# Identification of Gaps in Service Quality in Higher Education

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## Abstract

Gap means difference between perception and expectation. Identification of gap provides an opportunity to bridge it and thus to enhance the service. Higher education is getting popularity as a service industry day by day. This study focuses to identify the gaps in service quality of higher education by using a self-developed instrument on the lines of the SERVQUAL. Two stages random sampling technique was used. A sample of 144 students from university of Gujrat, Punjab, Pakistan was selected. The information collected through the questionnaire were used to find out the expectations as well as perceptions of the students regarding five dimensions of service quality gaps were determined based on differences between perceptions and expectations of the students. The results show that there are gaps in all the five dimensions. The study found significant difference between perceptions and expectations of students (p < 0.000).It means students' expectations exceeded their perceptions. It is recommended that the university should take steps for improvement in all the five dimensions.

Keywords: Service quality, higher education, measurement, SERVQUAL (service quality)

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# Introduction

Gap means difference between perception and expectation. Identification of gap provides an opportunity to bridge it and thus to enhance the service. Higher education is getting popularity as a service industry day by day. The providers directly affect the service of Education. Greater emphasis is being laid by the higher education institutions to meet the requirements and expectations of the students. Universities try to become student oriented as the student perceptions regarding educational facilities and services have become very important (Anci, 2006). In the universities of Pakistan, issue of service quality is emerging as a new field.

Different methods for measuring quality in higher education are in vogue. It is because of to the different meanings and interpretations of quality education. In higher education context, gap analysis is not new and anumber of studies are being conducted on the lines of the work of Parasurman (1990). Long et al (1999) had used "gap analysis" to compare expectations and experiences of the students. Expectations and preferences of the students in teaching, learning, and assessment have been studied by Sander, Stevenson, King, and Coates (2000). A number of measures to evaluate student expectations and perceptions have also been established by Duncan, LaBay, Clare, and Comm (2003).

Service, being a broader concept, encompasses the core activities of a university. It is also influenced by the university context (Abukari, 2010). Kotler, Armstrong, Saunders, and Wong (2004) have defined it as "A service is an activity or benefit that one party can offer to another which is essentially intangible and does not result in the ownership of anything."

Almost every service organization involves in the delivery of service through these four components.

- 1. Service setting.
- 2. Service worker.
- 3. Service purchaser.
- 4. Service procedure.

According to Arambewela, Hall, and Zuhair (2006), education is regarded as service which students along with other stakeholders experience and develop their assessment regarding delivery of service in the form of quality and its sustainability which are fundamental ingredients of a service. Abukari (2010) considered service as broader concept which involves teaching, community engagement and research. Service quality is actually an evaluation of how good a provided service approves client's/student's expectation. A number of inter-related factors which include treatment of the providers with the students, services which approve the scope, easy access for students and provision of quality information to students, technical expertise of the managers and continuation of services may be called service quality. Today, service quality is a popular emerging construct and a field of interest for the higher education stakeholders.

Kundi, Khan, and Qureshi (2014) found assurance and tangibility significant for improving service quality in higher education. They also found a strong relationship of these dimensions with student satisfaction.

Malik and Danish (2010) studied the satisfaction level of students in the Punjab Province of Pakistan. They have found that the students are satisfied with services of "RATER" (Reliability, Assurance, Tangibility, Empathy and Responsiveness).

Izogo and Ogba (2015) found that satisfied customers are definitely loyal. Out of their study, a dimension of service quality naming commitment emerged and proved much significant forecaster of loyalty and satisfaction of the customers.

Ong and Markervis (2012) pointed the need of higher education in the market place competition to make themselves distinct from their competitors in providing quality services. They have found in their study that the students of first and third year in Australia and Malaysia are satisfied with the service quality. There is an important difference between first and third year students' expectations of service quality in Malaysia. Nevertheless, no difference was found in perceptions and gap of service quality between first and third year students in Malaysia and Australia.

### Significance of the Study

This study specifically has provided opportunity to the administration of the UOG to fill up the gaps by designing innovative plans. In short, the study is supportive for the Vice Chancellors, HOD's, HR Managers of the Universities in particular and for the policy makers and managers in general. The study was delimited to the UOG.

### **Research Objective**

1. The objective of this research paper was to identify the gaps (difference in perceptions and expectations) in the service quality at University of Gujarat located in the province of Punjab Pakistan.

### **Research Question**

According to the research objective, following was the research question.

1. Are there gaps (the difference between perceptions and expectations) in service quality at University of Gujrat located in the province of Punjab Pakistan?

### **Population**

The population of this study consisted of all the boys and girls studying in the final year/semester of two year Masters or four year BS programs in University of Gujrat. The rationale behind the selection of final year/semester students of Masters or BS level as the respondents of the study was that these students had actually utilized the services of their university for a reasonable period of time and held the specific perception about service quality.

### Sample and Sampling Procedure of the Research

For the selection of respondents, a technique, called two stage random sampling, was used. At the first stage, four faculties (Administrative Sciences/Commerce, Social Sciences, Natural or Life Sciences and Languages) were selected in this study. At the second stage, one department was randomly selected from every faculty. Before administration of the questionnaires, the students were briefed about the topic, parts of the questionnaire, expected time for filling up the questionnaire and were requested for their cooperation for the promotion of research and development. The researcher himself visited the University of Gujrat and distributed questionnaires among 144 students who were studying in the final year/semester at Masters and BS levels.

### Instrument

In the process of instrument development, two instruments were consulted, first by Parasuraman (1990) (SURVQUAL) and the second by Douglas, (2006) (Student Satisfaction Survey). After studying the instruments the researcher reached the conclusion that both of questionnaires were developed according to their respective contexts and developed a comprehensive and contextualized instrument of his own.

By Chronbach's Alpha, the reliability was calculated as .915, which indicated that no deletion of any item needed. Moreover, a few grammatical and spelling mistakes were corrected immediately.

The instrument consisted of three parts; A, B, and C. Part "A" of the questionnaire was about respondent's profile. Part "B" consisted of 48 items concerning expectations of the respondents regarding service quality. In part "C" students' perceptions or actual experiences were also inquired through 50 items.

### **Data Collection**

The researchers personally visited the university and got the questionnaires filled by the students included in the sample. Professors and faculty members extended their full co-operation to the researcher for data collection. All the male and female students of final year/semester who were present in the classes responded to the questionnaires on the spot in the absence of their professors/ teachers. The response rate, therefore, remained 100%.

### **Data Analysis and Results**

The quantitative data collected through questionnaire were entered and coded in the spreadsheet. After the data entry was made by using SPSS version 20, it was rechecked and cleaned with the help of the hard copy. In this way, accuracy of the data was ensured. Finally, analysis of the data was made to identify the gaps in service quality.

#### Faculty wise distribution of Respondents in the Sample at UOG. Faculties Faculty of Faculty of Social Faculty of Commerce / UOG Faculty of Life / Natural Sciences Languages Sciences Management Sciences Total Ν 47 39 39 19 144 % 32.6% 27.1% 27.1% 13.2% 100.0%

### Table 1

Table 1 shows contribution of four faculties in the sample. The highest No. of students were from Faculty of Life /Natural Sciences and the lowest were from Management Sciences.

### Table 2

Item description for each of the five dimensions

Dimensi	ions of Service Quality	No. of Items	Item No. in Instrument
1. R	eliability (Rely)	07	16,19,20,39,40,44,46
2. A	ssurance (Asur)	11	10,11,18,21,30,32,33,37,38,42,43
3. R	esponsiveness (Resp)	10	12,24,29,31,34,35,36,45,47,48
4. E	mpathy (Emp)	06	13,14,15,17,22,41
5. T	angibility(Tang)	14	1,2,3,4,5,6,7,8,9,23,25,26,27,28
Total		48	

Table 2 depicts five dimensions of instrument which are Rely (Reliability), Asur (Assurance), Resp (Responsiveness), Emp (Empathy) and Tang (Tangibility). In the instrument, 07 items were on Reliability, 11 on Assurance, 10 on Responsiveness, 06 on Empathy, and 14 were on Tangibility.

### Table 3

Expectations of the Students Regarding Service Quality

Expectation	Mean	Mean Standard Med Error of		Variance	Std. Deviation	Minimum	Maximum	
		Mean						
	3.98	0.022	4.11	0.443	0.666	1.48	5	

Table 3 depicts that Mean for Expectation of students was 3.98 with *SD* of 0.66 and confidence interval [3.937 - 4.0223] and it was computed from its five dimensions (48 items) for a sample of 144 respondents. The median of expectation was 4.11 whereas its score ranged from 1.48 to 5.



*Figure1:* Showing the Frequency of Expectations of the Students Regarding Service Quality.

Table	4
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Perception of the Students Regarding Service Quality

Perception	Mean	Standard Error of	Median	Variance	Std. Deviation	Minimum	Maximum
		Mean					
	3.288	0.026	3.2877	0.657	0.8104	1.04	5

Table 4 shows that the Mean of Perception of students about service quality was 3.28 with SD of 0.81 and confidence interval [3.236 – 3.340] and it was computed from its five dimensions (48 items) for a sample of 144 respondents. The median of perception was 3.28 whereas its score ranged from 1.04 to 5.



*Figure 2:* Showing the Frequency of perceptions of the Students Regarding Service Quality.

Table	5
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GAP Scores Regarding Five Dimensions of Service Quality.(difference of perceptions and expectations)

Instument,s Dimensions	No. of Items	Sum of Gap Score	Average Gap Score
Reliability (Rely)	7	-4.96	-0.709
Assurance (Asur)	11	-8.58	-0.780
Responsiveness (Resp)	10	-8.43	-0.843
Empathy (Emp)	6	-3.9	-0.650
Tangibility(Tang)	14	-7.19	-0.514
Total of Five Dimensions			-3.496
Average Unweighted GAP Score	re		-0.699

Table 5 shows the sum of gap score as well as the average gap score for each dimension of service quality. Empathy shows the highest gap and the Assurance depicts the lowest gap between perception and expectations.

Table 6							
Mean and Star	ndard D	eviation of	Gap Score				
GAP Score	Mean	Standard	Median	Variance	Std.	Minimum	Maximum
Descriptive		Error of			Deviation		
		Mean					
	-0.699	0.031	-0.520	0.915	0.957	-3.640	2.570

Table 6 presents the computation of Mean. Mean of GAP Score i.e. -0.699 with *SD* of 0.95 and confidence interval [-0.760 to -0.638] was computed by subtracting total expectation from total perception for a sample of 144 respondents. The median of GAP Score was -0.520 whereas its score ranged from -3.64 to 2.57.



*Figure 3:* Showing the Frequency of Gaps in Five Dimensions of Service Quality.

Table 7

Mean and Stand	Mean and Standard Deviation of Expectations and Perceptions of Students								
	Expec	ctation	Perce	eption					
	(N=	144)	(N=144)						
	М	SD	М	SD					
Rely	4.07	0.73	3.36	0.87					
Asur	3.99	0.75	3.21	0.94					
Resp	4.07	0.77	3.23	0.91					
Emp	3.97	0.81	3.31	0.91					
Tang	3.80	0.66	3.33	0.81					

Mean and Standard Deviation of Expectations and Perceptions of Students

Note: Rely = Reliability; Asur = Assurance; Resp = Responsiveness; Emp = Empathy; Tang = Tangibility

Table 7presents the mean and standard deviation of expectations and perceptions of students regarding five dimensions of service quality.

### Table 8

Significant Difference in Perception and Expectation of Students with regard to Dimensions of Service Quality

Sub	F-Value	Multivariate	Significant	Difference
Variables/Dimensions		Tests	Univariate	
of Service Quality		of Significance †	F-Test *	
			Rely $(p = .000)^*$	E>P
Daly Agur Dagn	95.53		Asur $(p = .000)^*$	E>P
Rely, Asur, Resp,		p = .000	Resp $(p = .000)^*$	E>P
Emp, Tang			Emp (p = .000)*	E>P
			Tang (p = .000)*	E>P

# \* p<.05

<sup>†</sup> The value of Wilks' Lambda was used as the F-ratio for Multivariate tests.

E = Expectations of students; P = Perceptions of students, Rely = Reliability; Asur Note:

= Assurance; Resp = Responsiveness; Emp = Empathy; Tang = Tangibility

In table 8, MANOVA results reveal that there was statistically significant difference in expectation and perception by their dimensions (.53, F = 95p = .000). The post-hoc test (separate univariate ANOVAs that are done as a "step down analysis" after MANOVA) revealed that all the dimensions of service quality i.e. that is Rely, Asur, Resp, Emp and Tang were significant at p < .05 for expectation and perception.

The finding indicates that students had more expectations regarding all the dimensions (i.e. Rely, Asur, Resp, Emp and Tang) of service quality.

### Table 9

Mean and Standard Deviation of GAP Score for Five Dimensions of Service Quality in University 0f Gujrat.

		Rely		Rely Asu		ır Resp		Emp		Tang		GAP	
	N	M	SD	М	SD	М	SD	М	SD	М	SD	М	SD
UOG	144	-1.11	1.07	-1.20	1.23	-1.22	1.20	-0.83	1.22	-0.71	0.91	-1.01	1.02
Note: Rely = Reliability; Asur = Assurance; Resp = Responsiveness; Emp = Empathy;													

Tang = Tangibility

Table 9, shows the Mand SD of gap score for five dimensions of service quality.

### Conclusion

The sample of study consisted of 144 respondents including male and female. From faculty of life/natural sciences 47 students, from faculty of languages 39 students, from faculty of social sciences also 39 and from faculty of business/management sciences 19 students were included in the sample. Every dimension of service quality showed a negative gap and the value of average gap of all the dimensions was found (-0.699).Students had more expectations regarding all the dimensions (i.e. Reliability, Assurance, Responsiveness, Empathy and Tangibility) of service quality. There was statistically significant difference in expectation and perception by their dimensions (F = 95.53, p = .000).

The gaps exit in all the five dimensions of service quality which indicate the dissatisfaction among students.

# Recommendations

- University of Gujrat must take immediate and solid steps to improve in all the five dimensions of service quality.
- The university personal should be trained enough to treat the students with respectful manners.
- The system of financial assistance of university should be improved for deserving students.
- The provision of pastoral services to the students should be enriched.
- The university may provide special services for special students.
- The university employees may be trained enough to give the personal attention to the students.
- The university should conduct the regular surveys to determine the gaps in service quality for the betterment of the institution.

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