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QUALITY OF EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS: A COMPARATIVE STUDY OF PERCEPTIONS AND EXPECTATIONS OF BUSINESS STUDENTS

M.K. Khan, A. Ali
Hailey College of Commerce, University of the Punjab, Lahore

ABSTRACT

The study seeks to measure the service gaps between perceptions and expectations of business students keeping in view the need to deliver quality education in public and private higher education institutions. In addition, it aims to explore what measures should be taken for the improvement of quality of education. The related literature shows the perceptions and expectations of business students in these educational institutes are neglected especially in public sector education institutions in Pakistan that is why, the quality of education is not satisfactory in this regard. So the present study has contributed in providing implications how to increase their quality by focusing on the reasons for this negligence. An adapted version of EduQUAL scale which based on SERVQUAL instrument was used for data collection from business students of public and private institutes. Out of 300 questionnaires, only two hundred respondents dully filled the questionnaires with the response rate of 67 percent. The significant differences were enunciated between perceptions and expectations of business students in public institutions as compared to private institutions, where differences were relatively low. Considering the importance of quality of higher education the public institutions management needs to improve their learning and practical orientation in education, academics and physical facilities as well. The private institutes needs to improve firstly the services in learning outcomes, physical facilities and academics followed by responsiveness and personality development in both public and private institutes require attention of administration for the improvement in these areas.

Keywords: *Service quality, Higher education, Business education, Students, Total quality management, Quality assurance.*

1) INTRODUCTION

In education sector quality has become one of the key components to serve and to attract students, the primary customers (Ali, 2014). Higher education institutions in general and policy institutions including Higher Education Commission of Pakistan in particular are realizing their increasing role in national uplift through improving quality of higher education (Khan, 2011). In developing countries higher educational institutions are required to transform into learning organizations where quality of higher education provision is assessed and interpreted by internal stakeholders (Avdjieva & Wilson, 2002). Various stakeholders emphasize the education system to focus on quantitative expansion as well as quality of education (Cardona, 2012). There by educational institutions require to follow quality management principals with their application to education system (Sahney, 2012).

Quality assurance in higher education has become very effective across the globe to enhance universities accountability for quality of output and processes (Vidovich, 2002). In Pakistan, higher education commission is doing tremendous efforts to increase the quality assurance system to make the nation excel in globalized world. Quality assurance system is a scheme to assure the maintenance of quality and quality enhancement in all the policies and processes in the institution and it can be achieved through the high level of cooperation and commitment among the administrative management, faculty members, and students (Rana, 2008).

The higher education institutions had been attracted toward TQM from the late 1980 (Sakthivel, Rajendran, & Raju, 2005). TQM is a systematic and rationalized philosophy for change and quality management in higher education institutions (Hammersley & Pinnington, 1999). Total quality management practices are implemented by many college administrators in their institutes to realize that higher education services are provided to customers in appropriate manner (Sohail & Shaikh, 2004).Total quality management leads to quality improvement of courses, structures and resource management processes, support to student service output, input instructional processes improvement in higher education (Tulsi, 2001). TQM results in improved communication, increased productivity and higher employee morale that enables institutions to offer success stories (Motwani & Kumar, 1997).

A study argues that leadership is most important and crucial factor for success in implementing quality management practices as it needs the involvement of all the top management and bottom line staff (Santana, Moreira, Roberto, & Azambuja, 2010). The practices that lead to poor quality can't change by an organization until leadership and senior management and their visible signalling not committed to quality improvement (Deming, 1986). The external stakeholders(employers, funding bodies, institutional management, prospected students) are associated with quality assurance procedures while the internal stakeholders (current students, front line staff) does not only require quality assurance as well as they demand quality enhancement by updated learning and innovative pedagogies (Becket & Brookes, 2006).

The nature of higher education quality is complex and based on perspective of different stakeholders. This shows that quality is introduced and implemented through stakeholders (Becket & Brookes, 2006). It is noticed that stakeholders are important in assuring quality education, therefore, there should be a comprehensive fresh view and assessment of the current practices that are done by institutions and also determining the extent to which meaning of quality is considered in that institute and to what extent stakeholder's perspective is taken into account (Srikanthan & Dalrymple, 2003).

There is no one indicator through which we can measure education quality because it is multi-dimensional concept (Cheng & Tam, 1997). "Quality of service is an attitude that shows an overall evaluation of the goodness of a product or service" (Athiyaman, 1997). As large amount of research have been conducted on quality in education, In spite of this there is no universal consensus on how best to measure and interpret the quality in higher education (Becket & Brookes, 2006; Cheng & Tam, 1997). So several approaches have been used to measure service quality (Aghamolaei & Zare, 2008;Babakus & Mangold, 1992; Kanji, 1998; Mergen, Grant, & Widrick, 2000).

A modified version of SERVQUAL (called EduQUAL, developed by Narang, 2012) has been adopted by various researchers to measure perceptions of service quality in educational sector (Aghamolaei & Zare, 2008; Anderson, 1995; Babakus & Mangold, 1992; Bigné, Moliner, & Sánchez, 2003). It is found both reliable and valid by past studies. This study uses that measure to explore quality of higher educational

institutions in the area of business education and will also assess and analyze the perception and expectation of business students regarding quality of higher education in public and private institutions. So, this study will identify the service gaps in perceptions and expectations of business students. The results of this study will help the policy makers and administrations to take administrative steps and allocate the resources to ameliorate the performance of institutions.

2) LITERATURE REVIEW

Term quality was evolved from the Latin word "Quails "giving a sense of "what kind of" and the term quality referred as "slippery concept" (Pfeffer & Coote, 1991). A study argues that quality is a "notoriously ambiguous term" which has different meaning different to stakeholders (Khan, 2011), so as a result it is difficult to define and measure (Pounder, 1999). However in literature, the term quality is considered as: value (Feigenbaum, 1951), specification (Gilmore, 1974), requirement and defect avoidance (Crosby, 1979), excellence (Peters & Waterman, 1982), fitness for use (Juran & Gryna, 1988) and/or meeting or exceeding customer expectations (Parasuraman, Zeithaml, & Berry, 1985). Another allied term, service quality is used as equivalent to satisfaction and refers to a form of attitude that is outcome of expectation versus performance comparison (Bolton & Drew, 1991; Parasuraman, Zeithaml, & Berry, 1988). Empirical studies (E. W. Anderson & Sullivan, 1993;Bigné, et al., 2003; Dabholkar & Shepherd, 2000; Spreng & Mackoy, 1996)concluded that service quality is an antecedent of customer satisfaction. Another study argued that service quality should be focalized on the service actions performed against the customers (Lindquist & Persson, 1993).

An overall service quality perceptions are formed by customer on the basis of evaluation of performance at various levels and finally combine these evaluations to arrive at their perceptions (Brady & Cronin, 2001). A shift of the paradigm of service quality to customer perspective results from increase in globalization and competition (Parasuraman, et al., 1985). The main objective of ameliorating service quality is to bring forth customer loyalty, so it is meaningful for the service firms that first improve their service quality (Berry, 1995). Service quality is imperative to retain customer and create an optimistic intention in customer to stay with the organization in future (Ahmed, Nawaz, Ahmad, Shaukat, & Usman, 2010).

Perceived quality is a base for conceptualizing the construct of quality (Hasan, Ilias, Rahman, & Razak, 2008). Perceived service quality judgment is more cognitive and can be define as "the difference between service perceived and service expected"(Bigné, et al., 2003). Consumer judgment about an entity's overall superiority or experience is perceived quality (Zeithaml, 1987). A study shows the positive significant impact of perceived service quality on the customer satisfaction, that affects customer loyalty through mediating role of trust, which leads to positive word of mouth (Ribbink, Riel, Liljander, & Streukens, 2004).

Quality in education is a multidimensional, multifaceted, complex and dynamic positive concept (MOK, 2003). "Education quality is a rather vague and controversial concept" (Cheng & Tam, 1997). In the general scope of quality, quality in education can be defined as "value addition in education" (Feigenbaum, 1951), as "defect avoidance in the education process" (Crosby, 1979), as "excellence in education" (Peters & Waterman, 1982), as "meeting or exceeding customer expectations of education" (Parasuraman, et al., 1985), as "fitness of educational outcomes and experience for use" (Juran & Gryna, 1988).

There is no unified theory of quality; it is subjective in nature and matter of personal judgment. Quality is defined as excellence; it is to comply with norms. Education institutions have diverse stakeholders which creates diverse and conflicting expectations that requires implementing quality assurance methods. Quality is simply a tool of management, which can effectively contribute in improving performance of institutions and quality in higher education requires intellectual efforts (Doherty, 2008).

In the developing countries like Pakistan higher education is facing big challenges due to economic constraints. The problems are lack of resources, low status of faculty teachers, diminishing incentive plans and also some other technical problems faced are theoretical approach in teacher training program and these challenges are further aggravated by inappropriate collaboration among different educational sectors and also during training by the variation in trainee's cultural, religious and regional background (Akhtar, 2007). Pakistan is doing tremendous efforts and interest for the effective and competent quality assurance system is increasing to make the nation excel in the globalization (Rana, 2008). In

Pakistan the important challenge for education system is quality (Iqbal & Ahmad, 2010).

In order to have effective quality assurance in education sector, it is important to target individual aspect. As it gives a sense that there should be regular quality assessment of procedures for ensuring quality assurance and improvements (Bornmann, et al., 2006). The competent quality assurance system can be achieved if there is high level of cooperation and commitment among the administrative management, faculty members, and students is attained. This cooperation will lead to prosperity and development of a country (Rana, 2008).

Student satisfaction results from perceived quality that is a core factor for creating positive image in students mind (Alves & Raposo, 2010). Most important factor in determining quality of service received by students is students perceived access to that service (Abdullah, 2006). Students expectations and values are base for perceived quality of educational services and in higher education it is necessary to understand expectations and values of students (Telford & Masson, 2005). The perceptions of students about education quality is changed as the educational duration in the institution increased and students get more experience about their educational institutions (E. Anderson, 1995).

"Quality is linked to strategic plan" (Terziovski & Dean, 1998). Quality in education is actually the competitive weapon to attain competitive edge over the other educational institutions globally (Mahapatra & Khan, 2007). A sustainable competitive advantage among service providers can achieve or results through effective implementation of quality measures (Arumugam, Chang, Ooi, & Teh, 2009).

SERVQUAL scale was developed to measure the quality of service from the customer point of view, this instrument is widely used in measuring the perceived service quality (Parasuraman, Zeithaml, & Berry, 1991). Initially ten dimensions were identified to measure service quality which were afterwards condensed to five dimensions, that are tangibles, responsiveness, assurance, reliability and empathy (Parasuraman, et al., 1985, 1988). The SERQUAL was purified and tested for reliability and validity, this instrument having 22 items reflecting the above discussed five dimensions (Parasuraman, et al., 1991).

Quality in higher education is measured by different methods because of contradictory meanings of quality education. Consumers expectation and perception gap is service quality (Parasuraman, et al., 1988). In educational context gap analysis is used in many studies such as (Long, Tricker, Rangecroft, & Gilroy, 1999) used gap analysis to compare expectation and experience of students and also (Sander, Stevenson, King, & Coates, 2000) used gap analysis to examine teaching, assessment and learning expectations and experience of undergraduates.

Another study also employed gap analysis to evaluate expectation and experience of students concerning to tutors (LaBay & Comm, 2003). SERVQUAL was also adapted for measuring quality in higher education institutions (Aghamolaei & Zare, 2008; Chua, 2004; Holdford, Patkar, & MSPharm, 2003; LeBlanc & Nguyen, 1997). There is no consensus on the service quality measurement despite of many debates, on the base of SERVQUAL scale many scales were developed, adapted and replicated (Sandhu & Bala, 2011).

EduQUAL scale that was originated from SERVQUAL, was firstly developed by (Mahapatra & Khan, 2007) and used for measuring the quality in technical education institution. Afterwards EduQUAL was adapted and used by (Narang, 2012) for measuring quality in management institution.

In our study we are adapting EduQUAL to identify the service gaps in different dimensions and assessing the quality of education in business education institutions. This study is helpful to identify the areas that are lacking in quality which will be ultimately helpful for the management to ameliorate those areas and also assist in allocation of resources.

3) RESEARCH METHODOLOGY

3.1) Survey Instrument

The current study has adapted the scale called as EduQUAL which was developed by (Narang, 2012). This EduQUAL scale was developed on the basis of an earlier instrument which was used by Mahapatra & Khan (2007) to measure the quality in technical education and was validated by the respective study. The basis of this scales is SERVQUAL measurement tool that was basically developed by Parasuraman, et al., (1991). On the

bases of these scales an instrument with the name EduQUAL comprises five dimensions to measure quality of service in the area of management studies and the scale was testified for both reliability and validity.

The EduQUAL comprises of five dimensions that are physical facilities, academics, learning outcomes, responsiveness, and personality development. These five dimensions measure the service quality in the education sector particularly in the area of management studies. In line with past studies this study uses the same scale to measure the expectations and perceptions and gaps as reported by students of both public and private sector universities.

In the current study the EduQUAL scale was tested for reliability with a Cronbach coefficient 0.915. The reliability of the five dimensions of scale was also tested with Cronbach coefficient of physical facilities 0.75, academics 0.81, learning outcomes 0.74, responsiveness 0.68, and personality development 0.78. And the EduQUAL scale was well tested for its validity by (Narang, 2012).

3.2) Sample and Data Collection

The current study was conducted in Lahore which is most populous city of Punjab, the province of Pakistan. A total of 300 students were randomly selected from two public and two private universities. The questionnaires were personally administered among these respondents. Out of 300 only two hundred respondents dully filled the questionnaires with the response rate of 67 percent. The survey instrument consists of two sections.

In section 1 the respondents were asked about their expectations about the institute before getting admission and in section 2 they were required to answer keeping in view their perceptions/experience about the current institute after getting admission in that institute. The respondents were directed to give responses on the five point Likert scale ranging from 1 "strongly disagree", 2 for "disagree", 3 for "neutral", 4 for "agree" and finally 5 for "strongly agree". And they were also required to give information about their area of study and identify whether they study in public or private institution.

4) DATA ANALYSES

The study measure the gap among perceptions and expectations of students about the quality of business education, in order to identify service quality gaps the following formula will be used.

$$\text{EduQUALi} = \sum_{j=1}^{k} (P_{ij} - E_{ij})$$

Where, EduQUAL=quality perceived about education by business students "i", k=number of business education attributes/items, P=perception of business students "i" with respect to performance of an attribute "j" of business education institute, E=expectations of business students "i" about quality of education for an attribute "j".

The results of this formula show the direction of service quality gaps, if the students' expectations are not fulfilled it represents negative rating and if the expectations are properly met and fulfilled, it will articulate positive rating.

4.1) Quality of Business Education in Public Education Institutions

4.1.1) Service Gaps in different Dimensions

The mean of perceptions and expectations among the dimensions of EduQUAL was calculated as shown in table 1 and then mean differences that are service gaps were also identified among the dimensions of EduQUAL, the results show that there were negative service gaps among all dimensions of EduQUAL.

Table 1: Mean Scores and Service Gaps on EduQUAL Dimensions in Public Institutions

Dimensions	Perceptions		Expectations		Service Gaps		Paired "*t*"	"*p*"
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**		
Physical facilities	27.86	5.30	32.31	4.57	-4.45	6.86	-6.487	<0.001
Academics	18.41	4.77	24.02	3.94	-5.61	6.29	-8.913	<0.001
Learning outcomes	21.18	4.97	27.66	4.23	-6.48	6.61	-9.808	<0.001
Responsiveness	12.22	3.04	15.46	2.92	-3.24	3.97	-8.156	<0.001
Personality development	9.42	2.89	12.20	1.85	-2.78	3.26	-8.540	<0.001
Total service quality	89.09	17.15	111.65	13.95	-22.56	22.55	-10.005	<0.001

The service gaps show the highest negative gap in the "*learning outcome*" dimension which articulate that the students have high expectations relating to practical orientation in education, design of course structure based on job requirements, problem solving skills, adaptability to modern techniques and also opportunities for campus training and placement as well as they expect more about extracurricular activities. This high negative gap shows that the students' expectations exceed their perceptions.

On the other hand the lowest negative gap was found in "*personality development*" dimension which clarifies that the expectations of business students relating to encouragement for sports, games and cultural activities, enhancement of knowledge and the recognition of students are met to some extent by their respective institution.

4.1.2) Service gaps in different items

Table 2: Mean Scores and Service Gaps on EduQUAL items in Public Institutions

Items	Perceptions	Expectations	Service Gap	t value	*p*
Training on state-of-art technology	3.04	3.66	-0.62	4.60	<0.001
Adequate facilities/infrastructure to render services	3.85	4.1	-0.25	2.16	<0.05
Well-equipped computer laboratories with modern facilities	4.12	4.15	-0.03	0.26	0.796
Comprehensive learning sources	4.14	4.27	-0.13	1.37	0.174
Academic, residential and recreational facilities	3.36	3.85	-0.49	3.17	<0.01
Aesthetic view of facilities	3.81	4.12	-0.31	2.40	<0.05
Training in a well-equipped communication classroom	3.97	4.19	-0.22	1.86	0.066
Effective classroom management	3.97	4.34	-0.37	3.21	<0.01
Academics					
Adherence to schedule	3.78	4.28	-0.50	3.92	<0.001
Adequacy of subject teachers	3.96	4.27	-0.31	2.98	<0.01
Available regularly for students' work	3.84	4.16	-0.32	3.29	<0.001
Close supervision of students' work	3.84	4.09	-0.25	2.11	<0.05
Expertise in subjects and well-organized lectures	3.94	4.24	-0.30	2.86	<0.01
Good communication skill of academic staff	4.14	4.16	-0.02	0.19	0.849
Learning outcomes					
Practical orientation in education	3.56	4.02	-0.46	3.28	<0.001
Adaptability to modern techniques	3.73	4.19	-0.46	3.68	<0.001
Design of course structure based on job requirements	3.66	4.06	-0.40	3.17	<0.01
Problem-solving skills	3.74	4.13	-0.39	3.13	<0.01
Sense of social obligations	3.7	4.05	-0.35	2.75	<0.01
Opportunities for campus training and placement	3.78	3.9	-0.12	1.06	0.291
Extracurricular activities	3.92	4.18	-0.26	2.13	<0.05
Responsiveness					
Prompt services at service departments	3.51	4.01	-0.50	3.74	<0.001
Courteousness and willingness to help	3.68	4.11	-0.43	1.84	0.068
Cleanliness, orderliness, systematic and methodical	3.59	4.03	4.44	3.72	<0.001
Transparency of official procedure, norms and rules	3.74	4.00	-0.26	2.39	<0.05
Personality development					
Encouragement for sports games and cultural activities	4.04	4.14	-0.10	0.83	0.407
Enhancement of knowledge	3.84	4.09	-0.25	2.39	<0.05
Recognition of the students	3.92	4.17	-0.25	2.50	<0.05

Table 2 shows the service gaps among all items of different dimensions of EduQUAL. The results reveal that there were negative gaps score among all the items of the scale, this negative gaps articulate that the business students have more expectations relevant to all items prior to getting admission in public institutes as compare to their perception after the admission in that institutes.

The highest negative gap scores were found in the case of opportunities for campus training and placement, design of course structure based on job requirements, close supervision of students' work and to develop problem solving skills in students. On the other side the least negative gap scores were identified among the items of physical facilities which enunciate that the public institutes have enhancive facilities and they also have well-equipped laboratories with modern facilities, this shows that students' expectation from public institutes are met to some extent in the case of physical facilities.

4.2) Quality of business education in private education institutions

4.2.1 Service gaps in different dimensions

The table 3 shows the mean scores of perceptions and expectations of business students about quality in higher education, relating to different dimensions of EduQUAL scale. The service gaps were also evaluated which articulate the negative gaps among all the dimensions of the scale. It shows that the students in business education in the private sector also have more expectations than they actually perceived.

The highest negative gap score was identified in "*learning outcomes*". It shows that the students just like in public institutes have greater expectations about practical orientation in education, updated course structure, problem solving skills and also about other items of learning outcomes. It means perceptions of students in these learning outcomes elements did not meet their expectations. Secondly, the greater expectations of students have been identified in physical facilities.

Table 3: Mean Scores and Service Gaps on EduQUAL Dimensions in Private Institutions

Dimensions	Perceptions		Expectations		Service Gaps		Paired "t"	"p"
	Mean	SD	Mean	SD	Mean	SD		
Physical facilities	30.26	4.34	32.68	3.76	2.42	5.57	4.348	<0.001
Academics	23.5	3.17	25.2	2.87	1.70	3.19	5.325	<0.001
Learning outcomes	26.09	3.65	28.53	3.33	2.44	4.80	5.079	<0.001
Responsiveness	14.52	2.92	15.94	2.33	1.42	2.86	4.957	<0.001
Personality development	11.80	2.21	12.4	1.42	0.6	2.55	2.352	<0.05
Total service quality	106.17	11.84	114.75	10.18	8.58	12.93	6.635	<0.001

The lowest negative gap score was found in the case of "*personality development*". Here, the distinction is that the negative gap scores in this case having lower negative values as compare to public institutes service gap scores results.

4.2.2) Service gaps in different items

In order to evaluate the service gaps scores of all the items of EduQUAL, the mean scores of perception and expectation about each item were calculated and the difference of these mean scores represent the gap in service quality as shown in table 4. In this case all the items of EduQUAL bear the negative gap scores with the value less than zero.

Table 4: Mean Scores and Service Gaps on EduQUAL items in Private Institutions

	Perceptions	Expectations	Service Gap	t value	*p*
	P	E	(P-E)		
Training on state-of-art technology	3.04	3.66	-0.62	4.60	<0.001
Adequate facilities/infrastructure to render services	3.85	4.1	-0.25	2.16	<0.05
Well-equipped computer laboratories with modern facilities	4.12	4.15	-0.03	0.26	0.796
Comprehensive learning sources	4.14	4.27	-0.13	1.37	0.174
Academic, residential and recreational facilities	3.36	3.85	-0.49	3.17	<0.01
Aesthetic view of facilities	3.81	4.12	-0.31	2.40	<0.05
Training in a well-equipped communication classroom	3.97	4.19	-0.22	1.86	0.066
Effective classroom management	3.97	4.34	-0.37	3.21	<0.01

	Perceptions	Expectations	Service Gap	t value	*p*
	P	E	(P-E)		
Academics					
Adherence to schedule	3.78	4.28	-0.50	3.92	<0.001
Adequacy of subject teachers	3.96	4.27	-0.31	2.98	<0.01
Available regularly for students' work	3.84	4.16	-0.32	3.29	<0.001
Close supervision of students' work	3.84	4.09	-0.25	2.11	<0.05
Expertise in subjects and well-organized lectures	3.94	4.24	-0.30	2.86	<0.01
Good communication skill of academic staff	4.14	4.16	-0.02	0.19	0.849
Learning outcomes					
Practical orientation in education	3.56	4.02	-0.46	3.28	<0.001
Adaptability to modern techniques	3.73	4.19	-0.46	3.68	<0.001
Design of course structure based on job requirements	3.66	4.06	-0.40	3.17	<0.01
Problem-solving skills	3.74	4.13	-0.39	3.13	<0.01
Sense of social obligations	3.7	4.05	-0.35	2.75	<0.01
Opportunities for campus training and placement	3.78	3.9	-0.12	1.06	0.291
Extracurricular activities	3.92	4.18	-0.26	2.13	<0.05
Responsiveness					
Prompt services at service departments	3.51	4.01	-0.50	3.74	<0.001
Courteousness and willingness to help	3.68	4.11	-0.43	1.84	0.068
Cleanliness, orderliness, systematic and methodical	3.59	4.03	4.44	3.72	<0.001
Transparency of official procedure, norms and rules	3.74	4.00	-0.26	2.39	<0.05
Personality development					
Encouragement for sports games and cultural activities	4.04	4.14	-0.10	0.83	0.407
Enhancement of knowledge	3.84	4.09	-0.25	2.39	<0.05
Recognition of the students	3.92	4.17	-0.25	2.50	<0.05

The highest negative gaps were identified in the cases of training on stat-of-art technology, residential, recreational, and academic facilities, adherence to the schedule, practical orientation in education and adaptability to modern techniques. But the other intriguing aspect is that there are some cases having ($p>0.05$), that shows the lower negative gap values and these cases are well-equipped computer laboratories, comprehensive learning sources, spacious and well-equipped classrooms, good communication skills of academic staff, opportunities for campus training and enhancement of sports and cultural festivals. These lower negative gap scores articulate that the students' expectations in these cases are met to great extent by private institutions.

4.3) Quality of business education in higher education institutions

4.3.1) Service gaps in different dimensions

The mean perceptions and expectations of different dimensions of EduQUAL and the service quality gaps are presented in table 5. The results show that there were negative service gaps among all the dimensions of EduQUAL.

Here, the analyses table shows the service gap results after considering the responses of students' of both public and private institutes. So, in this case the highest negative service gap score was found in "*learning outcomes*" and the second highest gap score was in "*physical facilities*" followed by academics, responsiveness, and personality development dimensions.

Table 5: Mean Scores and Service Gaps on EduQUAL Dimensions in Higher Educational Institutions

Dimensions	Perceptions		Expectations		Service Gaps		Paired "*t*"	"*p*"
	Mean	SD	Mean	SD	Mean	SD		
Physical facilities	29.06	4.98	32.5	4.18	-3.43	6.31	-7.695	<0.001
Academics	20.96	4.78	24.61	3.49	-3.66	5.35	-9.662	<0.001
Learning Outcomes	23.64	5.00	28.1	3.82	-4.46	6.11	-10.328	<0.001
Responsiveness	13.37	3.19	15.7	2.64	-2.33	3.57	-9.223	<0.001
Personality development	10.61	2.83	12.30	1.65	-1.69	3.11	-7.673	<0.001
Total service quality	97.63	17.01	113.20	12.28	-15.57	19.63	-11.219	<0.001

4.3.2) Service gaps in different items

The table 6 shows the mean of perception and expectations of business students about different items of EduQUAL taking into account both the public and private institutes. The gap scores show that the students' expectations exceed their perception, thus resulting in negative service quality gaps. The highest negative gap scores were identified in the cases of training on state-of-art technology, updated course structure, practical orientation in education and opportunities for campus training and placement. It articulates that these are the cases about which the students expect more than they experience after getting admission in their

respective institution. So, these are the cases which are not being complied with the expectation of students and expectations are not met by both public and private institutes.

Table 6: Mean Scores and Service Gaps on EduQUAL items in Higher Educational Institutions

Training on state-of-art technology	2.83	3.64	-0.80	7.26	<0.001
Adequate facilities/infrastructure to render services	3.68	4.10	-0.43	5.14	<0.001
Well-equipped computer laboratories with modern facilities	4.04	4.25	-0.21	5.53	<0.01
Comprehensive learning sources	3.98	4.30	-0.31	5.78	<0.001
Academic, residential and recreational facilities	3.4	3.88	-0.48	5.02	<0.001
Aesthetic view of facilities	3.7	4.00	-0.30	3.35	<0.001
Training in a well-equipped communication classroom	3.84	4.17	-0.33	4.95	<0.001
Effective classroom management	3.6	4.16	-0.56	6.52	<0.001
Academics					<0.001
Adherence to schedule	3.48	4.15	-0.68	7.33	<0.001
Adequacy of subject teachers	3.6	4.14	-0.54	5.49	<0.001
Available regularly for students' work	3.32	4.00	-0.68	7.16	<0.001
Close supervision of students' work	3.3	3.98	-0.68	6.80	<0.001
Expertise in subjects and well-organized lectures	3.59	4.22	-0.62	7.36	<0.001
Good communication skill of academic staff	3.67	4.13	-0.46	6.91	<0.001
Learning outcomes					<0.001
Practical orientation in education	3.26	4.00	-0.74	7.1	<0.001
Adaptability to modern techniques	3.52	4.14	-0.62	7.04	<0.001
Design of course structure based on job requirements	3.24	4.02	-0.77	7.67	<0.001
Problem-solving skills	3.27	3.99	-0.72	7.37	<0.001
Sense of social obligations	3.40	3.92	-0.52	5.87	<0.001
Opportunities for campus training and placement	3.16	3.87	-0.71	7.55	<0.001
Extracurricular activities	3.78	4.16	-0.38	4.46	<0.001
Responsiveness					<0.001
Prompt services at service departments	3.17	3.86	-0.69	6.71	<0.001
Courteousness and willingness to help	3.23	3.92	-0.69	7.82	<0.001
Cleanliness, orderliness, systematic and methodical	3.44	3.97	-0.54	6.03	<0.001
Transparency of official procedure, norms and rules	3.54	4.05	-0.51	6.52	<0.001
Personality development					<0.001
Encouragement for sports games and cultural activities	3.66	4.08	-0.42	6.06	<0.001
Enhancement of knowledge	3.45	4.1	-0.64	7.17	<0.001
Recognition of the students	3.50	4.13	-0.63	7.04	<0.001

Apart from it on the other side, there are some cases which have lower negative gap scores which are spacious and well-equipped classrooms and computer laboratories. It shows that both the public and private institutes have well equipped and spacious classrooms and laboratories as the students were expecting from them.

4.3.3) Service gaps perceived among students with different area of study

The table 7 shows the mean perception and expectation of students' among different dimensions of EduQUAL with respect to their area of study. The current study is conducted by considering two areas of business education which are commerce and business administration.

The statistically proven results enunciate that there is no significant difference in the expectations of commerce and business administration students. But the analyses demonstrate that the perception of business students from two areas commerce and business administration were significantly different from each other. Same the case with service quality gaps, that they are substantially different in both areas of studies.

As there were greater negative service gaps in the case of commerce students among all the dimensions of EduQUAL which articulate those commerce students' expectations exceed their perceptions among different dimensions. Apart from it there were lower negative service gap scores among all the dimensions of EduQUAL in the case of business administration students' which enunciate that their expectations are being attained to some extent by their respective institutions.

Table 7: Mean Scores and Service Gaps perceived among Students with different areas of Study

Dimensions	Areas of Study	Mean	SD	Mean	SD	Mean	SD
Physical Facilities							
	Commerce	28.10	4.99	32.88	4.47	4.78	6.75
	Business Administration	30.05	4.77	32.04	3.82	1.99	5.44
Academics							
	Commerce	20.20	4.98	24.75	3.59	4.55	5.59
	Business Administration	21.68	4.51	24.34	3.47	2.66	4.86
Learning Outcomes							
	Commerce	22.56	4.70	28.31	3.86	5.75	5.76
	Business Administration	24.70	5.10	27.82	3.76	3.12	6.14
Responsiveness							
	Commerce	12.52	3.23	15.63	2.77	3.11	3.77
	Business Administration	14.20	2.96	15.68	2.52	1.48	3.13
Personality Development							
	Commerce	10.18	2.84	12.41	1.82	2.23	3.24
	Business Administration	11.05	2.76	12.16	1.44	1.11	2.85

5) RESEARCH FINDINGS AND DISCUSSION

The purpose of the current study is to determine the service quality gaps in the business education by considering the perceptions and expectations of business students through the EduQUAL scale that was tested well for reliability and validity.

The results of this study enunciate the negative service gaps among all the dimensions and items of the scale. The similar results were found in different studies on quality in higher education in the developing nations (Aghamolaei & Zare, 2008; Barnes, 2006; Narang, 2012; Zafiropoulos & Vrana, 2008). Intriguingly, these results are also in line with the results reported by studies on developed countries where students' perceptions are not conformed to their expectations (e.g. Chua, 2004; Tan & Kek, 2004).

The negative service gap score articulate that the expectations of the business students' exceed their perceptions about the institute. This

negative gap scores may lead to the dissatisfaction of the students (Bigné, et al., 2003; Spreng & Mackoy, 1996). So, the management of these institutes should have to take immediate action and intervene to take steps to ameliorate the service quality in all these dimensions, so that the student perceive better quality of service and get satisfied with the institute, which results in trust and loyalty that ultimately leads to positive words of mouth (Kassim & Abdullah, 2010; Narang, 2012).

The current study takes into account both public and private institutes. The outcomes of this study articulates that in both the cases of public and private institutions, the highest gap scores were found in "*learning outcomes"* dimension, which shows that the students in public as well as private institutions expect more about the practical orientation in the education, adaptability to modern techniques, they desire campus training and job fair programs and updated course structure. They expect more about the development of problem solving skills and sense of social obligations. But both public and private institutes are unable to meet the expectations of students in these areas.

In the public institutions the second high gap was found in academics which entails that in public sector institutions, there is inadequacy of faculty members, irregular students' consultations and no close supervision of students, work and the academic staff neither have good communication skill and nor they are expert in their subject and does not adhere to their time schedules, that is why students expectations exceed their perceptions about these items. The third highest gap was found in physical facilities and then to responsiveness and personality development respectively.

On the other side in private institutions the second highest gap was found in physical facilities which enunciate that the private institutions do not give training on state-of-art technology, have inadequate infrastructure and residential facilities and ultimately there are no comprehensive learning sources in private institutions. The other dimensions which are ranked as to negative quality gap are academics, responsiveness, and personality development respectively.

The service quality gaps in overall higher educational institutions were also identified as negative service gaps. The highest negative gap scores were found in "*learning outcomes*" as the same problems were highlighted

in other studies (Sarkar, 2007; Solanki, Bharti, & Dalal, 2009). The second highest gaps were found in academics followed by physical facilities, responsiveness, and personality development.

With respect to the area of study significant differences were found in the perceptions of the commerce and business administration students' and same was the case with service gaps as well. Surprisingly, the perceptions of commerce students' scores less which results in large service gaps as compare to business administration students'. The results reveal that the expectations of commerce students' are not fulfilled by their respective institutions unlike the business administration's area students'.

5.1) Conclusion and Recommendations

The current study enunciate the negative service gap scores between the perceptions and expectations of the business students' in all the dimensions about quality in higher education. The findings of study identify the areas that need the attention of administration and policy makers of higher educational institutions and provide guidelines for them to take remedial actions promptly to ameliorate the quality of service in these areas.

Thus the results shows that the public institutions management needs to improve their learning and practical orientation in education, academics and physical facilities as well. The private institutes needs to improve firstly the services in learning outcomes, physical facilities and academics followed by responsiveness and personality development. This result requires the attention of administration of both public and private institutes for the improvement in these areas.

Most importantly the current study articulates the results that the highest service quality gap is in the dimension of learning outcome in both sectors so, the policy makers of the both private and public institutions needs to introduce some practical orientations towards education through case studies analysis and some practical seminars moreover, an urgent attention towards the adaptability to modern techniques with innovative design of courses which entirely based on the job requirements in the market is required.

There is also need to create the sense of problem solving and decision making in the business students and also the intelligence of socialization with the extracurricular activities. The major expectation of most of the students in the current era is to get a good job as they complete their education so, the institutions need to arrange for job fairs and campus placements and also get the feedback from the employers in the market.

In addition to above both sectors are required not only to ameliorate the learning outcome dimension but also needs to focus on the academics side and the physical facilities, and most importantly the personality development of students and responsiveness rather than increasing the number of students in the higher education institutes.

5.2) Limitations and Future Directions

The current study only considered two public and two private higher education institutions in one city with a small sample size. Thus the others must be cautious in generalizing the findings of this research study. As this study is confined to business education thus the future researchers are encouraged to conduct research by taking into account other areas of studies like technical education, social sciences, arts, and humanities.

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