

Students' Perception of Service Quality in Higher Education Institutions in India: Effect of Gender, Academic Performance and Course of Specialisation

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Abstract— The paper presents the results of a study that was done to explore the influences on students' perception of service quality of higher education institutes (HEIs) in India. The research hypothesised that Gender, Course specialisation and Academic performance of students effect their perceptions about the service quality in their HEIs. Three different Universities were selected considering the types prevalent in the higher education sector of India viz. a Government State University, a Private State University and a Deemed University. The students sample was drawn from the post graduate programmes in these Universities. The measure of Academic performance was the percentage of marks obtained in the previous semester. The Course specialisations were Sciences, Engineering and Management. The SERVQUAL model was modified to suit the context of study and was named I-SERVQUAL. The reliability coefficient of the questionnaire based on the modified model was acceptable. Sample size was 200 from each type of University. Descriptive and Inferential statistics were applied to the data for analysis. Results revealed that all the three independent variables influence the students' perception about service quality either completely or partially. Post hoc data were also examined for further insights. The paper seeks to contribute to existing literature on the subject. This study would help provide useful inputs to the HEIs regarding the gap in the students' expectations and actual performance regarding service quality. Policy recommendations have been provided to enable the management of HEIs to meet the expectations of the students. The paper concludes by delineating research implications for the future research.

Keywords— Higher Education Institutes, *SERVQUAL*, *I-SERVQUAL*, Government State University, Private State University, Deemed University, Students' perception

I. INTRODUCTION

HIGHER education in India has been witnessing an unprecedented increase in the cost which in turn has enhanced the student's expectations regarding the quality of education provided by the institutes of higher education. With an increased awareness for quality education, every student expects that the University, where he or she studies or intends to study must have the best infrastructure, qualified and experienced faculty. This is in addition to an overriding

concern regarding their professional and personal growth. Since Universities, as service organisations, are unique because the product and the consumption are not discerningly separable, it has become imperative to look into and identify the most suitable service quality dimensions for Higher Education Institutes (HEIs).

The higher education in India comprises of more than 480 Universities that are being managed either privately or by the government. These Universities are facing a lot of challenges. Lowering of entry barriers for foreign universities as well as expansion of distance education options are the newer and perhaps more attractive competitors. The challenges are further compounded by the private universities establishing collaborations with renowned universities of the world. However with exponential growth in potential students, liberalization in opportunities, lack of support from governmental agencies and increasing competitive pressures have encouraged many educational institutions and service providers to lay their focus on considering students as their customers and provide best services to these potential students.

II. SERVICE QUALITY IN HIGHER EDUCATION

Higher Education has been increasingly recognised as service industry and, as a sector, it must strive to identify the expectations and the needs of its clients, who are the customers (Melo et al (2001)). One of the important components of higher education, as a service provider, according to Lovelock (2001) is that it is a service with actions that cannot be given any measureable value such as people's perception that involves continuous delivery, partnership between service provider and the client. The Institutions must aim to provide satisfaction that goes beyond the perceptions of the students' expectation and needs. E.g. the first and the foremost important but non measureable asset is the teacher and the quality of teaching as it significantly influences the approach of the student (Trivellas & Dargenidou, 2009; Umbach & Porter, 2002; Ryan, Healy and Sullivan, 2012).

Stakeholders in higher education, besides students have their own perspectives and demands. The employers look for

students who are skilled and employment ready; teachers, on the other hand, seek a congenial working space with professional growth. Thus, the HEIs need to strike a balance between the expectations of all stakeholders and also present quality products (students) to survive in the business of education. Universities, thus take on the role of service organizations, albeit differently; it is not possible to differentiate the production from consumption.

Despite the fact that private institutions are investing large grants towards establishing infrastructure and facilities to attract the students, it can be observed that there is a wide gap between the institution's perceptions and the students' expectation of quality of service leading to a large number of vacant seats in the institutions.

The Government of India, through various regulatory bodies, both at central and state level, aims to monitor and improve the quality of education. Yet the quality is far below international standards. The business of education requires a revolutionary shift in the paradigm to survive the rigors of competition. There is a deep need to take a re-look at the services of the higher education sector, particularly from the students' perspective.

III. IMPORTANCE OF STUDENTS' PERCEPTION

The importance of the students' views is being increasingly regarded as essential component for tracking teaching quality in the HEIs (Hill, Lomas & MacGregor, 2003). This becomes even more pertinent because the measurement of service quality, unlike the product quality is subjective and not objective. Hence, taking students' perception into account becomes important. It is argued by Yeo (2008) and Rasli & Huai (2011) that students' perceptions about service quality will create dynamics in the learning space. It will also provide useful information to the governing bodies to design programmes to satisfy the students.

A. Development of Hypotheses

Gender and students perception

Theoretically as well as empirically, gender has known to influence the perceptions on a lot of emotional as well as behavioural dimensions. Gender has not been researched very rigorously as a factor that influences the perceptions regarding service quality in HEIs. However in other contexts of service industries, gender has been very frequently taken up as an antecedent though with varying results. Snipes, Thomas and Oswald (2006), Soutar and McNeil (1996) showed that gender does play a role in the perceptions regarding service quality. Males tend to perceive service quality higher than the females.

However, on the other hand some studies Mattila (2000), Leong and Sohail (2006) and Sun & Qu (2011) indicate that there is no difference in perceptions towards service quality between males and females. Given the nature of inconclusive research, gender has been taken as an antecedent to bridge the gap in the previous literature. Hence,

H1: Gender affects student perceptions regarding service quality in HEIs.

Academic performance and students perception

The academic performance of the students was measured in terms of marks obtained in the previous semester. The students were divided into four groups; below 60%, 60 -75%, 75-85% and above 85%. Not very surprisingly, research is negligible on the academic performance as an influencing variable of students perception of service quality. The global as well as contextual differences in the measurement of this variable could be one of the reasons of this neglect. However, students with better academic performance may have perceptual differences about the quality given the way and the extent that they use these service quality dimensions. Hence,

H2: Students' perception of service quality is affected by the academic performance.

Course specialisation and students' perception

The students in the study represented three different streams or specialisations; Engineering, Sciences and Management. The specialisation, that a student studies, has a marked influence on the attitude, interests and perceptions. Since all the three Universities offer the three specialisations at the post graduate level, it seemed appropriate to study the influence of the course specialisation as an influence.

Again, previous research is very negligible on the subject. Hence,

H3: Students perception is affected by the course specialisation.

IV. RESEARCH METHODOLOGY

Three different universities in the state of Punjab (India) were selected for the purpose of the study viz. Government State University (GSU), Private State University (PSU) and Deemed University (DU). The sample size was 200 students from each type of University.

The data were collected through a questionnaire that was based on I-SERVQUAL which was modified from the original SERVQUAL (Parasuraman et al (1991). The Table 1 provides the details about original and modified SERVQUAL.

The reliability test of Cronbach Alpha yielded values of 0.906 indicating very high reliability. T-test and ANOVA were applied to test the hypotheses and analyse the data.

V. RESULTS AND DISCUSSION

TABLE I:
DIMENSIONS OF SERVICE QUALITY

SERVQUAL		I-SERVQUAL	
Parameter	Meaning	Modified Parameter	Meaning
Faculty	Specialization/ Experience	Faculty	Quality of service provided by the members of the university
Tangibles	Appearance/Physical Facilities	Facilities	Availability of facilities for academic, Co and extracurricular activities
		Tangibles	Quality of facilities and infrastructure on the campus.
Reliability	Ability to perform promised services	Reliability	Curriculum and Services as put up in the prospectus/website were delivered or not.
Responsiveness	Willingness to help customers	Delivery	Concerns whether equitable service is provided to all without bias.
Assurance	Trust and Confidence		
	Caring attitude	Attitude	Concerns with the attitude of the administrative staff and faculty

A. Sample demographics

TABLE II
DEMOGRAPHIC PROFILE OF THE STUDENTS

Demographic Variable	Category	Frequency(n =598)	Percent
University	GSU	198	33.1
	PSU	200	33.4
	DU	200	33.4
Gender	Male	323	54.0
	Female	275	46.0
Course	Engineering	200	33.4
	Science	199	33.3
	Management	199	33.3
Academic Performance	Less than 60%	98	16.4
	Between 60 to 75%	306	51.2
	Between 75 to 85%	130	21.7
	More than 85%	64	10.7

A. Difference in the perceived service quality and its dimension for HEIs of Punjab on the basis of gender of the post graduate (PG) students

A t-test was performed. The results are depicted in Table 3.

As can be observed, the t value is greater only for the faculty and reliability dimensions of service quality, indicating that the perception of males and females differ significantly only for these dimensions.

Hence the first hypothesis H1 is pertaining to significant differences in gender was accepted only for faculty and reliability dimensions. The finding is in coherence with the inferences drawn by Joseph and Joseph (1998) and Ham and Hayuk (2003), which also presented similar outcomes. However, this contradicts the study by Soutar and McNeil (1996) that shows significant differences between service quality and gender perceptions.

TABLE III:
DIFFERENCES IN PERCEPTIONS OF SERVICE QUALITY IN HEIS ON THE BASIS OF GENDER

Group Statistics						
Dimension	Gender	N	Mean	St. Dev.	T-value	p
Faculty	Male	323	34.91	7.01	2.51**	.0126**
	Female	275	36.34	6.92		
Facilities	Male	323	52.21	10.05	0.21	.8333
	Female	275	52.03	10.84		
Tangibles	Male	323	30.15	5.93	0.10	.9182
	Female	275	30.20	5.94		
Attitude	Male	323	38.49	8.27	1.43	.1798
	Female	275	39.46	8.39		
Reliability	Male	323	17.50	4.07	3.10**	.003*
	Female	275	18.49	4.03		
Delivery	Male	323	20.41	4.84	1.68	.0946
	Female	275	21.08	4.92		
Service Quality	Male	323	193.67	34.50	1.36	.1763
	Female	275	197.61	36.57		

** 0.05 level of significance

B. Differences in the Perceived Service Quality and its Dimensions for the HEIs of Punjab on the basis of the Course of Specialisation of the PG Students

Table IV depicts the Analysis of Variance (ANOVA) based on the course specialisation of the PG students for service quality and its dimensions.

TABLE IV-
ANOVA FOR DIFFERENCES IN PERCEIVED SERVICE QUALITY AND ITS DIMENSIONS FOR PG STUDENTS ON THE BASIS OF COURSE SPECIALISATION

ANOVA						
Dimension	Course	Sum of Squares	Df	Mean Square	F	p
Faculty	Between Groups	347.59	2	173.80	3.578	.029*
	Within Groups	28995.47	597	48.57		
	Total	29343.06	599			
Facilities	Between Groups	1512.07	2	756.04	7.119	.001***
	Within Groups	63397.56	597	106.19		
	Total	64909.63	599			
Tangibles	Between Groups	222.72	2	111.36	3.191	.042*
	Within Groups	20831.25	597	34.89		
	Total	21053.97	599			
Attitude	Between Groups	614.25	2	307.13	4.477	.012*
	Within Groups	40950.22	597	68.59		
	Total	41564.47	599			
Reliability	Between Groups	297.22	2	148.61	9.172	.000***
	Within Groups	9673.47	597	16.20		
	Total	9970.69	599			
Delivery	Between Groups	370.11	2	185.05	7.950	.000***
	Within Groups	13896.85	597	23.288		
	Total	14266.96	599			
Service Quality	Between Groups	17176.97	2	8588.49	6.955	.001***
	Within Groups	737210.70	597	1234.86		
	Total	754387.67	599			

p≤.05 level of significance,** p≤.01 level of significance
***p≤.001 level of significance

It can be observed from the table that the F value is higher than the Table value for all dimensions of service quality. An analysis of the post-hoc tests indicated that the science and engineering students perceive all the service quality dimensions except the reliability dimension in a similar manner. The perception of the management students is different from the science and engineering students for all dimensions except, reliability where there is a significant difference in the perception of Engineering and science students and Engineering and management students, while science and management students have same perceptions.

Hence hypothesis H2 for significant differences based on

the course of study has been accepted for all service quality dimensions.

C. Difference in the perceived Service Quality and its Dimensions for the HEIs of Punjab on eh Basis of Academic Performance of PG Students

The data as obtained was split into four groups on the basis of academic performance of the students.

TABLE V:
ANOVA FOR DIFFERENCES IN PERCEPTION BASED ON ACADEMIC PERFORMANCE

ANOVA						
Dimension	Course	Sum of Squares	Df	Mean Square	F	p
Faculty	Between Groups	938.71	3	312.91	6.556	.000***
	Within Groups	28404.35	596	47.66		
	Total	29343.06	599			
Facilities	Between Groups	1737.82	3	579.27	5.465	.001***
	Within Groups	63171.81	596	105.99		
	Total	64909.63	599			
Tangibles	Between Groups	349.33	3	116.44	3.352	.019*
	Within Groups	20704.64	596	34.74		
	Total	21053.97	599			
Attitude	Between Groups	874.64	3	291.55	4.270	.005**
	Within Groups	40689.83	596	68.27		
	Total	41564.47	599			
Reliability	Between Groups	163.13	3	54.38	3.304	.020*
	Within Groups	9807.56	596	16.46		
	Total	9970.69	599			
Delivery	Between Groups	311.77	3	103.92	4.438	.004**
	Within Groups	13955.19	596	23.42		
	Total	14266.96	599			
Service Quality	Between Groups	21629.55	3	7209.85	5.864	.001***
	Within Groups	732758.12	596	1229.46		
	Total	754387.67	599			

p≤.05 level of significance,** p≤.01 level of significance
***p≤.001 level of significance

As is evident, the students' perception was significant based on all dimensions of service quality implying that Academic Performance can play a major role in the differences in

perceptions.

Post hoc analysis revealed that while the differences in perceptions are significant for the groups that got marks less than 60% and those who got marks more than 85%, these differences are not observed for groups that got marks between 60 to 75% and 75% to 85 %.

Hence students with very less and very high marks tend to perceive quality very differently.

Hence, hypothesis H3 is accepted for service dimensions.

To summarize the results, service quality perceptions of the male and female students varied significantly for the faculty and reliability dimensions while no differences were observed in the other dimensions discussed.

Also science and engineering students have different ways of analysing things as compared to management students. In addition, the study also revealed that students at both ends of extremes in academic performance end to perceive service quality differently. Average of slightly above average students have a more or less similar perceptions regarding service quality.

VI. CONCLUSION

On the basis of the study it can be concluded that service quality is indeed a very important component of HEIs. The findings reinforce the fact that HEIs need to lay emphasis on all the dimensions of service quality and take into account, more importantly, the gender aspect of the demographic factors while maintaining adequate levels of service. Similarly service being offered to different courses has to be outlined differently. Also, the HEIs must look into providing different services to students with outstanding academic performance and to those who are relatively average in the studies.

The study is limited with regard to certain aspects. The students studying in the state of Punjab have been taken up for the study. The results may vary for different states owing to differences in the culture and social backgrounds. Also, only post graduate students were taken up in the study. The results may vary for graduates and Doctoral students. The future studies may focus on

- 1) the perception of Under-Graduate and post graduate students.
- 2) the variation in service quality being offered by HEIs in some other Indian states.
- 3) schools-primary and secondary as well.

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