



BE_SQUAL: A MULTIPLE-ITEM SCALE FOR EVALUATING SERVICE QUALITY OF BUSINESS EDUCATION IN PAKISTAN

Prof. Dr. Hayat M. Awan,
Institute of Management Sciences,
Bahauddin Zakariya University Multan - Pakistan



Prof. Dr. Hayat M. Awan is Meritorious Professor in Institute of Management Sciences, Bahauddin Zakariya University Multan. He has graduated from Karachi University and got his PhD (1981) (Operations Management) and MS (1979) degrees both from University of Toronto, Canada. He has been in the field of education for the past three decades and held various senior positions at national and international levels. University of Wisconsin-Madison USA as Assistant Professor, Vice Chancellor Bahauddin Zakariya University, Dean of faculty, and as Professor in BZU. He has provided his dedicated services for the improvement of quality in higher education as Chairman Quality Enhancement Cell and Chairman of BZU Research Committee. Besides his teaching assignments he held senior administrative positions as Chairmanship of various departments, Chairman Board of Studies Business Administration and project director of various development projects. He has also contributed in the development of External linkages with foreign universities. Author of more than 30 research articles in the field of Finance, Operations Management, Total Quality Management and ISO 9000, which are presented in different international conferences and published in well reputed international journals. He has been recognized for his academic expertise by the Higher Education Commission of Pakistan and awarded with Best Teacher Award 2003. He is approved scholar for the supervision of PhD research by the HEC.



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Prof. Dr. Hayat M. Awan, Khuram Shahzad Bukahri
Institute of Management Sciences,
Bahauddin Zakariya University Multan - Pakistan

ABSTRACT

Education as a service stands for a dynamic and complex contextual phenomenon. Quality of instruction essentially is supplemented by quality supporting services in order to create conducive learning environment. It is increasingly becoming clear that having internationally renowned faculty is not sufficient. Quality teaching supplemented by quality supporting services has become a key differentiator in the highly competitive learning landscape (Shaik, 2005). It is useful to assess not only student perceptions of their educational outcomes (technical quality) but also their perceptions of the manner in which educational services were provided for the duration of their stay (functional quality) at the institution.

Purpose:

The primary purpose of this study is to provide a practical basis for measuring business education service quality (BE-SQUAL) measurement framework based on the service quality determinants for education services provided by higher education institutions (HEIs) of business studies in Pakistan and to measure their relative importance from the students' points of view. Secondary objective of this study is to compare the service quality perceptions of students from private sector business institutes and public sector institutes based on high priority values of identified service quality dimensions for business education and to assess the effect of multidimensional service quality measurement dimensions on unidimensional behavioral intention of students from public and private sector business institutes

Design/methodology/approach:

Data collected from 135 students of private and public sector business institutes with the help of a questionnaire containing a total of 41 items identified from literature for measuring the service quality in higher education. Initially these 41 items subjected to factor analysis to form latent dimensions of service quality in business education institutes in Pakistan. Later, Multi-criteria decision-making methodology was used for assessing the relative importance of quality determinant factors that affect student satisfaction. More specifically, the analytical hierarchical process (AHP) was used in order to measure the relative weight of each quality factor. Finally, simultaneous regression analysis was

performed to analyze the effect of multidimensional service quality measurement dimensions on unidimensional behavioral intention of students from public and private sector business institutes.

Findings:

as result of factor analysis, 28 measurement items with factor loading (0.5>) were identified to form three service quality measurement dimensions: academic service quality (ACSQ), administrative service quality (ADSQ) and general service quality (GESQ) for business education which explained 65% of the variance. Based on global priority weights obtained from AHP students from private business institutes value campus layout, administrative support, flexible course management and employability potential of degree from a business institute, more than other determinants of service quality. While, students from public sector business institute give priority to academic staff qualification, friendly procedures, cooperation from administrative staff, quality of lecture contents more than they value other administrative as well as general service quality factors. Results from regression analysis of relationship between multidimensional service quality dimensions and unidimensional quality factors, also validated the importance of support service aspects for behavioral intentions (satisfaction, feelings and future contact) for students from private business institutes as compared with the results which suggested that academics related factors found to be significant predictors of behavioral intentions of students from public sector business institute.

Originality/value

This study used multi-criteria decision-making methodology for assessing the relative importance of quality determinant factors that affect student satisfaction and proposed a framework that can be used for analyzing the service quality of higher education institutes of business education. It is therefore, cautioned not to generalize the findings for higher education institutions in general

Key Words:

Analytical Hierarchy Process (AHP), higher education, Service quality measurement, business education, behavioral intentions

Paper Type:

Research Paper

INTRODUCTION

Students will have the opportunity to base their continued enrollment with higher educational institutes on how well educational programs and services meet the student's expectations for services. In a competitive market, satisfaction with services may make the

difference (Cook and Thompson, 2000; Parasuraman, Zeithaml, & Berry 1996). Satisfaction may influence student's desire to attend or defect various higher educational institutions. Colleges should include service quality assessment in their efforts to be accountable for the effectiveness of their services (Kerlin and Dunlop, 1993)

Today, controversy continues concerning how service quality should be measured (Cornin and Taylor, 1992; Parasuraman et al. 1993). One of the most controversial issues is the reliability of SERVQUAL; a scale developed to measure the service quality. SERVQUAL has been used to measure service in business school (Carman, 1990), banking, dry cleaning, fast food services (Cornin and Taylor 1992) and in many other service related institutions. SERVQUAL's validity has been called into question by Carman (1990) who analyzed the five dimensions of SERVQUAL and concluded that they were not generic and required modifications. One plausible solution is to adapt five dimensions of SERVQUAL by adding items that are pertinent to different situations, such as, the failure rate for higher education to deliver quality services, which is higher than business or public sector organizations in other areas of services (Carman, 1990).

While comparing higher education institutes and universities to other business organizations, we can see that most of the higher education institutes are faced with challenges:

- Since, 1990 tuition fee and other necessary cost of getting educated from a business school is on the rise and now has outpace the growth of economy, inflation and familial capacity to pay.
- Business schools are facing new customer groups. Over the past few years, the number of professionals from other fields of specialized education like engineering, medical, armed forces etc. have shown interest in business education, thereby the number of older business students is also increasing.
- Public Expenditure on Education as percentage to GDP is lowest in Pakistan as compared to other countries of the South Asian region. According to official data, Pakistan allocated 2.5% of GDP during 2006-07, 2.47% in 2007-08, 2.1% in 2008-09 and 2.0 % in 2009-10 which shows persistent declining (Economic Survey of Pakistan, 2010). Enrollment rate in universities during 2009 remain over 803,507 (Economic Survey of Pakistan 2009-10).

We can enlist number of other critical issues being faced by higher education institutions and require immediate attention from universities to become concerned with the quality of education and services they offer to their students. As suggested by Allen and Davis (1991), 'The topic of service quality in business education needs to studies and understood thoroughly by both administrators and faculty.'

PURPOSE OF STUDY

Tsinidou et, al. (2010) in their recent article suggested that, "Education services are often intangible and difficult to measure, since the outcome is reflected in the transformation of

individuals in their knowledge, their characteristics, and their behavior. Therefore, there is no commonly accepted definition of quality that applies specifically to the higher education sector” (Tsinidou et al. 2010). Practically we can devise some measurement instrument that can take into consideration the quality assessment to briefly describe what quality is, then setting up certain standards to compare and make assessment of these standards and their implementation in institution to conclude about the quality of education in an institution being assessed. This study attempted to look at the determinants of service quality in business studies HEIs rather than quality as a whole, and to measure the weights of the quality determinants in order to discover those that influence students' satisfaction most. It also aims to measure and analyze the factors that determine the service quality; to what extent they meet the students' expectations and if there are any differences of the students' perceptions about the weighting of the importance based on demographic factors and type of institute i.e. public or private sector.

Proceedings parts of this study provide a summary of relevant literature on key conceptual and methodological issues relevant to measuring service quality in higher education business schools. After utilizing a multi-sector study design, which adds to knowledge of service quality measurements, the research concludes with a discussion of managerial implications and directions for future research.

A SUMMARY OF LITERATURE REVIEW

Existing Knowledge about Service Quality

Generally, services can be defined as the commodities that repetition cannot be stored or disappear in use, or as activities that require personal contact. Those economic activities that typically produce an intangible product such as education, entertainment, food and lodging, transportation, insurance, trade, government, financial, real estate, medical, repair and maintenance-like occupations are defined as services (Aga and Safakli, 2007). ‘Services constitute an immaterial product produced to satisfy consumer needs’ (Aga and Safakli; 2007) and ‘are carried out for someone else’ (Goetsch and Davis, 1998:104 cited in Aga and Safakli, 2007). The major characteristics of services are intangibility, heterogeneity, and inseparability (Parasuraman et al., 1985).

Many researchers believe that most services are intangible (Bateson 1967, Berry 1991, Lovelock 1983, cited in Parasuraman et al., 1985). ‘Services are performances rather than objects, and cannot be counted, measured, inventoried, tested, and verified in advance of sale to assure quality’ (Parasuraman et al., 1985). That is the reason why most of the service organizations find it difficult to know how actually consumers perceive their services and then make assessment of service quality (Zeithaml 1981 cited in Parasuraman et al., 1985). ‘Services are heterogeneous because their performance often varies from producer to producer, from customer to customer, and from time to time’, (Booms and Bitner 1981 cited in Parasuraman et al., 1985) argue that ‘consistency of behavior from service personnel is also much difficult to assure because what the firm wishes to deliver to its customers may not be the same the customer receives’ (Booms and Bitner., 1981. Further, the production

and consumption of many services are inseparable (Carmen and Langeard 1980, Gronroos 1984, cited in Parasuraman et al., 1985). Defining service quality, (Lewis and Booms 1983 cited in Parasuraman et al., 1985 p-42) argue that:

“Service quality is a measure of how well the service level delivered matches customer expectation. Delivering quality service means confirming to customer expectations on a consistent basis”.

Service quality can also be defined as the difference between customer perceptions of the current service being provided by a given organization and customer expectations of excellent service within that given industry (Parasuraman, Zeithaml, and Berry 1985, 1988). Service has now been linked to performance through activities that help in customer retention and through other activities of management expectations and service reliability, one of the outcomes of the service quality may be the increased customer satisfaction and this leads significantly to performance.

Operationalizing Service Quality

A review of the relevant literature suggests that the main focus of service quality research has been twofold. First, to explore the service quality dimensions was of the primary interest to researchers Gounaris and Dimitridis (2003). Second, to devise the measurement instruments of service quality was the focus of subsequent research efforts (Gounaris, 2003). To measure perceived service quality we first traced the research of Parasuraman, Zeithaml, and Berry. These authors started with an exploratory investigation because at that time literature on service quality was not rich and they originally identified 10 constructs of service quality based on a series of focus group sessions (1985):

- i) reliability;
- ii) responsiveness;
- iii) competence;
- iv) access;
- v) courtesy;
- vi) communication;
- vii) credibility;
- viii) security;
- ix) understanding/knowing the customer;
- x) tangibles.

While there have been many different approaches or methods for measuring service quality, the SERVQUAL instrument (Parasuraman, Zeithaml, and Berry 1985, 1988) seems to have the greatest potential for applicability in different industries and sectors. Parasuraman, Zeithaml, and Berry (1988) refer to the dimensions of service quality as tangibles, reliability, responsiveness, assurance, and empathy (called SERVQUAL) where 10 determinants were recasts into five specific components of 22-item scale. Reliability, tangibles and responsiveness has not lose their physical identity as remained distinct, but the remaining seven components were summed up into two aggregate dimensions,

assurance and empathy. This new developed 22-item instrument was meant to measure customer's expectations and perceptions of the five RATER dimensions.

SERVQUAL and Industry-specific measure of service quality

Applicability of SERVQUAL as a generic scale for measuring service quality in all settings was questioned by many researchers (Babakus and Boller, 1992; Van Dyke et al., 1997; Jabnoun and Khalifa, 2005; Akbaba, 2006; Caro and Garcia, 2007 cited in Ladhari, R. 2008). 'It was also concluded that a simple adaptation of the SERVQUAL items is not appropriate to measure service quality across a diversity of service industries' (Carman, 1990; Babakus and Boller, 1992; Van Dyke et al., 1997 cited in Ladhari, R. 2008). Carman (1990 cited in Ladhari, R. 2008) argued that some dimensions needed expansion by the inclusion of 13 additional items to the SERVQUAL instrument to measure service quality appropriately across different services because in some cases service quality is a simple unidimensional construct but a complex multidimensional construct in others (Babakus and Boller, 1992 cited in Ladhari, R. 2008). That is why, a number of studies concluded that that industry-specific measures of service can be more useful than to use single generic scale (Babakus and Boller, 1992; Van Dyke et al., 1997; Caro and Garcia, 2007 cited in Ladhari, R. 2008 and Ahmed et al., 2009). Jabnoun N. (2003) argues that:

- SERVQUAL instrument has been used in no. of studies (Dabholkar et al., 1996; Hussey, 1999; Nielsen and Host, 2000; Engelland et al., 2000; Getz et al., 2001) but also it was challenged in a number of subsequent studies (Carman, 1990; Babakus and Boller, 1992; Cronin and Taylor, 1992, 1994)
- SERVQUAL has been tested on its psychometric properties in many studies. The evidence provides general support for the validity and reliability, of the instrument (e.g. Finn and Lamb, 1991; Kettinger and Lee, 1999; Lam, 1997).
- The major empirical problems of the instrument lie in its unstable dimensionality (Carman, 1990; Van Dyke et al., 1997).

Van Dyke and Kappelman et al (1997) indicate that SERVQUAL has many shortcomings like conceptual and empirical problems. Conceptual problems include the measurement of perceived service quality as a difference or gap score, the ambiguity of the expectation construct and the unsuitability of using only SERVQUAL to measure service quality across different industries. They further added that the empirical problems include reduce reliability, poor convergent validity, and poor predictive validity. Cronin and Taylor (1992) have examined SERVQUAL and presented a performance-based measure of service quality, called SERVPERF after applying this instrument in four industries (banking, pest control, dry cleaning and fast food). SERVPERF is composed of the 22 perception items only in the SERVQUAL scale without considering expectation part of SERVQUAL. They added that this measure explained more of the variance in an overall measure of service quality than did SERVQUAL and revealed that a psychometrically superior assessment of service quality can be obtained through the SERVQUAL performance items alone.

Jabnoun, N. et al (2003) indicated in their study and Babakus and Boller (1992) also found that 'perception scores had stronger correlation with independent measures, such as overall quality, than do the SERVQUAL measures (expectations minus perceptions). Babakus and Boller (1992) suggested that 'the dimensionality of service quality may depend on the type of industry being studied and argued that measures designed for specific industries are more appropriate than using a generic one (Jabnoun, N. et al., 2003).

Measurement of Service Quality in Higher education

Five-factor structure of SERVQUAL developed by Parasuraman et al. (1988) has received a reasonable amount of criticism for its suitability to measure service quality especially academic quality in higher education, and administering expectation items is also considered unnecessary (Carman, 1990; Parasuraman et al., 1991a, b; Babakus and Boller, 1992). Cronin and Taylor (1992) developed performance-based measure, SERVPERF. SERVPERF scale is the un-weighted perceptions components of SERVQUAL, which consists of 22 perception items which do not include expectations.

Most of the studies carried out to assess service quality in higher education opted for SERVQUAL as instrument to measure the quality of educational services. The SERVQUAL and other instruments focus on measuring functional quality and only indirectly evaluate technical quality. Academic experts who prefer SERVQUAL or other similar measurement scales alone to assess student perceptions of educational quality, favors the idea of those who believe that, 'the consumer rely mainly on functional quality to evaluate service quality'. The argument made for a "process-focus" is that consumers lack the ability, information, or confidence to assess the technical quality of the services. Instead, they rely on functional quality assessments to signal the technical quality of services. For many services this premise may be true, but for higher education it may lack validity for two reasons (Holdford and Reinders 2001).

Holdford and Reinders (2001) stated that, 'The first reason is that educational services are highly involving and require high levels of participation unlike many other services such as fast food or grocery store services. Unless students are mentally involved and participate in their education, they cannot learn. During their participation and involvement in a four-year educational experience, students often develop strong opinions about their educational outcomes. These perceptions may not coincide perfectly with the true capabilities of students, but they should have some relationship with actual skills and knowledge (Quinones and Mason 1994). The second reason is that there is evidence in the educational literature that students use educational outcomes to evaluate the schools they attend. (Fjortoft and Lee 1994) found student perceptions of their intellectual development (i.e., an educational outcome which describes self evaluations of knowledge and skill gained and their relevance to student career goals) to be an important variable in student assessments of their school experiences. For these reasons, it is important that any instrument that assesses the service quality of education should assess both technical and functional quality.

More recently, HEDPERF was developed comprising a set of 41 items (Firdaus, 2006). This instrument assesses the academic components and other important aspects of overall service environment as perceived by the student. This scale has five dimensions of the service quality concept:

- 1) Administrative Service quality. Factors happened to be important for enabling students to fulfill their study obligations, and relate to duties carried out by non-academic staff.
- 2) Academic aspects. Responsibilities of academics.
- 3) Reputation. Importance of higher learning institutions in projecting a professional image.
- 4) Access. Includes issues as approachability, ease of contact, availability and convenience.
- 5) Programme issues. Importance of offering wide ranging and reputable academic programmes/specializations with flexible structures and health services.

The SERVPERF and HEDPERF scales were compared in terms of reliability and validity and confirmed the superiority of the newly-purposed measurement instrument (Firdaus, 2006).

Research Objectives

Main objectives of this study include:

- 1) To identify the service quality determinants for education services provided by higher education institutions (HEIs) of business studies in Pakistan and to measure their relative importance from the students' points of view. A multi-criteria decision-making methodology was used for assessing the relative importance of quality determinants that affect student satisfaction. More specifically, the analytical hierarchical process (AHP) was used in order to measure the relative weight of each quality factor.
- 2) To compare the service quality perceptions of students from private sector business institutes and public sector institutes based on high priority values of identified service quality dimensions for business education.
- 3) To assess the effect of multidimensional service quality measurement items on behavioral intentions of students

RESEARCH METHOD AND DESIGN

As this study attempts to look at the determinants of service quality in business studies and to measure the weights of the quality determinants in order to discover those that influence students' satisfaction the most, so for that the starting point is to test the questionnaire developed by using items used in SERVPERF and HedPERF scales. Items included in SERVPERF and HEDPERF measurement scales merged and resulting set of 53 items was subjected to factor analysis for data reduction. The mechanism and results of factor analysis are explained in section below:

Factor Analysis

In order to gain a better understanding of the factor structure, all the items from Section B of the questionnaire were subjected to a factor analysis utilizing the principal components procedure, which was followed by a varimax rotation. Items with value greater than or equal to 0.5 were selected and the results of CFA identified four factors which accounted for 65.0 % of the variation in the data explained. Items included in factor 1 mainly come from academic service quality (ACSQ= Variance explained 32%) dimensions. Similarly, second factor correspond to administrative service quality dimensions (ADSQ= Variance explained 19%). However, factor, 4, and 5 grouped together based on their relevance with the general service quality dimension (GESQ= Variance explained 13%). Table 1 shows the results of the factor analysis in terms of factor name, the variables loading on each factor and the variance explained by each factor.

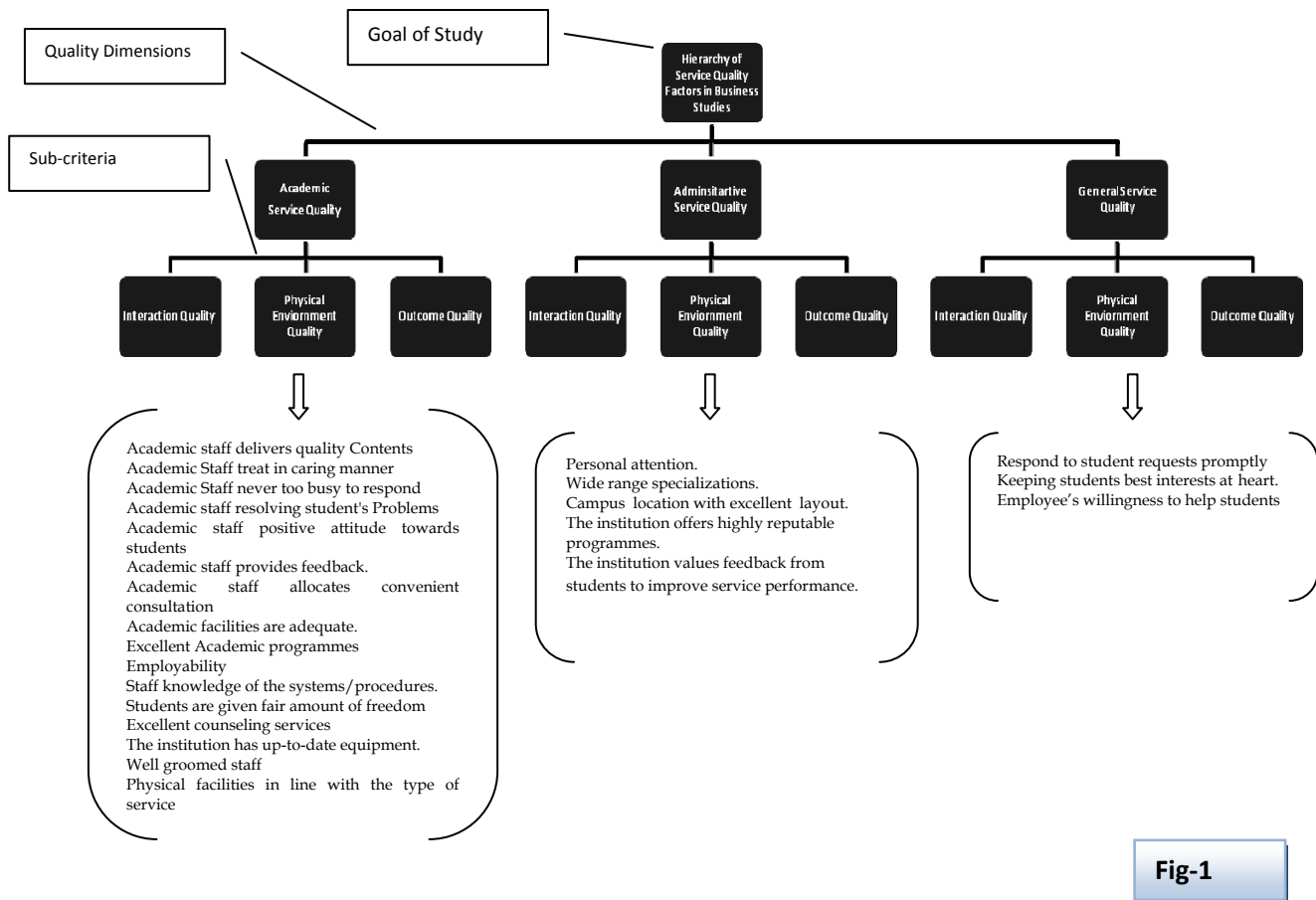
The four factors identified in Table 1. Based on the factors identified from factor analysis, we propose a framework for assessing the service quality in HEIs of business education in Pakistan. The diagram (Fig- I) below exhibit the conceptual formulation of proposed framework along with the corresponding measurement items for three main dimensions of business education service quality in Pakistan.

Table: I Results of Factor Analysis (Factor Loadings)		ACSQ	ADSQ	GESQ
1	Academic staff delivers quality Contents	0.750		
2	Academic Staff treat in caring manner	0.871		
3	Academic Staff never too busy to respond to queries	0.795		
4	Academic staff shows interest in resolving student's Problems	0.858		
5	Academic staff show positive attitude towards students	0.876		
6	Academic staff provides feedback about my progress.	0.750		
7	Academic staff allocates sufficient and convenient time for consultation.	0.802		
8	Academic facilities are adequate and necessary.	0.806		
9	The institution runs excellent quality programmes.	0.791		
10	The institution's graduates are easily employable.	0.792		
11	Administrative staff has good knowledge of the systems/ procedures.	0.733		
12	Students are given fair amount of freedom	0.819		
13	The institution operates an excellent counseling services	0.748		
14	The institution has up-to-date equipment.	0.618		
15	The institution's employees are well dressed and appear neat.	0.619		
16	The appearance of the physical facilities in line with the type of service	0.633		
17	When the institution promises to do something by certain time, it does so.	0.667		
18	When you have problems, the institution is sympathetic and reassuring.	0.608		
19	Class sizes are kept to minimum to allow personal attention.		0.585	
20	The institution offers a wide range of programmes with various specializations.		0.658	

Table: I Results of Factor Analysis (Factor Loadings)		ACSQ	ADSQ	GESQ	
21	The institution has location with excellent campus layout and appearance.		0.702		
22	The institution offers highly reputable programmes.		0.542		
23	The institution values feedback from students to improve service performance.		0.531		
24	The institution keeps its records accurately.				
25	It is ok if they are too busy to respond to student requests promptly			0.634	
26	It is unrealistic to expect universities to have students' best interests at heart.			0.528	
27	Employees of the institution are not always willing to help students				0.528
28	Employees of the institution are too busy to respond to student requests promptly.				0.506
	Percentage of Variance	32.358	19.549	7.368	5.791
	Cumulative Percentage of Variance	32.358	51.907	59.275	65.066

In order to achieve second objective this study, analytical hierarchical process (AHP) was used. The AHP is a multi-criteria decision making (MCDM) method that was introduced by Saaty (1980). MCDM is a well known class of decision making, which addresses decision problems that are related with a number of decision criteria. Common MCDM methods include priority based, outranking, distance based decision making etc. Each method based on its characteristics can be classified as deterministic/stochastic/fuzzy method or depending upon the number of decision makers, as single/group decision making method (Figueira et al., 2009). The primary objective of AHP is to classify a number of alternatives (e.g. a set of quality determinants) by considering a given set of qualitative and/or quantitative criteria, according to pair wise comparisons/judgments provided by the decision makers. AHP results in a hierarchical leveling of the quality determinants, where the upper hierarchy level is the goal of the decision process, the next level defines the selection criteria which can be further subdivided into sub criteria at lower hierarchy levels and, finally, the bottom level presents the alternative decisions to be evaluated.

Figure-I : Proposed framework for Business Education Service Quality in Pakistan



The main advantages of applying the AHP method are (Jadhav and Sonar, 2009):

- it is capable to provide a hierarchical decomposition of a decision problem that helps in better understanding of the overall decision making process;
- it handles both quantitative and qualitative criteria;
- it is based on relative, pair wise comparisons of all decision elements; instead of arbitrarily defining a percentage score and a weight for each decision element, AHP allows the decision maker to focus on the comparison of two criteria/alternatives, at a time, thus it decreases the possibility of defining ratings based only on personal perceptions of the evaluators or other external influences;
- AHP is applicable to both individual and group-based decision making (this is often achieved by considering the geometric mean of comparison values),
- it enables consistency checks upon pair wise decision judgments; and
- it supports sensitivity analysis to examine the effects of changing values of criteria weights on the final ranking of the decision alternatives.

There are three the basic concepts that AHP is based on:

- 1) Complexity analysis: a hierarchical tree is created with criteria, sub-criteria and alternative solutions as the leaves.
- 2) Calculation/estimation is executed in every tree level based on a 1 to 7 or 1 to 9 scale in order to measure priorities. More specifically, a pair wise comparison takes place in every tree level with regards to the parent node. The goal node in the hierarchical tree exists only to highlight the top-down analysis of the methodology.
- 3) Synthesis with ultimate goal to extract the final priorities of the alternatives.

As mentioned, AHP is a method that orders the priorities in a given situation, incorporating the element of subjectivity and intuition so that a final decision can be reached by making decisions for part-issues in a consistent way and gradually move up levels to deal with the given situation having a clear view of what it entails (Al Harbi, 2001). AHP is relatively simple and logical and given that a certain consistency in the part-decisions is maintained, AHP can help decision makers deal with complicated issues where often not only tangible but also intangible parameters affect their decision. It should be noted briefly at this point that AHP is as effective as its design in each individual case and that analysts should exercise care and precision in capturing the true sub-elements and requirements of the case in question. And, more often than not, spreadsheets and other computerized programs are necessary for the evaluation of the data (Dyer and Forman, 1992).

There are two difficult points related with the practical application of AHP. Firstly, when determining “crisp” comparative values, any uncertainties on judgments of decision makers cannot be easily handled. Secondly, when there are dependencies among the selection criteria, the Analytic Network Process (ANP) can be used, an AHP extension that handles both intra- and inter-dependencies among clusters of selection criteria (Gerogiannis et al., 2009; Saaty, 2001).

Data were collected by means of a structured questionnaire comprising of four sections namely A, B, C and D. Section A contained nine questions about student respondent profile. While sections B and C required respondents to evaluate the service components of their institution, in which only perceptions data were collected and analyzed. Specifically, section B consisted of 22 perception-items extracted from the original SERVPERF scale (Cronin and Taylor, 1992), and modified to fit into higher education context. Section C on the other hand is composed of 41 items extracted from the original HEdPERF (Firdaus, 2006), a scale uniquely developed to embrace different aspects of tertiary institution's service offering. As the items were generated and validated within higher education context, no modification was required. All the items in sections B and C were presented as statements on the questionnaire, with the same rating scale used throughout, and measured on a 7-point, Likert-type scale that varied from 1=strongly disagree to 7=strongly agree. In addition to the main scale addressing individual items, respondents were asked in section D to provide an overall rating of the service quality, satisfaction level and future visits.

There were also three open-ended questions allowing respondents to give their personal views on how any aspect of the service could be improved. Data were collected from students of business studies in higher education institutions (public universities/colleges &

private university/colleges) in three main cities of Pakistan including Karachi, Lahore and Multan. A total of 250 questionnaires were distributed, of these 135 were returned and nine discarded due to incomplete responses, thus leading to a response rate of 51.6 per cent. The number of 135 questionnaires out of usable sample size of 250 for a population size of nearly 20,000 students in Pakistani business studies institutions (OECD's 2009 Global Education Digest) was in line with the generalized scientific guideline for sample size decisions as proposed by Krejcie and Morgan (1970). The analysis of the data was carried out in five steps as explained in detail in the following paragraphs. Firstly, a range of demographic profiling was done. Secondly, the consistency of the responses was assessed and finally, the level of determinants of service quality was compared with demographic variables such as the department of the faculty and years of study to understand differences in perceptions among different segments of the student population.

Step 1- We developed the hierarchical representation of the problem by defining levels of criteria and sub-criteria perceived as most important by students.

Step 2- The criteria of each group are being compared in pairs. In a scale of 1 to 7, elements are assigned different degrees of relative importance. For example, if a student replies that element A is absolute important than element B, A is said to have a relative weight of 7 times that of B.

Then, a pair wise comparison matrix is created for each dimension of service quality. This is done by dividing each element of the matrix by its column total.

Step 3- The eigen value was calculated to determine the relative weight of each criterion in relation to the one immediately above in the hierarchy. The priority vector is established by calculating the row averages. At this point, the consistency ratio is calculated according to the following equation $CR=CI/RI$. Consistency index (CI) is calculated by the following equation $CI=\lambda_{max} - n/n-1$, where n is the number of sub-criteria of each criterion. The design of the AHP hierarchy must satisfy the goal of developing a model that will allow students to decide which factor they regard most important in assessing quality of the services provided by business institutes. The same procedure is applied for all selected criteria in order to assess their individual importance and their degree of contribution to the overall goal.

Step 4- This step examines whether the created pairs of criteria are consistent or not. The consistency ratio is used to check whether a criterion can be used for decision-making. If the CR value of the criterion is less than 0.1, then the criterion is considered of acceptable consistency, while bigger value means that it should not be used for estimating the priority vector.

Step 5- The sub-criterion priorities are combined to disclose the most important sub-criteria for each criterion in order to develop an overall priority ranking. More specifically, the relative weights of sub-criteria (priorities) for every criterion can be computed as normalized geometric means (the nth root of the product of n judgments) of the rows

(aggregating individual responses of the 265 questionnaires). In order to set the weights of the elements in a hierarchy, we prefer the geometric means, as the most common approach to set priorities. Note that the weights for criteria at each level, within their parent criterion sum to 1 (called local priorities). The figure below describes the framework for developing framework for the development of service quality measurement of HEIs in business studies using AHP multi-criteria method.

Resulted items would be categorized in three tiers i-e Academic Service Quality (ACSQ), Administrative Service Quality (ADSQ) and General Service Quality (GESQ). According to their priority weights obtained for the sub-factors of each one of the three tiers. Set of these tiers can be taken as second order hierarchical framework proposed for measuring the service quality in business schools. Finally, proposed framework applied to see the difference between public sector business schools and private sector business schools to identify how relative importance of measurement items may vary among students of private and public sector business institutes.

RESULTS AND DISCUSSIONS

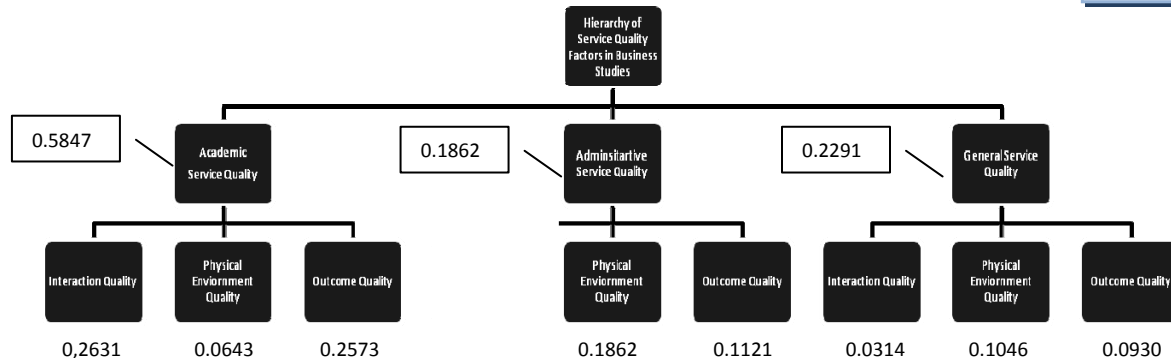
Fig. 2 shows the relative weights of overall elements in our study. We found Academic service quality has the highest relative weights (ACSQ=0.5847) thus making it the most important criterion when evaluating a business education institute in Pakistan. This dimension followed by general service quality (GESQ=0.2291), and administrative service quality (ADSQ=0.1862). Top five sub-criteria as ranked by relative weights are academic interaction quality (ACISQ=0.2631), academic outcome service quality (ACOSQ=0.2573); administrative outcome service quality (ADOSQ=0.1121); general service physical environment quality (GEP SQ=0.1046) and general service outcome quality (GEOSQ=0.0930). Results are also summarized in the table-2 below:

Table-2 Relative weights of Overall Service Quality Sub-criterion

Rank	Overall Service quality sub-criteria	Relative weights
1	Academic interaction quality (ACISQ)	0.2631
2	Academic outcome service quality (ACOSQ)	0.2573
3	Administrative outcome service quality (ADOSQ)	0.1121
4	General service physical environment quality (GEP SQ)	0.1046
5	General service outcome quality (GEOSQ)	0,0930

Fig.2 Relative weights of Service Quality dimensions and their sub-criterions

Fig-2



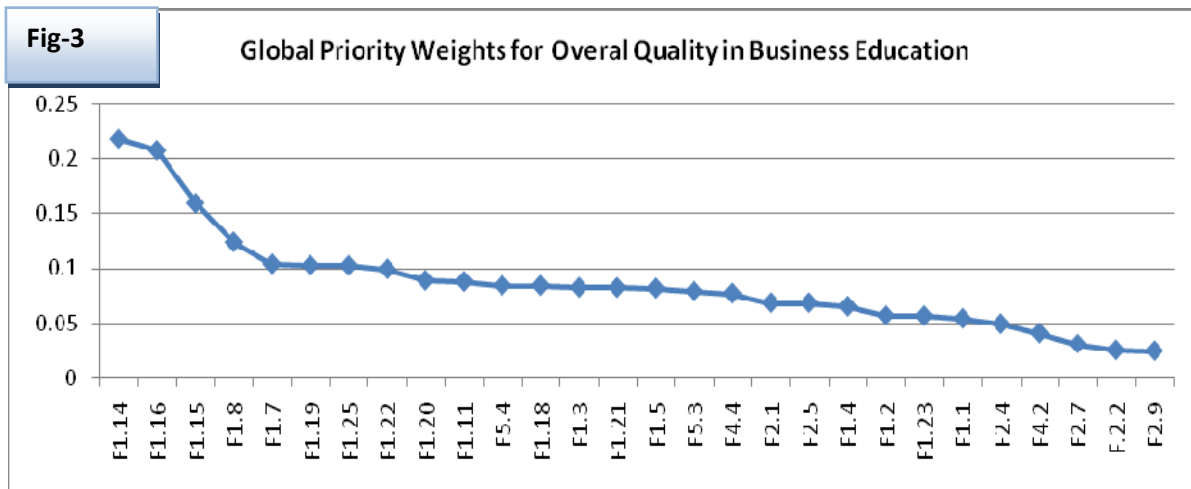
Global Priority Scores for Service Quality HEIs of Business Education

After identification of level one domain for service quality factors in selected business institutes of Pakistan, a detailed analysis of data was conducted in order to develop a hierarchical index based on global priority weights of sub-criterions which indicates their relative importance towards determining the critical importance of quality dimension. Global scores for sub-criterions are arranged, sorted in descending order of their relative scores. Furthermore, based on the significant cut off value, these factors are classified in three tiers.

The values of sub-criterions provided in Table 3 illustrate the relative importance of sub-factors provided by the students for an overall service quality perception about sampled business institutes in Pakistan, most significant service quality factors in Tier-I belongs to the level one service quality domain of academic outcome quality. Tier-I indicates that the most important factor for the overall business institute's service quality is institute's recognition among the employers (priority weight=0.2180). This clearly indicates that the students enrolled in different business institutes are mainly concerned with the probability of getting a reasonable job after completing their degree program. This also suggests that while making their choice for admission in BBA or MBA degree program, they assign a high value to the institute's recognition and acceptance in the market. After, employability concern, second most important sub-factor that determines the service quality perception of a student relates with the openness of the social environment where students can exercise a freedom of choice and speech.

Tier II of overall service quality in business institutes consists of those factors which are related with facilitation of education services. This suggests that once students can understand complexity of processes and also commit their efforts to achieve their educational goals in terms of quality of education and potential career, then with the help of and guidance of academic as well as assistance from support staff, flexibility in course

choices, convenient schedules and visible presence of senior faculty lead them towards successful completion of degree program. Tier III includes factors like student orientation, polite and considerate treatment from institute’s staff, availability of reference material, use of sophisticated equipments, teaching methods and student feedback for improvement planning. Presence of these service quality factors in third tier reveal that service quality improvement is not a onetime planning decision; rather it goes on and require continuous efforts to ensure student’s satisfaction.



Tiers	Table-3 Ranking of overall Service Quality Determinants of Higher Education’s Institutions in Business Studies			
	Ranking	Factor	Label	Global Priority Weight
Tier-I	1	F1.14	The institution's graduates are easily employable.	0.2180
	2	F1.16	Students are given fair amount of freedom	0.2075
	3	F1.15	Administrative staff has good knowledge of the systems/procedures.	0.1592
	4	F1.8	Academic staff allocates sufficient and convenient time for consultation.	0.1239
	5	F1.7	Academic staff provides feedback about my progress.	0.1038
	6	F1.19	The institution has up-to-date equipment.	0.1026
	7	F1.25	Academic Staff are highly educated and experienced in their respective fields	0.1023
Tier-II	8	F1.22	When the institution promises to do something by certain time, it does so.	0.0992
	9	F1.20	The institution's employees are well dressed and appear neat.	0.0889
	10	F1.11	Academic facilities are adequate and necessary.	0.0878
	11	F5.4	Employees of the institution are too busy to respond to student requests promptly.	0.0843
	12	F1.18	The institution operates an excellent counseling services	0.0842
	13	F1.3	Academic Staff never too busy to respond to queries	0.0824
	14	F1.21	The appearance of the physical facilities of the institution is	0.0823

Tiers	Table-3 Ranking of overall Service Quality Determinants of Higher Education's Institutions in Business Studies			
	Ranking	Factor	Label	Global Priority Weight
			in line with the type of service	
	15	F1.5	Academic staff show positive attitude towards students	0.0817
Tier-III	16	F5.3	Employees of the institution are not always willing to help students.	0.0790
	17	F4.4	It is unrealistic to expect universities to have students' best interests at heart.	0.0770
	18	F2.1	Class sizes are kept to minimum to allow personal attention.	0.0685
	19	F2.5	The institution offers highly reputable programmes.	0.0685
	20	F1.4	Academic staff shows interest in resolving student's Problems	0.0653
	21	F1.2	Academic Staff treat in caring manner	0.0569
	22	F1.23	When you have problems, the institution is sympathetic and reassuring.	0.0564
	23	F1.1	Academic staff delivers quality Contents	0.0540
	24	F2.4	The institution has location with excellent campus layout and appearance.	0.0491
	25	F4.2	It is ok if they are too busy to respond to student requests promptly.	0.0408
		26	F2.7	The institution values feedback from students to improve service performance
	27	F.2.2	The institution offers a wide range of programmes with various specializations.	0.0253
	28	F2.9	The institution keeps its records accurately.	0.0246

Comparative assessment of Service Quality Determinants of Public Sector and Private sector business institutes

After developing the service quality measurement framework, this study also attempts to conduct an empirical analysis of the data collected from public and private business institutes by using earlier identified factors for over all service quality in business institutes of Pakistan. This step is considered to be important for analyzing the influence of specific context nature of business institute on service quality perception of the student that ultimately will reflect in different set of factors that can be attributed as determinants of service quality in public and private sector business institutes.

Priority weights for Service Quality in Private Sector HEIs of Business Education

The values of sub-criteria provided in Table 4 illustrate the relative importance of sub-factors provided by the students for service quality perception about private sector business institutes in Pakistan. For private business institutes, most significant service quality factors in Tier-I belongs to the level one service quality domain of Physical environment quality. Tier-I indicates that the most important factor for a private business institute's service

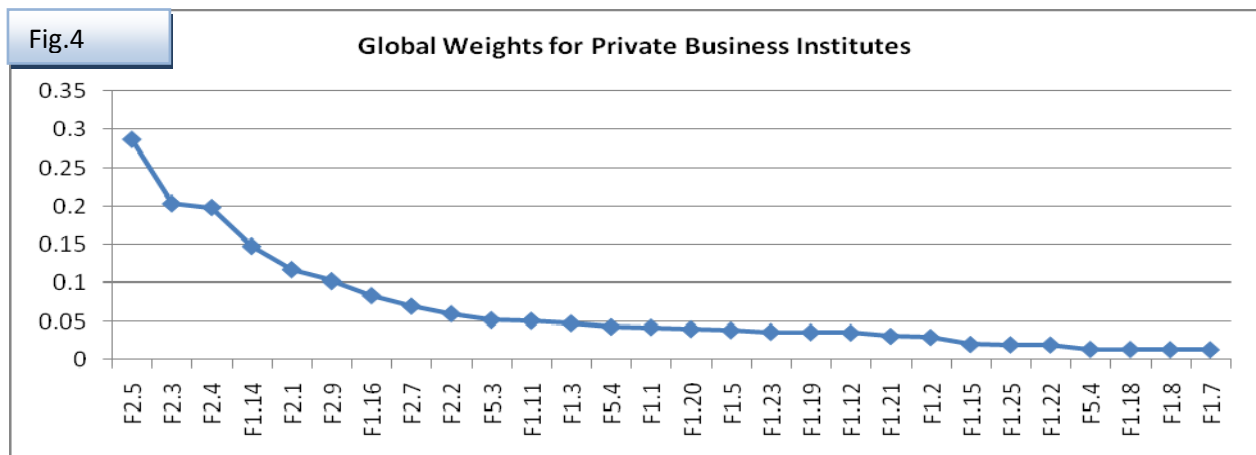
quality is institute's repute and quality of degree program that better suits different career choices with relatively higher demand in job market (priority weight=0.2870).

In today's competitive business environment most of the corporate groups are trying to reduce their resource dependencies and greater tendency is towards lean management. In the wake this increasing tendency of corporate sector, different business groups, either directly established their own business school or alternatively established a long term relational contract with some of the top ranked business schools in private sector. By doing so, a cooperative mechanism has been developed between corporate sector and business education institutes in private sector which allowed them to closely work together and design a customized degree program particularly for a single industry. Sharing of ideas through regular seminars, expos, case studies, invited lectures by the corporate heads and professionals from outside the country have certainly raised the level of student's expectations from a business institute.

Tier II of overall service quality in business institutes consists of those factors which are related with facilitation of education services. It is understandable that most of the business schools mainly emphasize 'aesthetic component' of location facility and try to ensure the availability of modern tools and equipment to aid their delivery of education services to the students mostly coming from the middle or middle upper segment of the society Tier III includes factors like student orientation, polite and considerate treatment from institute's staff, availability of reference material, use of sophisticated equipments, teaching methods and student feedback for improvement planning. These sub-factors are almost the same as in case of overall service quality factors included in tier-III. Table-4 below summarized the results of these sub-factors along with the ranking and related tier in which they can be identified.

Table-4 Ranking of Service Quality Determinants of Private Sector Higher Education's Institutions in Business Studies				
Tiers	Ranking	Factor	Label	Global Weight
	1	F2.5	The institution offers highly reputable programmes.	0.2870
	2	F2.4	The institution has location with excellent campus layout and appearance.	0.1989
	3	F1.14	The institution's graduates are easily employable.	0.1484
	4	F2.1	Class sizes are kept to minimum to allow personal attention.	0.1178
	5	F2.9	The institution keeps its records accurately.	0.1032
	6	F1.16	Students are given fair amount of freedom	0.0846
	7	F2.7	The institution values feedback from students to improve service performance.	0.0707
	8	F2.2	The institution offers a wide range of programmes with various specializations.	0.0607
Tier-II	9	F5.3	Employees of the institution are always willing to help students.	0.0528
	10	F1.11	Academic facilities are adequate and necessary.	0.0519

Table-4 Ranking of Service Quality Determinants of Private Sector Higher Education's Institutions in Business Studies				
Tiers	Ranking	Factor	Label	Global Weight
	11	F1.3	Academic Staff never too busy to respond to queries	0.0485
	12	F5.4	Employees of the institute are never too busy to respond to the student's request prompt	0.0436
	13	F1.1	Academic staff delivers quality Contents	0.0430
Tier-III	14	F1.20	The institution's employees are well dressed and appear neat.	0.0406
	15	F1.5	Academic staff show positive attitude towards students	0.0390
	16	F1.23	When you have problems, the institution is sympathetic and reassuring.	0.0370
	17	F1.19	The institution has up-to-date equipment.	0.0365
	18	F4.4	It is unrealistic to expect universities to have students' best interests at heart.	0.0346
	19	F1.21	The appearance of the physical facilities of the institution is in line	0.0314
	20	F1.2	Academic Staff treat in caring manner	0.0300
	21	F1.15	Administrative staff has good knowledge of the systems/procedures.	0.0208
	22	F1.25	Academic Staff are highly educated and experienced in their respective fields	0.0203
	23	F1.22	When the institution promises to do something by certain time, it does so.	0.0201
	24	F5.4	Employees of the institution are too busy to respond to student requests promptly.	0.0143
	25	F1.18	The institution operates an excellent counseling services	0.0142
	26	F1.8	Academic staff allocates sufficient and convenient time for consultation.	0.0139
	27	F1.7	Academic staff provides feedback about my progress.	0.0138
	28	F4.2	It is ok if they are too busy to respond to student requests promptly.	0.0136

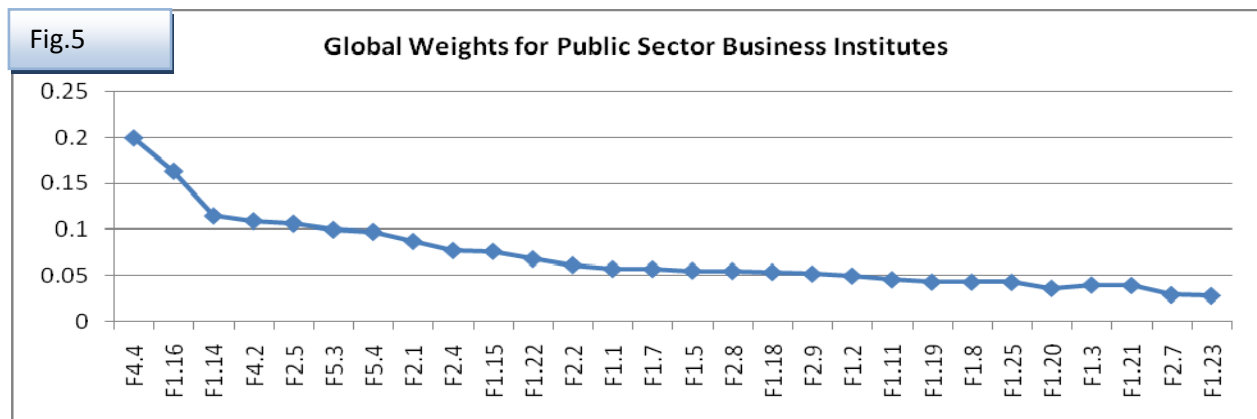


Priority weights for Service Quality Public Sector HEIs of Business Education

The values of sub-criteria provided in Table 5 illustrate the relative importance of sub-factors provided by the students for service quality perception about public sector business institutes in Pakistan. For public sector business institutes, most significant service quality factors in Tier-I is about general service interaction quality (GESQ). Tier-I indicates that the most important factor for a public sector business institute's service quality is institute's concern with the provision of basic and relatively ill-defined education services (priority weight=0.1986). By saying ill-defined means, students as customers with relatively lesser purchasing or lack of exposure does not qualify for claiming most competitive educational facilities.

Most of the institute's in public sector remain under pressure of resource constraints and sometime managing for the running expenditure becomes a tough ask to reply in a satisfying manner. By virtue of such limitations, educational facilities in public sector business institutes are relatively less modern and to some extent not up to the standards of modern means of business education around the world. Similarly, students of public sector business institutes perceive a well aligned location facility and physical layout sufficient for better educational services. Most of the factors included in Tier-I of service quality framework are related with the student's administrative dealing with institute's employees.

If we look at the priority scores for service quality sub-factors for public sector institute in table-5 below, almost all the scores are lesser than the priority scores of overall service quality global scores as well as priority scores of private sector institute's service quality. Secondly, the difference between the scores is very small which shows the inability of respondents to make categorical choices on measurement scales of these items. There is a visible tendency of almost neutral or indifferent response to most of the sub-criteria. This response tendency can be interpreted as service quality perception of students from public sector business institutes largely determined by the external conditions and there is less influence of their personal opinion and judgment criteria of classifying service delivery mechanism as good or bad. Similar response pattern also observed for the service quality factors included in Tier-II and Tier-III. (See Table -5)



<i>Tier</i>	<i>Rank</i>	<i>Factor</i>	<i>Table-5- Ranking of Service Quality Determinants of Public Sector Higher Education's Institutions in Business Studies</i>	<i>Global Weight</i>
Tier-I	1	F4.4	It is unrealistic to expect universities to have students' best interests at heart.	0.1996
	2	F1.16	Students are given fair amount of freedom	0.1634
	3	F1.14	The institution's graduates are easily employable.	0.1146
	4	F4.2	It is ok if they are too busy to respond to student requests promptly.	0.1092
	5	F2.5	The institution offers highly reputable programmes.	0.1065
	6	F5.3	Employees of the institution are not always willing to help students.	0.0997
	7	F5.4	Employees of the institution are too busy to respond to student requests promptly.	0.0974
	8	F2.1	Class sizes are kept to minimum to allow personal attention.	0.0873
	9	F2.4	The institution has location with excellent campus layout and appearance.	0.0773
Tier-II	10	F1.15	Administrative staff has good knowledge of the systems/ procedures.	0.0763
	11	F1.22	When the institution promises to do something by certain time, it does so.	0.0681
	12	F2.2	The institution offers a wide range of programmes with various specializations.	0.0614
	13	F1.1	Academic staff delivers quality Contents	0.0570
	14	F1.7	Academic staff provides feedback about my progress.	0.0568
	15	F1.5	Academic staff show positive attitude towards students	0.0552
	16	F2.8	The institution has standardized and simple service delivery procedures.	0.0548
	17	F1.18	The institution operates an excellent counseling services	0.0536
Tier-III	18	F2.9	The institution keeps its records accurately.	0.0518
	19	F1.2	Academic Staff treat in caring manner	0.0496
	20	F1.11	Academic facilities are adequate and necessary.	0.0455
	21	F1.19	The institution has up-to-date equipment.	0.0429
	22	F1.8	Academic staff allocates sufficient and convenient time for consultation.	0.0429
	23	F1.25	Academic Staff are highly educated and experienced in their respective fields	0.0427
	24	F1.20	The institution's employees are well dressed and appear neat.	0.0360
	25	F1.3	Academic Staff never too busy to respond to queries	0.0397
	26	F1.21	The appearance of the physical facilities of the institution is in line with the type of service	0.0392
	27	F2.7	The institution values feedback from students to improve service performance	0.0291
	28	F1.23	When you have problems, the institution is sympathetic and reassuring	0.0281

The relationship between service quality dimensions for business education and behavioral intentions

Overall opinion about business education standers and service quality dimensions

Regression analysis performed, with the three service quality dimensions as the independent variable and the unidimensional variable overall service quality satisfaction scale as the dependent one. The results as presented in Table-6 shown the quality dimension have significant relationship with the behavioral intentions and explained a 40% proportion of the variance in the dependent variable. Of the three dimensions, for overall service quality of business education, one dimensions shown a significant contribution (ACSQ, $t = 2.6, p = 0.011$), for private business education institutes (ACSQ, $t = 3.21, p = 0.002$) and for public sector business institutes (ACSQ, $t = 3.142, p = 0.003$). It is worth noting that only the GESQ dimension was not found to be significant as the predictor of behavioral intentions. Behavioral intentions (Overall opinion about service quality standards of institute) for overall and for public sector business institutes was mainly predicted by the quality of academic services, while for private business institutes, overall opinion about service quality largely influenced by student's perception about administrative service quality dimensions.

Feelings to express degree of satisfaction and service quality dimensions

Other unidimensional variable i-e feelings to express degree of satisfaction with service quality were entered as the dependent variable in the regression analysis and the three service quality dimensions as the independent one. As shown in table-6, the service quality dimensions contributed significantly. Feelings to express degree of satisfaction among overall business students found ACSQ as significant predictors (ACSQ, $t = 2.651, p = 0.010$). Results of private business institutes suggested that both the ACSQ and ADSQ are the strong predictor of feelings of their students to express degree of satisfaction with the service quality of a private business institute (ACSQ, $t = 2.375, p = 0.020$; ADSQ, $t = 1.862, p = 0.070$). Finally, analysis of public sector business institutes showed that (ADSQ, $t = 2.075, p = 0.040$) administrative service quality perception of the student is relative significant predictor of their feelings to express degree of satisfaction with the overall quality of services in public sector business institute.

Probability of future visit and service quality dimensions

Third unidimensional dependent variable i-e intentions to visit the institute in near future or later sometimes was entered as the dependent variable, the regression analysis indicated that for overall business education service quality GESQ predicted a significant ($t = 2.41, p = 0.018$) contributions. Similarly, for private business institutes (ACSQ, $t = 1.869, p = 0.069$) found to be the significant predictor of student's intentions to visit the institute in future. However, analysis of public sector business institute's results shown that it is mainly the (ACSQ, $t = 2.922, p = 0.006$) and relatively less significant (GESQ, $t = 1.978, p = 0.054$) that determine their intentions to visit the institute in future.

TABLE: 6 Regression Analysis

Simultaneous Regression Analysis of Service Quality Dimensions and Behavioral Intentions (Overall Business Education Institute)												
Service Quality Dimensions	Overall Opinion about Service Quality (R ² =0.466)				Feelings towards quality of Service (R ² =0.269)				Future Contact with the institution (R ² =0.225)			
	B	β	t	p	B	β	t	p	B	β	t	p
ACSQ	.380	.442	2.601	.011	.372	.518	2.651	.010	ns	ns	ns	ns
ADSQ	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
GESQ	ns	ns	ns	ns	ns	ns	ns	ns	.498	.239	2.401	.018
Simultaneous Regression Analysis of Service Quality Dimensions and Behavioral Intentions (Private Sector Business Education Institute)												
Service Quality Dimensions	Overall Opinion about Service Quality (R ² =0.331)				Feelings towards quality of Service (R ² =0.132)				Future Contact with the institution (R ² =0.235)			
	B	β	t	p	B	β	t	p	B	β	t	p
ACSQ	ns	ns	ns	ns	.420	.486	2.375	.022	.780	.359	1.869	.069
ADSQ	1.186	.643	3.241	.002	-.435	-.421	1.862	.070	ns	ns	ns	ns
GESQ	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Simultaneous Regression Analysis of Service Quality Dimensions and Behavioral Intentions (Public Sector Business Education Institute)												
Service Quality Dimensions	Overall Opinion about Service Quality (R ² =0.295)				Feelings towards quality of Service (R ² =0.184)				Future Contact with the institution (R ² =0.408)			
	B	β	t	p	B	β	t	p	B	β	t	p
ACSQ	.745	.505	3.142	.003	ns	ns	ns	ns	.804	.430	2.922	.006
ADSQ	ns	ns	ns	ns	.447	.343	2.035	.048	ns	ns	ns	ns
GESQ	ns	ns	ns	ns	ns	ns	ns	ns	.369	.241	1.978	.054

CONCLUSION

The primary goal of this study was to identify the service quality determinants for education services provided by higher education institutions (HEIs) of business education in Pakistan and to measure their relative importance from the students' points of view. For this purpose items from two service quality measurement scales SERPERF (Cronin and Taylor, 1992) and HEdPERF (Firdaus, 2006) merged and used for factor analysis. Based on factor analysis, a total of 28 items selected and categorized into three main dimensions of service quality measurement of business education using the survey data collected from students of private and public business institutes of Pakistan. Three main dimensions for service quality of business education in Pakistan were named as ACSQ (academic service quality), ADSQ (administrative service quality) and GESQ (General Service quality)

A multi-criteria decision-making methodology was used for assessing the relative importance of three main service quality dimensions comprising of 28 determinants of service quality that affect satisfaction of students from business institutes in Pakistan. The analytical hierarchical process (AHP) was used in order to measure the relative weight of each quality factor. This helped us to develop a more precise hierarchical framework building on the contextualized three dimensions for measuring the service quality satisfaction for business education in Pakistan. Based on the global priority scores obtained from AHP, sub-factors (measurement items) were ranked in order of their values from higher value to lower values. Sorting of these items in descending order of their relative importance and stratified into three tiers representing stages of priorities emphasis for determining the service quality satisfaction of students from higher education business institutes of Pakistan. AHP based global priority scores were used to develop aforementioned tiers for overall business education service quality and separately for public sector and private sector higher education institutes of business studies in Pakistan.

The resultant stratified tier structure of service quality determinant factor for business education suggests that service quality in business education institute can best be managed by first beginning with the improvement of academic services that include availability of highly educated faculty, showing concern for student' choices in making decisions about curriculum, schedules, and other education related policies, increasing visibility of alumni networks to ensure better recognition of qualification standards on business institutes among the employers. All the nine top ranked service quality items stratified and grouped in tier-I are either academic-related directly or share some connection which requires support from the administration and top management of the institutes. Similarly, comparative analysis of service quality tiers of private sector business institutes and public sector business institutes revealed that service quality satisfaction for private sector business institute is more dependent on factors such as availability of physical infrastructure that include campus building, state of the art equipment and lab facilities, flexibility of study hours, assurance of future employability etc. This tendency suggest that private sector business institutes in Pakistan, over the time, have developed an approach that lacks academic rigor in business education and thus positioned their educational quality based on the provision of modern facilities and infrastructure instead of positioning their services based on core dimension like provision of quality educations with the help of quality academic resources. These arguments are evident based on the results of regression analysis conducted to assess the extent of which service quality dimensions can predict the behavioral intentions of the students in terms of their opinion, feelings and future contact. Mainly, quality of administrative service quality and service quality of general services found to be more significant predictors of positive behavioral intentions of students as compare to the academic service quality dimension.

The regression analyses compared the three service quality dimensions for business education in Pakistan so as to determine how well they predicted the behavioral intentions of students. Although the one dimension that's ACSQ of the proposed framework demonstrated a reasonable significance and along with the moderate significance of other two (ADSQ; GESQ) dimensions in terms of explaining the variances in service quality

satisfaction levels, the implications of these findings are less clear thus would be safe to infer that the proposed framework would still be premature to authenticate what actually predict the satisfaction level of the student. Nonetheless, the current findings do provide some important insights into how these dimensions of service quality compare with one another and exhibit differences in behavioral intentions of the students from private and public sector business institutes.

The current results also suggest that the one dimension, the academic service quality is the most important determinant of service quality in higher education of business studies in Pakistan, thus reinforcing the recommendations that higher education institutes for business studies should, therefore, concentrate their efforts on the dimension perceived to be important rather than focusing their energies on a number of different attributes, which they feel are important determinants of service quality. It is concluded that all service quality dimensions should be given due importance, failure to prioritize these attributes may result in inefficient allocation of resources.

Limitations and suggestions for future research

The present findings suggest that the modified dimensions and measurement scale for assessing the service quality satisfaction of students of business education in public and private sector business institutes of Pakistan, is better than the use of generic measures of service quality. However, these findings may not be generalized to higher education institutions in general. Given that the current study is limited to one category of higher education institutions i.e. business education institutes, this assertion would need to be validated by further research. Future studies should apply the measurement instrument in other categories of higher education, in order to test whether the results obtained are general and consistent with the findings of this study.

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