceptable for the betterment of society. Engineering Colleges, Arts and Science Institutions and B-Schools predominantly contribute to higher education in today's competitive education system. The higher education industry is complex and diverse. It combines a dominant public sector of state universities and community colleges that educate majority of all students. The benefits of higher education include advanced peer learning, field placements, broadened discipline knowledge, specialization etc (Litten, 1980; Bynner *et al.*, 2003)

B. Service Quality

Service quality has become a strategic option for many institutions of higher learning around the globe. The role of service quality has also become critical to the success of an organization (Landrum, *et al.*, 2007). Perception of service quality has become paramount strategic importance for an organization due to its influence on the post-enrolment communication behavior of the students (Marilyn, 2005). Over the last decade, numerous assessments were conducted to measure the service quality in higher education. However the dimension of quality and the measurement approach to the service quality are still been debated and unsettled. (Owlia and Aspinwall 1996; Parasuraman, Berry, Zeithaml, 1993; Cronin, Taylor, 1994; Carman, 1990; Buttle, 1996)

Through an empirical test, the authors later condensed the earlier ten dimensions into five. (Parasuraman and Berry, 1991; Zeithaml *et al.*, 1990) In their study, the data on the 22 attributes were factor analyzed and resulted in five dimensions as follows:-

1. *Tangibility*: the physical facilities, equipment, appearance of personnel;
2. *Reliability*: the ability to perform the desired service dependably, accurately, and consistently;
3. *Responsiveness*: the willingness to provide prompt service and help customers;
4. *Assurance*: employees' knowledge, courtesy, and ability to convey trust and confidence; and
5. *Empathy*: the provision of caring, individualized attention to customers.

C. Service Quality and Student Satisfaction

The relationship between customer satisfaction and service quality is still ambiguous in marketing literature (Anderson *et al.*, 1994). Many research studies have been conducted to determine whether satisfaction is influenced by service quality or vice versa. Athiyaman (1997) found that there is a strong relationship between service quality and customer satisfaction, and all service encounters should be managed to increase consumer satisfaction. Boulding *et al.*, (1993) states that both service quality and customer satisfaction are treated as one and the same by the business press. In contrast, Taylor and Baker (1994) strongly supported the view that service quality and customer satisfactions are separate and distinct constructs.

Guolla (1999) and Ahmed *et al.*, (2000) show that students' perceived service quality is an antecedent to student satisfaction. Therefore, there is a current consensus among the researchers with regard to the causal order between these two constructs. With this theoretical background, the present study considers student perceived service quality as an antecedent to student satisfaction in higher education sector.

III. OBJECTIVES OF THE STUDY

The main objective of this study is to find out the determinants of service quality of higher education institutions and to find its impact on student satisfaction with special reference to Puducherry and also to analyze their demographic profile.

IV. RESEARCH METHODOLOGY

This study has adopted Parasuraman's SERVQUAL dimensions. The dependent variable in this study is the student satisfaction towards their higher education institutions in Pondicherry. The dimensions for the independent variable were tangibility, assurance, responsiveness, reliability and empathy as illustrated in the following fig.1.

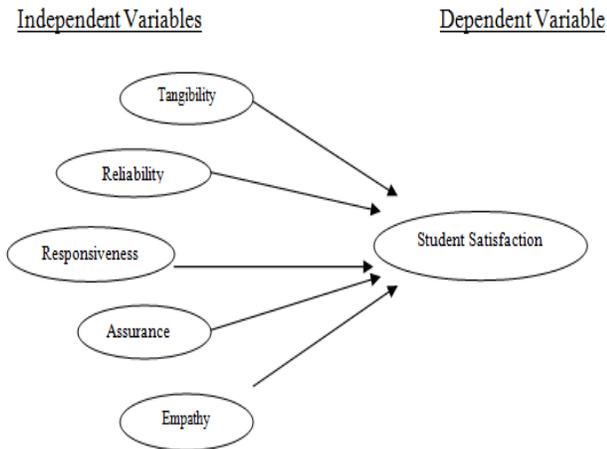


Fig. 1 Research Frame Work

A. Hypotheses

- H₁: There is a significant relationship between tangibility and student satisfaction.
- H₂: There is a significant relationship between reliability and student satisfaction.
- H₃: There is a significant relationship between responsiveness and student satisfaction.
- H₄: There is a significant relationship between assurance and student satisfaction.
- H₅: There is a significant relationship between empathy and student satisfaction.

B. Sampling, Research Instruments and Data Collection

Probability sampling method has been adopted for this study as it gives equal chance for each and every unit of the population to be included in the sample. A sample of 160 students was selected through random sampling and they were administered with research instrument developed by Parasuraman *et al.*, (1990). The questionnaires were based on the five dimensions of service quality and used the likert scale from 1 for strongly disagree to 5 for strongly agree. The validity test were conducted using the content and face

validity approach. Meanwhile the alpha coefficient for the reliability test was 0.85

V. FINDINGS AND DISCUSSION

A total of 160 students answered the questionnaire and out of which 54% are male and 46% are female. Moreover 68% are UG students and 32% are PG students. Research also revealed that 67% of students are from urban area and 33% are from rural area. The research used Pearson Correlation and Regression analysis and the findings for tangibility shows that mean for “tangibility” of institutions’ service quality is equal to 3.3069 this means that most of the students agreed that tangible services are provide in their institutions.

The mean for “reliability” of institutions’ service quality is equal to 3.4674 this means that most of the students agreed that services are provide in their institutions are reliable. The mean for “responsiveness” of institutions’ service quality is equal to 3.4454 this means that most of the students agreed that the responsiveness of services are provide in their institutions are satisfied.

The mean for “assurance” of institutions’ service quality is equal to 3.7864 this means that most of the students agreed that the assurance of services are provide in their institutions are satisfied. The mean for “empathy” of institutions’ service quality is equal to 3.8054 this means that most of the students agreed that the empathy of services are provide in their institutions are satisfied.

A. Hypothesis 1: There is a Significant Relationship between Tangibility and Student Satisfaction: The relationship between tangibility and students satisfaction was analyzed using Pearson’s correlation coefficient and the results in the Table I indicates a strong and positive relationship between tangibility of services and student satisfaction (R square = 0.364, n=160, p<0.01). This means that 36% of their satisfaction is determined by tangibility.

TABLE I RELATIONSHIP BETWEEN TANGIBILITY AND STUDENT SATISFACTION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.607	.368	.364	.45759	.368	91.574	1	157	.000

B. Hypothesis 2: There is a Significant Relationship between Reliability and Student Satisfaction: Table II indicates a strong and positive relationship between

reliability of services and student satisfaction (R square = 0.561, n=160, p<0.01). This means that 56% of their satisfaction is determined by reliability.

TABLE II RELATIONSHIP BETWEEN RELIABILITY AND STUDENT SATISFACTION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.751	.564	.561	.38035	.564	202.776	1	157	.000

C. Hypothesis 3: There is a Significant Relationship between Responsiveness and Student Satisfaction: Table III indicates a strong and positive relationship between

responsiveness of services and student satisfaction (R square = 0.656, n=160, p<0.01). This means that 66% of their satisfaction is determined by responsiveness.

TABLE III RELATIONSHIP BETWEEN RESPONSIVENESS AND STUDENT SATISFACTION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.811	.658	.656	.33682	.658	301.776	1	157	.000

D. Hypothesis 4: There is a Significant Relationship between Assurance and Student Satisfaction: Table IV indicates a strong and positive relationship between

assurance of services and student satisfaction (R square = 0.256, n=160, p<0.01). This means that 26% of their satisfaction is determined by assurance.

TABLE IV RELATIONSHIP BETWEEN ASSURANCE AND STUDENT SATISFACTION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.510	.260	.256	.49514	.260	55.296	1	157	.000

E. Hypothesis 5: There is a Significant Relationship between Empathy and Student Satisfaction: Table V indicates a strong and positive relationship between

empathy of services and student satisfaction (R square = 0.370, n=160, p<0.01). This means that 37% of their satisfaction is determined by empathy.

TABLE V RELATIONSHIP BETWEEN EMPATHY AND STUDENT SATISFACTION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.612	.374	.370	.45544	.374	93.920	1	157	.000

VI. CONCLUSION

Analyzing and understanding the students' satisfaction is not easy, but to some extent this study has investigated the determinant factors of service quality of higher education institutions based on the literature and examined its relationship with student satisfaction. As there is an increase in the scenario of parents expecting quality education for their children, it is the sole responsibility of the institutions and the concerned regulatory bodies of higher education to meet out their expectation without any flaw.

The results of this study reveals that the students studying in the colleges affiliated to Pondicherry University are satisfied with the service quality dimensions such as tangibility, reliability, responsiveness, assurance and empathy. Moreover it is established that there is a strong and positive relationship between the above dimensions and student satisfaction. It is also found that among the five dimensions, two dimensions namely responsiveness and reliability accounts for higher student satisfaction.

Hence the higher education institutions should continuously work towards ensuring that the service provided can really meet or exceed the expectations of students thereby they can overcome the cut-throat competition prevailing in the higher education arena and as a result of which they can develop better potential to increase their market share. By offering better service quality to the student stakeholders and

achieving their satisfaction higher education institutions can act as a major force in the industry at both national and international level.

REFERENCES

- [1] Anderson, E.W., Fornell, C. & Lehmann, D.R. (1994). Customer satisfaction, market share, and profitability: findings from Sweden, *The Journal of Marketing*, 58(3), 53-66.
- [2] Athiyaman, A. (1997). Linking student satisfaction and service quality perceptions: the case of university education, *European Journal of Marketing*, 31(7), 528-540.
- [3] Bebedelis, G. (2008). Aristotle on virtue and Ethics: A parallelism with Sathya Sai Baba's teachings, *European Sathya Sai Educare Institute*, Copenhagen.
- [4] Boulding, W., Kalra, A., Staelin, R. & Zeithaml, V.A. (1993). A dynamic process model of service quality: from expectations to behavioral intentions, *Journal of Marketing Research*, 30(1), 7-28.
- [5] Buttle, F. (1996). SERVQUAL: Review, critique, research agenda, *European Journal of Marketing*, 30(1), 8.
- [6] Bynner, J., Dolton, P., Feinstein, L., Makepeace, G., Malmberg, L., & Woods, L. (2003). Revisiting the Benefits of Higher Education. A Report by the Bedford Group for Life course and Statistical Studies, Institute of Education.
- [7] Carman, J. M. (1990). Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions. *Journal of Retailing*, 66(1), 33.
- [8] Cronin Jr, J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations. *Journal of Marketing*, 58(1), 125.
- [9] Guolla, M. (1999). Assessing the teaching quality to student satisfaction relationship: applied customer satisfaction research in the classroom, *Journal of Marketing Theory and Practice*, 7(3), 87-97.

- [10] Gupta, P. & Kaushik, N. (2017). *MEDUQUAL-development and validation of scale. In: 9th Annual National Conference-2017*. New Delhi: DBH, 600-616.
- [11] Hair, J.F. Jr, Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. (2008). *Multivariate Data Analysis*, 6th ed., Pearson Prentice Hall, New Delhi.
- [12] Hu, L.T. and Bentler, P.M. (1995), Evaluating model fit, in Hoyle, R. (Ed.), *Structural Equation Modeling: Concepts, Issues, and Applications*, Sage, London, 76-99.
- [13] Krejcie, R. & Morgan, D. (1970). Determining sample size for research activities, *Educational and Psychological Measurement*, 30(2), 607-610.
- [14] Landrum, H., Prybutok, V. R., & Zhang, X. (2007). A comparison of Magal's service quality instrument with SERPERF. *Information and Management*, 44, 104-113.
- [15] Litten, L. H. (1980). Marketing higher education: Benefits and risks for the American academic system. *The Journal of Higher Education*, 40-59.
- [16] Marilyn, R. (2005). Marketing education: A review of service quality perceptions among international students. *International Journal of Contemporary Hospitality Management*, 17(1), 65.
- [17] Muthukrishnan, S. (2016). Why do college students perceive as 'Quality' of higher education, *University News*, Oct, 54(41), 05-10
- [18] Owlia, M. S., & Aspinwall, E. M. (1996). Quality in higher education--a survey. *Total Quality Management*, 7(2), 161-171.
- [19] Parasuraman, A. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing (pre-1986)*, 49(4), 41.
- [20] Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding Customer Expectations of Service. *Sloan Management Review*, 32(3), 39.
- [21] Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1993). Research Note: More on Improving Service Quality Measurement. *Journal of Retailing*, 69(1), 140.
- [22] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A Multiple-Item Scale for Measuring Consumer Perc. *Journal of Retailing*, 64(1), 12.
- [23] Singh. B.P & Prasad. C.S, (2016). Higher Education in India: At a glance, *university News*, June 27- July 03, 54(26), 3-8.
- [24] Taylor, S.A. & Baker, T.L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions, *Journal of Retailing*, 70(2), 163-178.
- [25] Zeithaml, V.A., Berry, L.L. & Parasuraman, A. (1996), The behavioral consequences of service quality, *The Journal of Marketing*, 60(2), 31-46.
- [26] Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. (2008). *Services Marketing: Integrating Customer Focus across the Firm*, 5th Ed., McGraw-Hill, Boston, MA.