

## **Perceived Service Quality in Higher Education: A Comparative Study of Public and Private Universities**

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### **Abstract**

The neo-liberal philosophy adopted in India in 1991, led to decrease in the role of government and increase the role of profit-pursuing private players in every sector including higher education. No doubt private sector is acting as filler between the increasing demand for higher education and decelerating supply by the government. But as a result education is becoming much more of a “product” with varying customers and stakeholders, and what the latter now demanding is satisfaction and value for money (**Sahney et al., 2008**). Hence undoubtedly quality has become competitive weapon for institutions to attract and serve their primary stake holders. But service quality can be improved only if institutions know what their customers (students) wish. The present study is an attempt to know how the students of public and private universities perceive quality of main aspects of university education. Further it attempts to identify the differences in quality of services perceived by students of these public and private higher education institutions. The results of the study indicate that students of universities perceive the quality of their services as just average and significant differences have been found in perceived quality of services between public and private higher education sector. This study can serve as a guiding tool for the management of universities in reassessing their strategies so as to redesign the service delivery system to improve service quality.

**Key Words:** Higher Education, Perceived Service Quality, Private Universities, Public Universities

## **1 Introduction**

The neo-liberal philosophy adopted in India in 1991, resulted into a decline in the role of the government and public expenditure throughout all the sectors, and increased the role of profit-driven private players in every domain. The major expansion of higher education during this period has been in the private sector. Even in the government institutions, introduction of self-financing courses has also been witnessed. The private sector is playing a significant role in filling the gap between demand for higher education and its reducing supply. But this has resulted in to severe competition to attract maximum students or so-called 'potential customers' among the institutions. As a result education is becoming much more of a "product" with varying customers and stakeholders, and what the latter now demand is satisfaction and value for money (Sahney et al., 2008). Hill (1995) suggested, "Students are primary customers of Higher Education sector, so it should focus on their expectations". Shekarchizadeh et al. (2011) added that students being consumers of educational institutes, so institutes must seek to maximize their satisfaction. Hence undoubtedly quality has become competitive weapon for institution to attract and serve their primary stake holders.

The American Society for Quality defines quality as "the totality of features and characteristics of a product or service that bears on its ability to satisfy given needs". Service Quality is a combination of two words- service and quality, where emphasis is on the service provider's promises relating to the standard or specification of a service so that the quality service to the end users must be available (Haksever et al., 2000 in Faizan Ali et al. 2016).

Asaduzzaman (2013) expressed that definition of service quality in educational sector is based on students' overall assessment of the services obtained by them as their educational experience.

Service quality can be a tool to achieve success among competing services and in the field of higher education, it is not only crucial and significant but is also an important parameter of educational excellence (Alves and Raposo 2010). So students' perceived service quality has emerged to be an exceptionally significant topic for universities and their management. This study concentrates on identifying the differences in perceived quality of services offered by public and private higher education institutions in Punjab.

## 2 Literature Review

**Mahapatra and Khan (2007)** have propounded an instrument named “EduQual,” to measure service quality in technical education. The results of study indicated that learning outcomes, responsiveness, physical facilities, personality development and academics were important dimensions of service quality perceived by students.

**Sapri, Kaka, & Finch (2009)** conducted a study to identify the students perceptions with respect to teaching facilities offered at Higher Education Institutes. The study concluded that teaching and learning delivery; support services facilities; accommodation and social facilities; course administration; teaching and learning facilities; teaching and learning service environment were the service quality dimensions perceived by the students. The teaching and learning delivery was considered as the most important factor by students.

**Sahney et al. (2011)** conducted a study with an objective to identify customer requirements and evaluate service quality. The results of study indicated that faculty expertise and relevance of curriculum to future needs got top priority followed by clarity of course objectives but politeness and courtesy were least preferred by the students. The negative gaps were obtained across all the items which indicated a need for improvement across all dimensions of service quality.

**Narang (2012)** in his paper attempted to measure perceived service quality of management institutes from students' perspective. For this, data was collected from 214 students of three public institutes in state of Uttar Pradesh using a 28 items modified SERVQUAL scale Named EduQUAL. The results of EFA triggered five dimensions of service quality i.e. academics, learning outcomes, personality development, responsiveness and physical facilities. Further in order of importance students placed academics at number one rank, followed by personality development (rank II), learning outcomes (rank III), physical facilities (rank IV) and responsiveness (rank V).

**Khosravi et al. (2013)** conducted a survey among the students of 10 colleges of Islamic Azad University to find the variables affecting their satisfaction regarding higher education. A questionnaire consisting of 61 items covering 12 dimensions based on Neol Levitz Student Satisfaction Inventory was used. The results of exploratory factor analysis revealed that seven

factors such as academic advising effectiveness; campus support services; campus life; responsiveness; safety and security; campus climate and financial aid effectiveness had impact on student satisfaction.

**Calvo-Porrall et al. (2013)** collected data from students of a public and private centre of a university in Spain by using an adapted SERVQUAL scale. Significant differences were obtained with regard to responsiveness, assurance and empathy dimensions of service quality with the high mean scores of private centre than public. Tangibility and empathy exert maximum positive influence on perceived service quality in both public and private centre. But reliability, responsiveness and assurance did not influence perceived service quality significantly in higher education.

**Jain et al. (2013)** conducted a study with the objective to determine dimensions of service quality perceived by the students of higher education institutes in Indian context and to develop and validate a multidimensional scale to measure service quality. The data was collected from 235 students of technical institutes with the help of questionnaire of 38 items. EFA analysis resulted into a multidimensional scale with seven factors (i.e. academic facilities; non academic processes; curriculum; support facilities; interaction quality; industry interaction and input quality) to measure service quality.

**Kaur & Bhalla (2015)** in their study attempted to examine the quality of higher education in Punjab from students' perspective. A self administered questionnaire containing 32 statements related to perception of students towards quality of higher education has been used to collect the data. The results depicted that students view infrastructure as an important factor followed by placement services, education environment, extracurricular activities, academic facilities, support services and academic staff. Among selected factors, students in general were not satisfied with placement services and academic facilities provided by their institutions.

**Prakash and Muhammed (2016)** in their study examined the role of perceived service quality in determining student satisfaction and positive behavioral intentions. A 27 item scale proposed by Jain et al. was used to collect data from 216 M.B.A. students of two universities of South India and SEM

analysis resulted into eight dimensions namely interaction quality, non academic process, curriculum, academic facilities, campus, industry interaction, support facilities and input quality.

**Dunja Mestrovic (2017)** in his study explored dimensions of perceived service quality i.e. teaching staff, administrative staff, reputation/image, environment and equipment, study programmes and syllabus. Results of partial least square structural equation modeling confirm the direct and significant relation between perceived service quality and student satisfaction.

After reviewing the various research papers it can be inferred that besides five dimensions of service quality provided by SERVQUAL or SERVPERF model; several other dimensions like academics, teaching methodology, curriculum, faculty, library services, physical resources, administrative services, reputation, and placement opportunities appeared to be important dimensions.

### **3 Objective/purpose of the study**

Considering the importance of higher education in present era and competitive environment in which these institutes of higher education operate, the present study was conducted with an objective to measure the level of quality of services perceived by students of higher education and also to determine the differences in perceived service quality between public and private universities from the students' perspective.

### **4 Research Methodology**

Descriptive research design is used in this study and the scope of the present study is limited to state of Punjab. The universe of the study is the post graduate students of commerce and management streams of four universities (two public universities and two private universities) in Punjab state.

#### **4.1 Sampling**

Among the various public and private universities in Punjab, a sample of four universities (two public universities and two private universities) was selected on the basis of their popularity and student strength and from these universities a sample of 400 students from the classes of M.B.A. and M.Com. of each university was chosen for data collection.

#### ***4.2 Design of questionnaire***

Based on literature review and scales used by previous researchers an adapted questionnaire is prepared and used to collect the data. The questionnaire has been divided into two parts - the first part relates to the demographic profile of the respondents and for the second part six services i.e. academic services (Soutar and McNeil (1996)), administrative services (Soutar and McNeil (1996)), fees and financial services (Hill 1995), career preparation services (Joseph and Joseph 1997), general university environment (Hill 1995) along with their sub dimensions have been taken and respondents were asked to indicate that how they perceive the quality of services of the selected university on a five-point scale (where 1 represent very poor to 5 represent very good).

#### ***4.3 Data Collection***

The questionnaires were distributed among students of management and commerce departments of four universities in Punjab through online and offline mode. A sample of 400 students studying in four universities of Punjab was selected for the study.

#### ***4.4 Face validity***

In total, 26 items relating to six latent variables of service quality and an item on overall service quality of institutes of higher education, were reviewed by two experts and academicians, from the field of marketing to estimate the content and face validity. The experts suggested deletion of one item. Reframing of two items was also suggested.

#### ***4.5 Testing of Reliability***

After incorporating the suggestions of experts, finally 26 items were transformed into questionnaire to collect the data from respondents. As per Churchill (1979), "the purification of an instrument begins with the computation of item-to-total correlation and Cronbach's coefficient." Cronbach's alpha for all the items in the present case is 0.923 which demonstrates that scale shows a good reliability.

#### 4.6 Testing of Normality

As per Kuo et al. (2009), the normality of data should be examined to analyze distribution pattern of collected data before its analysis. In this study, Skewness and Kurtosis was used to test normality of gathered data. The values of skewness and kurtosis for the data were between the absolute value of 2 and were in its acceptable range, (skewness < 3 and kurtosis < 10 as per Hair et al., 2010) which implies the data was normal.

#### 4.7 Statistical Analysis and techniques

The data collected was analyzed by using mean scores and independent sample t test. Descriptive analysis was done by calculating frequency and percentages (Table 1). Further mean and standard deviations were calculated to measure the level of quality of services perceived by students of higher education. The Independent Sample T-test was used to determine the differences in quality of higher education as perceived by students of selected public and private universities (Table 2).

**Table: 1 Demographic Profile of Respondents**

Particulars	Classification	Frequency	Percentage
Type of University	Public	200	50.0
	Private	200	50.0
Course Name	M.BA.	260	65.0
	M.Com.	140	35.0
Term of Course	2 <sup>nd</sup> Sem.	133	33.3
	3 <sup>rd</sup> Sem.	155	38.7
	4 <sup>th</sup> Sem.	112	28.0
Gender	Male	179	44.8
	Female	221	55.3
Residential Area of Student	Rural	205	51.2
	Urban	103	25.8
	Semi Urban	92	23.0
Type of Student	Day Scholar	251	62.8
	Residential	149	37.3
Sample Size		400	100

## 5 Results and Discussion

Keeping in view the objectives of study null hypotheses have been formulated and tested. Mean perception scores across all variables of service quality are compared while testing null hypotheses that there exists no significant difference in perceived quality of services between the public and private universities.

**Table: 2 Mean Comparison of Service Quality of Private and Public Universities**

Latent Variables	Items	Private Universities		Public Universities		t-value	p-value
		Mean	SD	Mean	SD		
<b>Academic Services</b>	1. Relevant and flexible curriculum	3.65	0.943	3.54	0.945		
	2. Knowledge and expertise of academic staff	3.85	0.919	4.04	0.899		
	3. Teaching methodology and communication skills of academic staff	3.91	0.931	3.97	0.910		
	4. Library and Computer Lab facilities	3.74	1.020	3.74	1.097		
		<b>3.78</b>	<b>0.786</b>	<b>3.83</b>	<b>0.760</b>	<b>-0.631</b>	<b>0.528</b>
<b>Fees and Financial services</b>	1.Provision of scholarships to meritorious and needy students	3.51	1.002	3.59	1.095		
	2.Reasonable tuition fees charged by university	3.35	0.955	3.38	1.167		
	3.Easy and fast procedure of payment of fees	3.68	0.884	3.30	1.102		
		<b>3.51</b>	<b>0.751</b>	<b>3.42</b>	<b>0.889</b>	<b>1.135</b>	<b>0.257</b>



<b>Administrative Services</b>	1.Proficiency and friendliness of administrative staff	3.71	0.939	3.34	1.170		
	2.Simplicity of Admission procedures and policies						
	3.Adequate and detailed information available on website or prospectus	3.76	0.894	3.54	0.955		
	4.Timeliness and accuracy of examination results	3.76	0.904	3.67	0.994		
		3.78	0.943	3.33	1.032		
		<b>3.74</b>	<b>0.752</b>	<b>3.46</b>	<b>0.814</b>	<b>3.607</b>	<b>0.000*</b>
<b>Support Services</b>	1.Transportation and Parking facilities						
	2.Hostel facilities						
	3.Health centre facilities	3.92	0.984	3.66	1.018		
	4.Sports Complex facilities	3.68	1.078	3.49	1.135		
	5.Student Centre facilities	3.67	1.067	3.48	1.068		
		3.85	0.965	3.55	1.063		
		3.80	1.038	3.55	1.102		
		<b>3.77</b>	<b>0.823</b>	<b>3.53</b>	<b>0.854</b>	<b>3.174</b>	<b>0.020*</b>
<b>Career preparation services</b>	1.Academic and professional development of students						
	2.Personality development of students						
	3.On Campus placement	3.78	1.000	3.59	1.058		
	4.Tie up with foreign universities and multinational companies						
		3.78	0.968	3.53	1.017		
		3.75	0.972	3.28	1.071		
		3.83	0.967	3.03	1.209		
		<b>3.78</b>	<b>0.843</b>	<b>3.35</b>	<b>0.897</b>	<b>4.911</b>	<b>0.000*</b>
1.location of the university							
2.Wi-Fi connectivity in campus							

<b>University Environment</b>	3.Extent of safety and security in campus						
	4.Clean,well-maintained and green campus	3.47	1.084	4.04	0.992		
	5.Use of technology in relation to different aspects of university	3.41	1.126	3.35	1.206		
		3.97	0.882	3.83	1.044		
		4.09	0.903	3.97	1.039		
		3.83	0.983	3.45	1.069		
On the whole the quality of services of this university can be considered	<b>3.75</b>	<b>0.760</b>	<b>3.73</b>	<b>0.821</b>	<b>0.240</b>	<b>0.841</b>	
<b>Perceived Service Quality</b>	<b>3.91</b>	<b>0.881</b>	<b>3.76</b>	<b>.942</b>	<b>1.645</b>	<b>0.101</b>	

Source: Students Survey, \* denotes significant at 0.05 levels of significance.

### 5.1 Academic Services:

H<sub>01</sub>: There exists no significant difference in perceived quality of academic services among selected Public and Private Universities.

With regard to academic services, the public universities obtain a mean score of 3.83 while private universities obtain numerically a smaller mean score of 3.78. In this respect, the highest gap between two type of universities relates to item 2 i.e. ‘knowledge and expertise of teaching faculty’ with public universities mean score of 4.04 and private universities mean score is 3.85. However, for library services mean score for both public and private universities is same i.e. 3.74. The result of independent sample test with a p-value of 0.52 denotes that there exists no significant difference among selected public and private universities. Hence, the academic services are not perceived differently by students of private and public universities in Punjab.

### 5.2 Fees and Financial Services

H<sub>02</sub>: There exists no significant difference in perceived quality of fees and financial services among selected Public and Private Universities.

For item Fees1 the private universities obtain a mean score of 3.51, while public universities obtain a score of 3.59. In relation to item Fees 2, the public universities obtain a fair valuation with mean score of 3.38 in comparison to mean score of 3.35 for private universities. But for item Fees 3, the private universities (M= 3.68) get higher valuation from their students. The result of independent samples t test with t value of 1.135 and p value of 0.257 indicates that students do not perceive significant difference between public and private universities with regard to variable 'fees and financial services'. Hence both public and private universities stand on same footing in relation to fees and financial services.

### **5.3 Administrative Services:**

H<sub>03</sub>: There exists no significant difference in perceived quality of administrative services among selected Public and Private Universities.

With regard to variable 'administrative services', results of independent samples t test with t value 3.607 and p value 0.000 rejects the null hypothesis. So it's clear that students of selected public and private universities perceive significant difference with regard to administrative services. In this dimension, the private universities clearly obtain a better assessment for all of the items analyzed with a mean score of 3.71 for Admin1, compared to 3.34 obtained by the public universities. For item 2 mean score of private universities is 3.76 while mean score of public universities is 3.54. However again the mean scores for both public and private universities indicate that students perceive the services just above average as all mean score are less than 4.

### **5.4 Support Services:**

H<sub>04</sub>: There exists no significant difference in perceived quality of support services among selected Public and Private Universities.

A p-value of 0.02 shows that there exists a significant differences between public (M= 3.53) and private universities (M= 3.77) with regard to support services. Further for all items the private universities obtain better assessment than the public universities. The mean scores of private universities range from 3.92 to 3.67 where as mean scores of public universities range from 3.66 to

3.48. It conveys that public universities need to improve upon their support services so as to compete with their private counterpart.

### **5.5 Career Preparation Services:**

H<sub>05</sub>: There exists no significant difference in perceived quality towards career preparation services among selected Public and Private universities.

Table 2 reveals that the null hypothesis is rejected for the variable 'career preparation services' (at 0.05 level of significance as p value=0.000). Thus, there exists significant differences between public (M=3.35) and private universities (M=3.78) regarding career preparation services. Further private universities are perceived much better than public universities for all the items analyzed, with the highest gap relating to item "tie up with foreign universities and multinational companies" as private universities secure a mean score of 3.83 where as public universities mean score is 3.03. It is followed by another item "on campus placement" for which mean score of private universities is 3.75 whereas public universities' mean score is 3.28.

### **5.6 University Environment:**

H<sub>06</sub>: There exists no significant difference in perceived quality of university environment among selected Public and Private universities.

The results of independent t-test (p value = 0.84) indicate that null hypothesis is not rejected for the latent variable 'university environment'. Hence no significant difference is perceived towards university environment from students' perspective. Only in one item i.e. "location of university" public universities obtain better mean score (4.04) than private universities (3.47). For rest of the items analyzed under this variable, private universities are assessed better than public universities. It clearly shows that private universities have an upper hand over public universities in context to 'university environment'.

### **5.7 Perceived Service Quality:**

H<sub>07</sub>: There exists no significant difference in perceived service quality among selected Public and Private Universities.

A p-value of 0.10 clearly shows that there exists no significant difference among selected public and private universities, with regard to variable 'perceived service quality'. The mean score of private universities for perceived service quality is 3.91 whereas it marginally smaller i.e. 3.76 for public universities. It reveals that both public and private universities are on the same page as far as student perception is concerned. Although private universities have scored better mean score, however there is nothing to choose among the two.

## **6 Conclusions**

The results of t-test indicate that out of six variables, significant differences have been found in three variables with regard to quality of services between public and private universities from students' view point. However when overall perceived service quality is analysed, students do not perceive significant differences among them. Further, findings of the study reveals that private universities of Punjab have fared better than public universities of this region. As for all the items (except five) of service quality relating to the various aspects of university education, private universities obtain higher mean scores as compared to public universities. This is similar to the findings of previous studies (Basheer, 2009; Calvo-Porrall et al., 2013) The five items for which the public universities score better than private universities are: 'knowledge and expertise of teaching faculty'; 'teaching methodology and communication skills of faculty'; 'provision of scholarships to needy students'; 'reasonableness of tuition fees' and 'location of university'. Barring these five items private universities are assessed better than public universities for all other items. However the point of concern is that the level of perception regarding quality of services is not very high even in case of private universities as the mean scores are less than 4 (which represents quality being below good) except one item. In case of public universities except two items i.e. 'knowledge and expertise of academic staff' and 'location of university' the mean scores are below 4 for all other items. This highlights the scope of improvement in quality of services for both private and public universities in Punjab state.

### ***6.1 Research Implications***

The aim of this study was to gain a better insight of the students' perceptions with regard to quality of services of private and public higher education in Punjab. Although scope of study is only Punjab and further data collected is related to only four universities, yet the implications of this study for researchers and practitioners are quite significant. In the state of Punjab, students' strength in higher education has been decreasing for the last few years. More and more students every year prefer to go to other states and countries for quality education. Based upon the above results of present study, the practitioners in higher education (specifically public universities of the region) can reassess their management strategies and can identify and implement appropriate measurement tools to redesign the service delivery system to improve service quality. They should understand that care and concern reflected by the university through its academic and administrative staff along with better infrastructural facilities can encourage students to become active members of the university community. More over in this era of un-employability, the universities need to concentrate their efforts more towards placement services. These efforts to improve service quality will enable the higher education institutes to increase student satisfaction and to stay competitive in a current saturated market environment.

### ***6.2 Limitation and Future Research***

The present study has a number of limitations that could become an insight for future research. First, the study focuses particularly on respondents limited to four universities of Punjab only. Therefore, future study can be expanded for the measurement of perceived service quality in other states of India too. Second, our research focuses on the students' perspective of the perceived quality of Higher Education. In future research, the perspective of other stakeholders of education, such as the Faculty, administrative staff and parents of students can be analyzed. Third, respondents were made to answer by self-reported questionnaires, which can inflate observed results. Future study can be done with open suggestions of respondents. Finally, the study concentrates only on perceived service quality of the universities, future research can be undertaken to examine the relationship between service quality, student satisfaction and loyalty.

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