Service Quality of Higher Education in Pakistan

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ABSTRACT

This paper attempts to evaluate the perceptions and expectations of students in higher education students with regard to service quality. Forming the basis of the empirical investigation, the data was collected from five focus groups using two different service quality measurement instruments: service quality (SERVQUAL), and service performance (SERVPERF). 160 questionnaires were returned out of 200. Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were used to analyze the data. The results indicated that SERVQUAL and SERVPERF were both valid and reliable indicators of university service quality in Pakistan and SERVPERF was only significant to student satisfaction.

Keywords: *Service quality, Satisfaction, Commitment, Higher education, Pakistan*

INTRODUCTION

Education provided to the citizens and the development of a country go hand in hand (Memon, 2007). In 1947, the time when Pakistan became independent, the University of the Punjab and the University of Sindh Jamshoro were the only two available higher education institutions. The Agha Khan University that was established in 1983 was the first private university. Today, there are146 universities and Degree Awarding Institutions (DAIs) in Pakistan. These are divided into two Distance Learning Universities (the Allama Iqbal Open University and the Virtual University), 79 Public Sector Universities/DAIs, and 65 Private Sector Universities/DAIs. Recently, the Pakistani government embarked on laudable policy programs to ensure the quality of university-level educational institutions. The Punjab government allocated a budget of Rs.31.56 billion for the education sector for the period of 2012 – 2013. Given the facts, it is vital to study the service quality of higher education provided to this young nation.

Service quality is essential in gaining a competitive advantage. In the higher education sector, there exists a need to understand the quality of education being provided as universities can only be successful if students are being offered services that they wish to pay for, at a quality deemed satisfactory (Brown & Mazzarol, 2009).

This research measures the service quality with respect to commitment and satisfaction levels of students. Triangulation was achieved by conducting focus groups and using two versions of service quality instruments (SERVQUAL, and SERVPERF) to support the robustness of the results.

SIGNIFICANCE OF THE STUDY

Quinn, Lemay, Larsen and Johnson, (2009, n.p. state, "Higher education provides a unique setting in which to study service quality". Private higher education institutions operate in a highly regulated environment and are becoming increasingly competitive, using a market orientation (Kwiek, 2006). In this environment, the institutions have to compete with each other, with public higher education institutions, and worldwide virtual education providers. To survive, the private higher education institutions

need to enhance their service quality and develop a satisfied and committed student body base. These improvements are only possible with the collection of relevant data (Jensen & Artz, 2005). Thus, the primary objective of this study on the quality of private university experience is to provide the institution and its stakeholders with factors that have a differential effect on student learning in an emerging economy. Using the findings of this paper, university management will be in a better position to evaluate what facilitates or inhibits students' educational development. It will enable the management to use the results to better design service delivery.

RESEARCH QUESTIONS

This research aimed to understand the aspects of the higher education experience that are important to private university undergraduate students based on their evaluation of service quality with respect to satisfaction and commitment. Specifically, the research questions are:

1. Are the two scales for measuring service quality (a.SERVQUAL, b. SERVPERF) reliable and valid in private higher education setting?

2. What are the most and least preferred characteristics (tangibility, reliability, responsiveness, assurance, and empathy) of service quality by private university students?

3. Are student evaluations of service quality (using a.SERVQUAL, and b. SERVPERF), positively associated with student satisfaction?

LITERATURE REVIEW

The literature of service quality has been divided into two distinct streams: the disconfirmation paradigm and the perception paradigm (Brochado, 2009). This division was a result of disagreement of authors on the definition of quality which also led to different measurement methodologies. The disconfirmation paradigm suggests that service quality is the comparison of performance perceptions with expectations (Parasuraman, Zeithaml & Berry, 1988) while the perception paradigm claims that service quality is only derived from perceptions of performance (Cronin & Taylor, 1992).

The disconfirmation paradigm led to the development of the SERVQAL scale (Parasuraman et al., 1988). The proposed gap model states that satisfaction is a comparison of the experience and the initial expectations of a customer which is denoted by the "gap" or the difference between the perception and expectation. A negative difference among the perceptions and expectations causes dissatisfaction while a positive difference denotes consumer delight. Cronin and Taylor (1992) in criticizing the reliability and validity of the SERVQUAL argued that it is difficult to conceptualize expectations, therefore perception is the only apt measure of service quality. Hence, they proposed the SERVPERF scale. Despite the dispute, empirical evidence exists that both the scales (SERVPERF and SERVQUAL) are sufficient measures of service quality (Carrillat, Jaramillo & Mulki., 2007).

SERVICE QUALITY IN HIGHER EDUCATION

The idea that higher education may be categorized as a service initiated a research framework from an educational perspective (Lovelock, 1983, Mazzarol, 1998). According to Oldfield and Baron, (2000), higher education is a "pure service". It is an intangible, heterogeneous, and perishable service (Gruber, Fuβ, Glaser-Zikuda, 2010). The service experience is difficult to standardize, as it varies from one institution to the next. Institutions are increasingly realizing the importance of higher education as a service industry and are placing greater emphasis on meeting the expectations of students (DeShields, Kara & Kaynak , 2005). The immense competition has made it critical for higher education management to understand students' perceptions and expectations regarding quality service (Nadiri, Kandampully & Hussain , 2009). Thus, institutions are applying market-oriented strategies to higher education institutions with the aim of gaining a competitive advantage (Hemsley-Brown & Oplatka, 2006).Service quality research in the higher education sector is relatively new, at least when compared to that of the commercial sector (Sultan & Wong, 2010). However, it is gaining popularity (Brochado, 2009). According to Gruber et al., (2010) due to the significant changes taking place in higher education institutions over the last decade, it should be regarded as a business-like service industry which focuses on meeting and exceeding the needs of students. Many higher education institutions are beginning to realize this stance and are competing for students, both in the local and international

market (Paswan & Ganesh, 2009).Service quality literature suggests the importance for educational institutions to monitor the quality of the services they provide in order to commit themselves to continuous improvements (Brochado, 2009).

SERVICE QUALITY, SATISFACTION AND COMMITMENT

The terms "service quality" and "satisfaction" have often been used interchangeably.. However, service quality is measured on the expectations of the respondents and is a long term evaluation while satisfaction is based on analytical judgments on a specific transaction (Parasuraman et al.,1988). According to Anderson et al. (1994) service quality can be judged by a customer irrespective of a direct experience, but it is necessary for customers to have utilized a service for them to judge their satisfaction level. There exists a significant influence of service quality on satisfaction (Cronin & Taylor, 1992; Dado, Petrovicova, Cuzovic & Rajic , 2011). Higher education institutions that focus on improving service quality generate high levels of customer satisfaction (Stodnick & Rogers, 2008). A long term relationship between the service provider and customer is established if commitment persists (Dai et al, 2011). Commitment is the identification of oneself with the organization; thus, the willingness to associate with the organization. This attitude of individuals towards their organization measures their level of commitment (Malhotra & Mukherjee, 2003).

METHODOLOGY

A triangulation approach was used. The data was gathered through focus group and survey instruments in order to enhance the validity and the reliability of the research results. The data from the survey was coded using SPSS. Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were used to analyze the survey data.

SAMPLE

This research focused on private higher education. In Pakistan, entry into a higher education institute requires a completion of grade 12 or an equivalent certification. Higher education institutions are registered with the higher education commission of Pakistan. The purpose of registering private institutions offering higher education is to ensure that these institutions offer an acceptable quality of education and that students are enrolled at institutions that have the capacity and expertise to offer their programs.

Students are considered to be the "primary customers" of a university (Hill, 1995). They are the direct recipients of the service provided. So, student-perceived service quality is a particularly imperative issue for university management. Data for this research was collected by rotating 400 questionnaires among the undergraduate students currently studying at a private university in Pakistan. The final usable sample comprised 160 respondents that represented a response rate of 40%. This particular institution used in this study was selected as it has been ranked by the higher education commission in Pakistan as among the top ten universities in the country since the inception of the university.

FOCUS GROUPS

Five focus groups were conducted in the month of February 2013 to explore student opinions regarding service quality in higher education. In total, 49 students participated across 5 semi-structured focus groups. Each group interview lasted approximately 40 minutes and participants ranged from 9 to 11 students (focus group 1 comprised ten students from first year, focus group 2 comprised nine students from second year, focus group 3 comprised nine students from third year, focus group 4 comprised ten students from fourth year and focus group 5 comprised eleven students from all years). The groups were interviewed regarding their experiences with the service quality at their current institution. The researcher (also an instructor at the university) was the moderator of all the focus groups.

INSTRUMENTS

The instruments employed in this research were:

1.   Parasuraman et al., 1988: service quality (SERVQUAL), and

2.   Cronin and Taylor, 1992: service performance (SERVPERF)

Students were also asked to provide information pertaining to their satisfaction and organizational commitment using the following questionnaires:

1.   Allen and Meyer 1990: Organizational Commitment scale

2.   Cammann, Fichman, Jenkins & Klesh, 1983: Satisfaction scale

Two sets of questionnaire were distributed. In version A, the first section comprised SERVQAL followed by SERVPERF. In version B, SERVPERF was presented before SERVQUAL. This change in sequence was deliberate to insure no bias arose due to the sequence in which the questions appeared for the respondents. The responses were measured on a Likert scale from 1 (strongly disagree) to 7 (strongly agree).

FINDINGS

Major Themes Arising From Focus Groups

Although substantially similar views were found across the focus groups, certain dissimilarities also emerged. All students perceived the institute's buildings and its physical infrastructure as a basic necessity and not an important determinant of service quality. The   facilities comprising electricity generators, air conditioning, high speed internet, quality food at the cafeteria, and sports complex were not perceived to be related to superior quality of education. 75% students (43/49) were satisfied with the current infrastructure of their institute. However, they said that room for improvements existed.

The quality of the lecture delivered by the instructors was highlighted as a critical aspect of service quality in higher education. The students preferred young instructors who could relate to the latest technology and gave examples of places and products that the students were familiar with. The personality of the instructor was directly related to the quality of lectures. An instructor who was willing to entertain questions and give individual feedback was considered a good quality instructor compared to an instructor who had superior knowledge but failed to connect to the students.

The first and the second year students stated that dress code did not reflect service quality. They went on to express their concern that the dress code[1] was a form of gender discrimination. According to these two groups, such policies showed resistance to innovation and freedom of opinion. Meanwhile, the third and the fourth year students felt that the dress code was a means of maintaining discipline within the institution which in turn depicted superior quality of education.

An interesting pattern emerged in the focus groups. When the students were asked if they were aware of the fee structure of their university, only the students on scholarships were aware of the per course fee, while the other participants were not sure. Therefore, the question whether value for money was being delivered was left unanswered by the majority of the participants of the focus groups.

Validity and Reliability

To answer the first research question, validity and reliability of SERVQUAL and SERVPERF were calculated. Table 1 shows the validity and reliability for the SERVQUAL and SERVPERF. For all items we found that the factor loading was greater than 0.4. Items that had factor loading of less than 0.4 were dropped from the analysis. To test for reliability, we used composite reliability (Fornell & Larcker, 1981; Kim, 2009). Composite reliability was used to test for reliability of the instruments. For validity, convergent and discriminant validity was used. Reliability should be greater than 0.7 while AVE should be greater than 0.5 (Hair et al., 2006). The CR for both SERVQUAL and SERVPERF was greater than 0.7 (Hair et al., 2006). The AVE of 0.4 or greater was acceptable. Discriminant validity

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1 The university selected for research has a dress code of collared shirts for boys

should be greater than squared correlations. The discriminant validity was greater than squared correlations for both SERVQUAL and SERVPERF. Hence, SERVEQUAL and SERVPERF both were reliable and valid. The results indicate that both SERVEQUAL and SERVPERF are useful and valid measures to study service quality in the developing country.

Table 1: Validity and Reliability of the SERVQUAL and SERVPERF

	CR	AVE	Factor loading	Discriminant validity
SERVQUAL				
Tangibility	0.858	0.605	0.64-0.84	0.778
Reliability	0.845	0.529	0.48-0.81	0.727
Responsiveness	0.855	**0.601**	**0.62-0.90**	**0.775**
Assurance	**0.824**	**0.547**	**0.66-0.80**	**0.740**
Empathy	**0.871**	**0.576**	**0.70-0.81**	**0.759**
SERVPERF				
Tangibility	**0.800**	**0.508**	**0.49-0.82**	**0.713**
Reliability	0.852	0.540	0.58-0.84	0.735
Responsiveness	0.774	0.473	0.42-0.78	0.688
Assurance	0.773	0.463	0.57-0.77	0.681
Empathy	0.844	0.523	0.66-0.76	0.723

Student Preference

Table 2 shows the mean and median of all five sub variables of SERVQUAL and SERVPERF. The mean for SERVQUAL is highest for empathy (3.688) indicating that empathy was a highly scored item on SERVQUAL, closely followed by responsiveness (3.685), assurance (2.40), reliability (2.13) and lastly, tangibility (1.98). For SERVPERF, the highest score was attributable to reliability (3.5) followed by responsiveness (3.41), empathy (3.37), assurance (3.36) and tangibility (3.16). It can be analyzed that tangibility scored lowest for both SERVQUAL and SERVPERF while overall SERVPERF scores were higher than SERVQUAL.

Table 2: Mean and Median - Sub Variables of SERVQUAL and SERVPERF

	SERVQUAL		SERVPERF	
	Mean	Median	Mean	Median
Tangibility	1.9875	1.7500	3.1688	3.2500
Reliability	2.1344	1.8750	3.5150	3.6000
Responsiveness	3.6859	3.5000	3.4188	3.5000
Assurance	2.4094	2.0000	3.3641	3.2913
Empathy	3.6888	3.6000	3.3750	3.4000

Service Quality, Satisfaction and Commitment

Table 3 shows the relationship of SERVQUAL and SERVPERF with student satisfaction and commitment. SERVQUAL was found to be insignificant with student satisfaction and commitment at p value of 0.818 and 0.912. Student satisfaction was significantly related to SERVPERF at p value of 0.01 while commitment was insignificant at p value of .912. Student satisfaction was positively related to SERVPERF with β of .798 indicating that 1% increase in SERVQUAL will increase student satisfaction by 78.9%. These relationships are depicted in Figure 1.
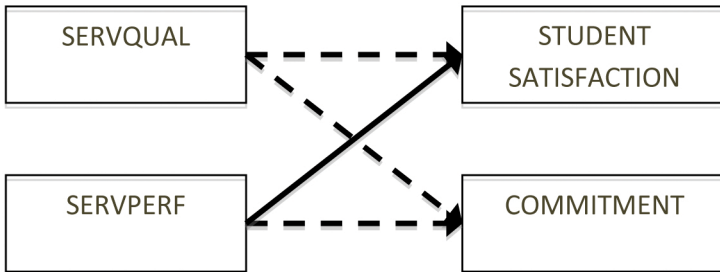

Figure 1: Results Relating Significant (Bold Line) and Insignificant (Dotted Line) Relationship

Table 3: Regression

			Estimate	S.E.	C.R.	P
SERVQUAL						
Student Satisfaction	<---	SERVQUAL	-.046	.199	-.230	.818
Commitment	<---	SERVQUAL	-.005	.043	-.110	.912
SERFPERF						
Student Satisfaction	<---	SERVPERF	.798	.140	5.715	***
Commitment	<---	SERVPERF	.004	.032	.111	.912

DISCUSSION AND CONCLUSION

This paper examined service quality in higher education. Empirical support for service quality and their sub-components and their collective impact on commitment and satisfaction was found. The results reinforced that SERVQUAL and SERVPERF are valid and reliable instruments for measuring service quality in higher education. It may be inferred from the results that in Pakistan, the tangible elements of higher education are not perceived as significant predictors of service quality. In fact, the focus group interviews and survey data both reveal that empathy including the soft elements of a teacher are considered as indicators of service quality. The implication for private higher education administration is that university students consider the building and infrastructure as a basic necessity that must be provided by the institute although it does not affect the quality of their experience. The differentiating factor is the faculty who can connect to the students by bringing into the classroom examples that the young adults can relate to.

In the given sample, SERVQUAL was not significantly related to commitment and satisfaction in an emerging economy. This gives rise to future research direction to identify the factors that increase level of commitment and satisfaction among students in higher education. Stemming from the same finding, SERVPERF showed a significant relationship with satisfaction experienced by students. However, SERVQUAL failed to detect this relationship. In future, the factors that cause both instruments to deduce dissimilar results may be explored.

Moreover, this research based the findings on respondents from private higher education only. Future research may include the comparison of opinions of students from public higher education institutions versus those from the private sector.

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