Measuring Service Quality In Educational Institution: A Case Study

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ABSTRACT

This study aims atfinding out the SERVQUAL gap that leads to educational institutions' service offering to be ineffectivein Varanasi. The study employs SERVQUAL model that has been modified for use in educational institutions. The model encompassesassurance,empathy, responsiveness,reliability and tangibles dimensions of service quality .The study is quantitative in nature.To collect data from respondents, convenience sampling technique was used. Data was collected from 150 participants at the Varanasi schools. The results indicate thatin assurance,reliability andtangibilitydimensions, the students' typically had high expectations and the assurance dimensionshowed the largest perception gap. Administration of educational institutions will benefit from the study as it will prove to be useful in figuring outeconomicalsolutions tominimisegaps in service quality .

Keywords: students'satisfaction ,educational institution, service quality , SERVQUAL.

1. INTRODUCTION:

Globally, educational institutions have become familiar with the implementation of quality assurance procedures. Educational institutions are under increasing pressure to draw in exceptionally talented students and establish a solid academic reputation, which is causing them to focus more on issues related to service quality. This study measures expectation and perceptions of staff and students in selected schools at Varanasi to ascertain their satisfaction with respect to service quality offered at their school. The issue of measuring service quality in higher education has garnered the interest ofseveral scholars (**Peng&Samah, 2006; Petruzzellis,2006; Pereda, 2007; Abu Hasan, 2008; Lee, 2010; Jain, Sinha, & Sahney, 2011; Sultan & Wong, 2012; Koni 2013).**Staff and students' assessment of institution'sservice quality is influenced by process and outcome of institution. The process deals with how staff and students are handled during service interactions and outcome is the real result that the students are experiencing(**Cuthbert, 1996**). Students and employees engage with the institution on a daily basis and receive a range of services. The importance of students' perceptions of the educational institution experience is increasingas higher education institutions have endeavoured to adopt a more student-centric approach. (**Mahadzirah& Wan, 2003; Khodayari&Khodayari, 2011).**This study uses quantitative approach toexplore the quality of service delivered at the selected two types of school: public

and private school in Varanasi by comparingthe perceived and expected levels of service.In the education sector determining whether the institution is fulfilling students' expectation is also crucial for other educational institutions.This study is unique as it looks at public and private schools of Varanasi in this context, which is relatively new.

2. OVERVIEW OF LITERATURE

The idea of'service' can be explained as an intangible product that cannot be owned or stored, but it comes to an existence at the time and place it is delivered for consumption. And the degree to which a service satisfies or surpasses students' expectation is known as service quality. **(Lewis & Mitchell, 1990; Boltan& Drew, 1991;Cronin & Taylor, 1992; Nitecki & Hernon, 2000; Zeithaml, 2006; Parasuraman, 2004 ; Jain, Sinha, & De, 2010).** The notion of difference is the degree and direction of discrepancy or gap between students' expectations and perceptions of a service (**Parasuraman et al., 1985**). A range depicting perfect quality to completely unsatisfactory quality has been used to show how service quality is measured, with acceptable quality being represented at a certain spot along the range. The degree to which the expected and perceived services differ from one another determines where students' perception of service quality fall on the quality range. Students' dissatisfaction is said to occur when expectations exceed perceptions, resulting in a perceived service quality that is below satisfactory levels.Conversely, when expectations are lower than perceptions , the quality of the service perceived is considered satisfactory and will have a greater positive variation between theperceived and expected service quality. According to **Gronroos (2008),** Students' perception of service quality is based on a comparison between what they believe service organizations should provide, that is, what they expect and their perception how well these organizations provide the services.Consumers base their perception about service quality by comparing it to previous experiences and productivity is influenced by both the students and the service provider's staff performance. The Gaps Model provides an explanation for this discrepancy amid the students' expectations and the perceived quality of the service received. According to this model, a student compares 'his or her experience with pre-consumption expectations (before service consumption) and post-consumption experiences (after service consumption)', with the latter being the function of disconfirmation.The distinction implies level of contentment or dissatisfaction with particular services.

3.Gap analysis:

Gap Analysis is the process of comparing the actual or real performance with the estimated or standard performance and then finding out the key areas where the difference are and what are the reasons of such differences. In Management Literature also it is defined as the process of evaluating the actual performance with the desired performance. This analysis allows any institution to find out how the expected performance can be achieved, because it helps in finding out the lacunas or the limitation that current system is having, and can be really helpful in removing those limitation. Gap analysis helps in identifying that whether the resources are utilized in a proper way or not and if they are not then what are the scope of improvements. Usually gap analysis is done in four different stages:-

a. Evaluating your current performance

b. Identifying the ideal or standard performance where you want to be

c. Finding out gap by comparing Current performance with standard performance

d. Executing plans or strategies to bridge the gap between actual and standard performance.

There are various tools to undertake Gap Analysis these are

a. SWOT analysis - this is one of the oldest tool of gap analysis which is implemented by many organization. This analysis helps the organization in determining their Internal strengths and weakness and their external Opportunities and threats. This analysis helps in determining where your organization stands as compared to the competitors and what organization can do in improving their performance.

b. Fishbone diagram – this tool is also known as Ishikawa. It is type of analysis which tries to find out the cause and effect of any particular procedure and it has derived its name fishbone from its diagrammatical representation. This tool is really helpful in understanding and evaluating the current performance of the organization which uses categories like Measurement, machine, material, method, people and environment.

c. Mckinsey 7s framework – this model helps in finding out whether the organization is reaching its expectation. This model works on 7s which are Skills, Style, Staff, Strategy, System, Structure and Shared Vision.

d. PEST analysis – this model is somewhat similar to SWOT analysis, this tool helps the organization in identifying the external factors of the environment such as political, economical, social and technological. Some organization want to do more in-depth analysis of the market which adds two more factors into this which is Legal and environmental (PESTLE)

e. Nadler- Tushman Model – this is one the most innovative and dynamic model for gap analysis which takes into consideration the organizational whole process starting from Input (Beginning) to Output (End). This model transform the whole process into input, transformation and output. This model explains how shortage of inputs and inadequate transformation function may result in gap in the output.

3.1 The Gap Model:

Students perception are the subjective evaluations of the actual service experiences, whereas students expectations are the standards or reference points that students bring to the service experience (**Zeithaml et al.,2006**). The Gap Model makes a comparison between the perceived level of service performance and the attributes that a student actually expects to receive.**Iacobucci et al. (1995)** have emphasized the differences between the disconfirmation paradigms, as it is known in the literature on students' satisfaction, and in the literature on service quality, the Gap Model. According to **Koni et al. (2013),** the Gap Model pinpoints 'five potential gaps'amid expectations for service levels and views of actual service performance. **Miremadi et al. (2011)**assert that to be able to effectively manage students' expectations, it is crucial to have a thorough understanding of them and also there is a need to identify service gaps from the viewpoint of the students.

The following is a brief overview of the five service quality gaps depicted in Figure 1:
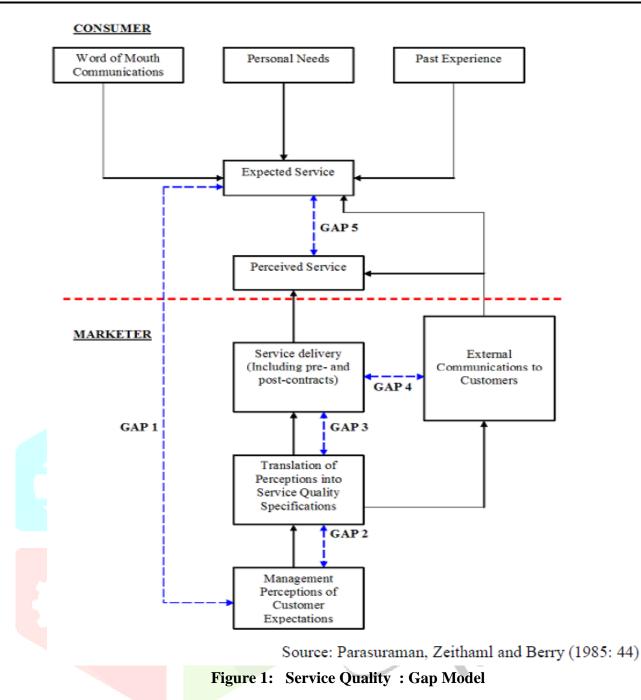
Gap 1: Itcomprises of the difference between what students actually expects and what a service provider perceive as the expectation of students.
Gap 2: The discrepancy between how marketers interpret students' expectations and how those expectations are translated into specifications for service quality is second gap.
Gap 3: The disparityamid the marketer's actual service and the specifications for students' service quality is third gap.
Gap 4: The discrepancy between what is stated to the students and the actual delivery of services is the fourth gap.
Gap 5: The fifth gap isdiscrepancy between the students' perceived service and expected service.

Source: Parasuraman, Zeithaml and Berry (1985: 44)

Figure 1:   Service Quality : Gap Model

This study aims to assess the fifth quality gap in secondary education service.The fifth gap is the disparity amid students' perception of the exact service delivery and their actual expectations. **Nitecki and Hernoon (2000),** stated that this gap form the basis of a students oriented definition of service quality, but other gap are contributors to the service qualitygap that may be perceived by students .According to **Parsuraman et al. (1988**) there are five service quality dimensions which measure students' perception of service quality. It comprise of assurance, empathy, reliability, responsiveness and tangibility.

4. RESEARCH METHODOLOGY:

The aim of study is to evaluate expectations and perception of staff and studentsregarding service qualityto assess their level of satisfaction in secondary education. Data has been collected from the public and private school of Varanasi district.Data has been taken from the 150 respondents.

4.1 RESPONDENTS:

The respondents for this survey have been chosen from two type of school fromVaranasi district. The respondents are the students ranging between the age of 14 to 19years and staff between the agesof 23to 60 years. Convenient sampling technique was employed to conduct the survey in bothtypes of schools.Out of the200 questionnaire that were distributed, 150 have been returned.

Table 1: Profile of the Respondents

Demography	N	Per cent
Public	50	33.33
Private	100	66.66
Educational Level		
11TH	80	53.33
12TH	70	46.66
Type of staff		
Academic	15	50
Administration	15	50
Age		
17-21	80	53.33
22-26	70	46.66
27-31	15	50
32-36	15	50
Gender		
Male	90	60
Female	60	40

4.2 Measurement

There aretwo segments to the survey,namely, students' service expectation" of schools as well as students service provided by the school. In the segmentof service expectation participants were asked provide Likert scale rating with seven points, (1= strongly disagree, 2=disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=agree, 7=strongly agree), the degree to which schools exhibit the characteristics listed in the statements.Participants were asked to rate the degree to which the schoolexhibits the qualities outlined in perception segment statements.There are five dimensions to the survey:

1. Commitment to serve

2. General attitude

3. Human factors

4. Physical and academics services

5. Visual aspects

4.3 Analysis:

Thesurvey of SERVQUAL was utilized for gauging the services quality provided, and the evaluation process entailed calculating the discrepancy between the scores given to the perception and expectations statement (**Youseff et al.,1995**) .The seven-point Likert scale was used to calculation andfor every response to the statement, an average score was calculatedin the SERVQUAL survey's perception and expectation and sections.SPSS version 16.0was used for theMann-Whitney to make comparison and find

significant difference.   This test is used for comparing the differences between two independent samples which in case of this study is public staff versus public students and private staff versus private students.

4.4 Reliability:

Cronbach alpha was computed to assess the reliability of the data that was collected. It ranges from 0 to 1, where 0 denotes a measurement that is completely unreliable and 1 represents a value that is totally reliable. For every survey segment or   service quality factor, Cronbach alpha was determined.

Table 2: Reliability Test usingCronbach Alpha Test

Dimensions of Service Quality	N	Cronbach's alpha	
		Expectation	Perception
Assurance	150	0.757	0.880
Empathy	150	0.832	0.958
Reliability	150	0.748	0.878
Responsiveness	150	0.787	0.998
Tangibles	150	0.767	0.970

All of the   Cronbach's alpha coefficients   values are higher than 0.7, which denotes that data is fairly reliable.

5.   Analysis and Findings

Respective factor scores ofevery dimensions and each statement from the five dimensions are exhibited in Table 3.Results show that   expectations   were one or two units higher than their perceptions. Reliability (-2.308), responsiveness (-.020), and tangibility (-2.053) show the largest disparities.

Table 3: Total score for dimensions

Dimensions	Statements	Perception Mean	Expectation Mean	Factor score/ Difference
Reliability	1	3.26	5.26	-2
	2	3.17	6.24	-3.07
	3	4.45	6.34	-1.89
	4	3.56	6.25	-2.69
	5	4.41	6.5	-2.09
	6	3.44	5.87	-2.43
	7	3.54	6.15	-2.61
	8	3.61	5.23	-1.62
	9	3.56	5.36	-1.8
	10	5.25	6.23	-0.98
Responsiveness	1	4.04	6.15	-2.11
	2	3.54	6.0	-2.46
	3	4.25	6.17	-1.92
	4	3.55	5.87	-2.32
	5	3.87	5.87	-2
Empathy	1	4.25	6.05	-1.8
	2	3.95	6.5	-2.55
	3	4.63	6.02	-1.39
	4	4.05	6.10	-2.05
Tangibility	1	3.15	6.04	-2.89
	2	3.16	4.05	-0.89
	3	4.86	5.68	-0.82

	4	4.42	6.06	-1.64
Assurance	1	4.55	6.35	-1.8
	2	4.59	6.28	-1.69
	3	4.65	6.25	-1.6

The present analysis in table 3 elucidates the variation existing amid the respondents' expectations and perceptions . The five dimensions' analytical discussion is given below.

Table 4: Service Quality Index

Dimensions	Score
Reliability	-2.108
Responsiveness	-1.020
Empathy	-1.455
Tangibility	-1.855
Assurance	-1.870
Overall SERVQUAL	**-4.092**

The analysis of GAP specifies that there is variationamid expectation and perception of the participants. A large number of gaps across all indicate significant divergence between participants' expectations and perceptions. The analysis of each dimension is discussed next section.

5.1 ANALYSIS OF THE RELIABILITY DIMENSIONS:

For the dimension reliability, the average gap score was -2.208.In reliability dimension, the statement administrative staff of excellent school shows a genuine enthusiasm in problem solving of the studentshad the largest impact on the discrepancy between expectations and perceptions .This suggests that in order for schools to obtain a competitive edge, the staff should offer their whole support to the students.

5.2 ANALYSIS OF THE RESPONSIVENESS:

The third-highest disparity ever measured was in this dimension.This suggests that public school students are not entirely content with the service quality's component of commitment to serve. The excellent school provide quick and prompt service statement was the primarytrigger (-2.46) to thedisparity between expectation and perceptions.This suggests that public school students are dissatisfied with the level of service they are receiving, and public schools need to take the appropriate steps to address the issues.

5.3 ANALYSIS OF EMPATHY

Out of the five dimensions, this dimension has the second-lowest gap score recorded. Regarding empathy, excellent schools provide accurate and timely information statement had the peakscore(-2.55).

5.4 ANALYSIS OF TANGIBILITY

Out of the five dimensions, this dimension had the lowest score.Excellent schools have modern-looking equipment was the gap statement and (-2.89) was the maximum gap score for service quality's tangibility dimension. This suggestthat public school management must find solution to the issue of having modern looking equipment.

5.5 ANALYSIS OF ASSURANCE

For this dimension excellent schools have good admission procedure to recruit qualified students , was the statement that had the highest statement gap score (1.8). This suggests that public schools lacks admission procedures for recruiting qualified studentsManagement is responsible for making ensuring that procedures and policies are created and put into place to address this problem with service quality.

5.6 COMPARISON OF STAFF VERSUS STUDENTS

H_0: There are no difference in services rendered between staff and students.

H_1: There are difference in services rendered bystaff and students.

For any p-values < 0.05 , the H_0 will be rejected and it will be determineddisparityexists amid the staff andstudents in light of their expectations . In order to compare expectations of students and staff, the test of Mann-Whitney was employed.

Table 5: Expectation   of public staff vs private students: Significance

Statements	Asymp. Sig.	Wilcoxon W Test	Z Test	Mann-Whitney U Test
Statement 1	.001	15422.000	-3.277	4533.000
Statement 2	.000	15003.000	-4.213	4125.000
Statement 3	.002	15252.000	-3.153	4521.000
Statement 4	.006	15532.000	-2.722	4600.000
Statement 5	.001	15190.000	-3.477	4312.000
Statement 6	.003	15435.000	-3.408	4308.000
Statement 7	.01	15869.000	-2.950	4557.000
Statement 8	.328	16272.000	-1.80	4991.000
Statement 9	.638	16531.000	-979	5394.500
Statement 10	.003	15428.000	-470	5653.000
Statement 11	.002	15343.000	-2.950	4550.000
Statement 12	.003	16784.500	-4.788	3588.500
Statement 13	.000	16406.000	-5.220	3256.000
Statement 14	.731	15428.000	-161	3246.000
Statement 15	0.91	15428.000	-412	5653.000
Statement 16	.681	16593.000	-694	6600.000
Statement 17	.488	16614.000	-1.751	5624.000
Statement 18	.080	16502.000	-835	5624.000

Statement 19	.404	16598.000	-683	5736.000
Statement 20	.495	16614.000	-2.169	5508.000
Statement 21	.694	16502.000	-2.501	5441.000
Statement 22	-.080	15952.000	-1.591	5510.000
Statement 23	.404	16319.000	-170	4892.000
Statement 24	.486	15576.000	-882	4698.000
Statement 25	.303	16319.000	-2.946	5122.000
Statement 26	.012	15770.000	-1.240	5732.000

The test results as per table 5 demonstrate that staff and students at public and private schools have different expectations regarding service quality . The detailed statements are presented in Appendix.

CONCLUSION:

In order to assess the level of service quality in school education, this study has examined the expectations and perceptions of both staff and students. The five dimension included in the study are assurance, empathy, reliability,responsiveness andtangibility. The finding reveals that students had high expectation in tangibility, empathy and responsiveness dimensions and theirhighest perception was seen in the assurance, responsiveness, and tangibility dimensions. The study makes it possible to carry out comparable research at other schoolsbelonging to the private and public sectors and also to provide a basis forcontrastingthe outcomes. Furthermore the findings of this study have initiated efforts to gauge and compare students' satisfaction with respect to service provided at other schools in Varanasi. To overcome the limitations of this study and to confirm the results of this investigation, replication studies with larger sample sizes would be useful.

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APPENDIX

Statements	Detail
Statement 1	An excellent school has complete and modern laboratories
Statement 2	An excellent school has modern library with complete collection
Statement 3	An excellent school provide students with health care
Statement 4	An excellent school has a pleasant campus environment
Statement 5	An excellent school provide practical and applied oriented course
Statement 6	AN excellent school perform the service right the first time
Statement 7	An excellent school provides their services at the time they promise to do so
Statement 8	Administrative services of an excellent school will provide error free records
Statement 9	Employees of an excellent school will tell students exactly when service will be performed
Statement 10	An excellent school has qualified lecturers
Statement 11	An excellent school show interest in solving students problem
Statement 12	Employees of an excellent school provide quick and prompt services
Statement 13	Employees of an excellent school are ready to help
Statement 14	Employees of excellent school are never too busy to respond to requests
Statement 15	An excellent school give individual attention
Statement 16	An excellent school applies discipline to every body
Statement 17	Excellent school [provide accurate and timely information.
Statement 18	Excellent school create harmonious relationship among staff and students
Statement 19	An excellent school develop democratic campus regulations
Statement 20	An excellent school has modern looking equipment
Statement 21	The physical facilities of an excellent school are visually appealing
Statement 22	Employees at an excellent school are neat appearing
Statement 23	Material associated with the service of an excellent school will be visually appearing
Statement 24	Excellent school have good admission procedure to recruit qualified students.
Statement 25	Lectures of excellent school assess and evaluate stents achievement objectively
Statement 26	Employees of an excellent school treat students courteously.