Investigating Service Quality and Students Satisfaction in Public and Private Sector Universities of KPK

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Abstract

The research study aimed to investigate the level of service quality and its relationship with student's satisfaction in public and private sector universities of KPK. The research population comprise of 22 universities (12 public sectors and 10 private sectors).The sample was 650 students of both private and public sector universities and all the respondents have been randomly selected. The questionnaires were tested for reliability and validity and predicted desired results. The service quality of both sectors universities was measured on the basis of student responses. Correlation, regression and T-test have been used in the analysis of the research. The t-test results reported significance mean difference of service quality i.e tangibility dimension, assurance, administrative responses and empathy dimension of service quality show significance difference in public and private sector universities. The reliability dimension of service quality showing insignificance mean difference in both public and private sector universities. The results demonstrate strength for public sector universities for their tangibility and assurance and private sector universities showing strength in their responses services and empathy dimension. The research predicts positive relationship of service quality all dimensions with student's satisfaction. The originality of work of this research work holds a lot of academic and organizational value.

Keywords: Higher education institutions, Universities, Khyber Pakhtunkhwa, Education service quality, Students' satisfaction.

Introduction

It has been historically evident that socio-economic development of societies has always been directly linked with the educational development. Within the education sector higher education institutions have been mainly responsibility for equipping individuals with the advanced knowledge and skill required for various positions in the public and private sector. It is these institutions that provide the teachers, doctors, civil servants, engineers, scientists and social scientists who work in various fields and social sector organizations**.** Without the participation of highly qualified manpower, the process of economic development cannot be achieved and the society cannot be put on the path of development, progress and prosperity. Seeing the

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statistics in the table below the argument seems relevant that one of the major causes of our slow economic growth was lack of higher education institutions. In the early days of this country only 2 public sector and none of the private sector university was there, however, the growth can be judged from the fact that now 89 public sector and 67 private sector universities are there in Pakistan.

It is universally accepted principal that growth of any country is directly proportional to the growth of its higher education sector. It's unfortunate that Pakistan's Higher Education Sector growth pattern indicates that it has been on lowest priority in country's developmental plans. If the governments had scarcity of economic means for development of higher education sector than private sector could have encouraged sharing the responsibility. For decades the size of the sector and its capacity presents discouraging statistics especially in private sector. For 50 years from its existence Pakistan, till 2001, have only 4 institutions in Private sector and today after 18 years private sector institutions are around 76 with numerous campuses. Public Sector that started with merely 2 universities in 1947/48 reached to 36 in 53 years' time span and is now nearly doubled in 14 years. In Khyber Pakhtunkhwa only 4 public sector universities and one private sector exited till 2001 and since then the sector grew to 22 public sector and 10 private sector universities in last thirteen years. Seeing this phenomenal and unprecedented growth rate of Higher Education institutions in Pakistan in general and Khyber Pakhtunkhwa in particular, a student of strategic management stands flabbergasted.

The growth of higher education institutions in Pakistan is one of the remarkable developments of the past two decades, and its private sector even occupies nearly 44% country's share today. The private sector higher education many of them for-profit or quasi for-profit, represents the fastest-growing sector nationwide.

The service sector is now considered to be an important sector and has got a vital role in many countries economies (Abdullah, 2006). Due to this vitality in the countries boom the construction of service quality model is considerably topical concern in the literature of service quality (Baron et al., 2009). Providing excellent service quality, resultantly improve the level of customer satisfaction, retention, attraction, loyalty and financial aspects like increase the profitability and financial position of the firm (Abdullah, 2006a; Nadiri et al., 2009; Voss et al., 2007). Due to this important relationship, it has got tremendous consideration and is an area of interest to the managers (Abdullah, 2006).

Seeing the role and performance of the Higher Education Sector of Khyber Pakhtunkhwa over the last decade or so as, one apparently feels satisfied that it contributed a significant share in socio-economic

development of the area. However, there is alarming realization that the prevailing effects of globalization, students' mobility, and technological diffusion, ongoing institutional collaboration at national and international spectrum and profit motives are intensifying competition amongst all players of the higher education sector irrespective of their public or private status. The intensity of competition, that has come to stay with globalization, would certainly lead to elimination of competitively weak institutions and support survival of the fittest.

The ensuring debate identifies that educational service quality of any institution directly relates to the students' satisfaction. And only those institutes survive who are able to maintain their degree of competitiveness matching to their competitor institutions.

The research study was aimed to achieve following objectives:

a. To determine the prevailing level of educational service quality by the students of universities of Khyber Pukhtunkhwa.
b. To compare and analyze the level of educational service quality in students between public and private sector universities in KPK.
c. To examine the relationship between education service quality and students satisfaction.
d. To investigate the impact of education service quality on student's satisfaction in these selected public and private sector universities.

Literature Review

Many researchers have termed service quality an 'elusive' and 'indistinct' construct that is difficult to define and measure (Bolton and Drew, 1991; Carman, 1990; Cronin and Taylor, 1992; Parasuraman et al., 1988). Baron et al. (2009) stated that service quality is a kind of complex topic in which more technicalities are involved. Moreover, Clewes (2003) argued that one issue that is still unresolved is properly defining service quality and making a suitable model for service quality. Crosby (1979) definition of service quality is the earliest one who termed service quality as "the conformation to specifications." He farther elaborated that quality is often mistaken for imprecise adjectives i.e goodness, luxury or weight, which tells the indefinable nature of the construct. Parasuraman et al. (1988) developed a stem of service quality which compare the general expectation of consumers with their actual perceptions of a firm. This mechanism will help in knowing that service quality received by the consumers exceeds their expectations (Lovelock and Wirtz, 2011). Alternatively, Berry et al. (1988) proposed service quality an evaluation and works like attitude. These above discussions

predict that there is no consensus between researchers and academicians regarding the proper definition and framework of service quality.

DeShields et al. (2005) asserted that that higher education institutions should make such principles and strategies which will make these institutions as profit making; these strategies will help them to get competitive advantage, which will definitely improve their student's satisfaction. The same kind of findings was documented by many academiciations, who argue that service quality assurance help in improving students' satisfaction (Hemsley-Brown and Oplatka, 2006). Higher education institutions continuously emphasizing to improve their service quality to meet the needs and expectations of the students (DeShields et al., 2005).

Nadiri et al. (2009) documented that higher education institutions are facing problems in knowing the students perception and expectations which constitute the service quality and thereby help to attract and satisfy the needs of the students. They farther stated that service quality has an impact on student's satisfaction. This emerging era really make it necessary for the higher education institutions to foster service quality in their day to day operations to satisfy students' needs and in order achieve competitive advantage and sustainability in the very competitive service environment (DeShields et al., 2005).

According to Oldfield and Baron (2000), higher education can be seen as a "pure service," suggesting that it possesses all the unique characteristics of a service (Section 2.2.4). More recently, Gruber et al. (2010) stated that higher education service exhibit intangibility, perishability and heterogeneousity. This is mainly due to the fact that most of these institutions have varying nature of services and difficult to standardized. Higher education as a service also satisfies the perishability criterion since it is difficult to store. However, ways to overcome this are evident, for instance, the emergence of e-learning and video technology (Cuthbert, 1996) over the past fifteen years. Keeping this in view higher education service sector attempts to a remove the element of perishability and continuously in bringing innovations and technological advancement. It is worth standing to mention that like other businesses, higher education as a service have vary different stakeholders with varying interest. According to Sultan and Wong (2010) argued that the research of service quality in higher education institutions in very new one while comparing to the research of commercial sector. There have been tremendous changes in service sector of these institutions, which have affected the students satisfaction (Gruber et al., 2010).

Many higher education institutions are beginning to realise this and are competing for students, both in the local and international market (Paswan and Ganesh, 2009). Furthermore, with the emergence of many informal platforms for students to post their views on their experiences (e.g. The Student Room), higher education institutions are increasingly being called to account for the quality of education that they provide. Accordingly, achieving quality has become an important goal for most higher education institutions (Abdullah, 2006). Harvey and Green (1993) contend that quality in higher education is a complex and multifaceted concept and an appropriate definition is lacking. There are many ways to define quality in higher education and each definition has its own criteria and perspective and is regarded as 'stakeholder relative' (Harvey and Green, 1993).

In 24 terms of the student as the stakeholder, DeShields et al. (2005) argue that the higher education sector needs to continue to deliver a high quality service and satisfy students in order to succeed in a competitive service environment. Therefore, attempting to evaluate the level of service quality and understanding how different factors impact overall service quality is crucial so that higher education institutions can design their service in the best possible way (Abdullah, 2006). Furthermore, knowing the strengths and weaknesses of different factors and their relative influence may lead to better allocation of resources, resulting in students being provided with an improved service (Abdullah, 2006).

Theoretical Framework

The following theoretical frame work has been developed based on the literature.

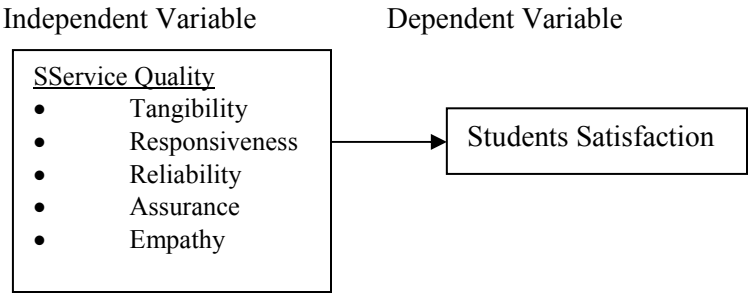

Figure 1 Theoretical Framework

Hypotheses

H.1. Education service quality provision has significant relationship with the perceived students' satisfaction.

H2. Education service quality has significant impact on the student's satisfaction.

H.3: There is significant difference between the service quality of public and private sector universities.

Measures and operational Definition

Chronin and Taylor (1991) gave a model SERVPERF for measurement of service quality.

The five of this model dimensions are:

- **TANGIBLES**-Appearance of physical facilities, equipment, personnel, and communication materials
- **RELIABILITY**-Ability to perform the promised service dependably and accurately
- **RESPONSIVENESS**-Willingness to help customers and provide prompt service
- **ASSURANCE**-Knowledge and courtesy of employees and their ability to convey trust and confidence
- **EMPATHY**-Caring, individualized attention the firm provides its customers

Service quality dimensions for higher education are

(1) Tangibles embodied the appearance of buildings, equipment, and staff.

(2) Reliability embodied the degree to which the knowledge, skills learned and services are offered accurately and on timely manner.

(3) Responsiveness refers to the willingness to help customers and provide prompt service. In difficult situations, it is also the ability to respond effectively.

(4) Assurance embodied the knowledge and courtesy of employees and their ability to convey trust and confidence.

(5) Empathy refers to the attention and care that the institution may offer to customers as well as convenient operating hours.

Research Methodology

Type of Research and techniques

This is a quantitative research and correlational study. The data has been quantitatively quantified. The data is analyzed through statistical techniques i.e correlation, regression and T-test.

Population and Sampling

Population is identifiable total set, or group or aggregation of elements of interest being investigated by the researcher (Hair el.al., 2003) The population of this research is comprised of all of the universities / Degree awarding institutions (general universities) of public and private sector both charter and operating within Khyber Pakhtunkhwa. To analyze the level of service quality in these universities in KPK, simple random sampling technique has been applied. Total 650 students have analyzed in this study,

comprise of 325 from public sector universities and 325 from private sector universities.

Data collection and Techniques

The primary data for the study was collected using questionnaire on five Likert scale for both service quality and students satisfaction. The questionnaire has been tested by other researchers in past. However some secondary data was collected from higher education commission sources.

Data Analysis

Diagnostic Test

Table NO 1 Muilticolinarity Diagnostic test

Variable	Tolerance	VIF
Tangibility	.678	1.234
Responsiveness	.876	1.122
Reliability	.567	1.213
Assurance	.677	1.132
Empathy	.667	1.222
Students' satisfaction	.654	1.543

The above table no 1 show the level of multicolleanarity in independent variables of this research study. The results predict values of tolerance and VIF within feasible ranges. as per O"Brien& Robert (2007) argued that values of tolerance above .5 and VIF above 1 predicts no muilticolinarity.

Reliability of the Instrument

Table: No 2 Reliability

Variable	No of Items	Cronbach's Alpha
Tangibility	20	.722
Responsiveness	16	.720
Reliability	33	.717
Assurance	4	.789
Empathy	7	.709
Students' satisfaction	8	.714

The above table 2 predicts reliability of the data. The results signify the feasible ranges of chronbach alpha value which means that the data is reliable and can be proceed for further analysis of this study. The researchers argued that alpha value of above .60 is acceptable; however the value of alpha of all variables are is desired and feasible ranges. So the scale is highly reliable for further analysis of this study.

Validity (Confirmatory Factor Analysis And Exploratory Factor Analysis)

The questionnaires were tested for validity. To check validity factor loading was performed which predicted loading of each construct above 0.5, which show a standard level of commonality in different questions of a variable. The KMO test of the loading also shows a value significant at 5% probability level which signifies the adequacy of data for further analysis.

Correlation Analysis

Table NO 3 Correlation

Variable	Satisfaction	Tang	Assurance	Reliability	Responsiveness	Empathy
RSatisf	1.000					
F.Tang	0.234	1.000				
L Assur	0.203	0.024	1.000			
P Reliab	0.213	0.013	0.045	1.000		
B Respons	0.200	0.025	0.174	0.034	1.000	
GEmpathy	0.201	0.187	0.213	0.051	0.133	1.000

The table no 3 show the correlation of the different variables of this study. Correlation demonstrates the direction and strength of association between two variables. The results indicate that there is positive significant correlation between the tangibility factor and the students' satisfaction. Similarly, the universities Assurance, responsiveness, reliability and empathy are also demonstrating positive significant correlation with students satisfaction.

Regression Analysis

Table no 4 Regression analysis

Variables	Beta	T. values	P values
Tangibility	0.134	2.44	0.016
Assurance	0.117	2.23	0.029
Responsiveness	0.138	3.66	0.000
Reliability	0.170	2.11	0.023
Empathy	0.091	1.55	0.076

Dependent Variable: Satisfaction, F Value= 54.78, $R^2 = 0.66$

The table no 4 represents the impact of the education service quality on the satisfaction of the students. The results demonstrate that tangibility has positive significant impact on the students' satisfaction as the t-value is significant at 5% level of probability. The beta value of tangibility 0.11 demonstrates that one change in tangibility will account for 0.13 unit change in student's satisfaction. Similarly assurance, responsiveness and reliability are also showing positive significant impact on the students' satisfaction.. These stated variables also showing

their t-values above the critical value i.e t=2 and are significant at 5% level of probability, which suggest that these variables also have significant positive impact on the students satisfaction. These variables report beta of 0.11, 0.13 and 0.17 respectively which means that these variable bring 0.11, 0.13 and 0.17 unit changes in student's satisfaction for their one unit change. However, Empathy is the only variable indicates positive but insignificant impact on the student's satisfaction of both public and private sector universities. The reported beta value is 0.08, which means that one unit change in empathy will bring 0.09 unit change in student's satisfaction. The R-square 0.66 indicates that 66% changes are caused by these facets of education service quality in the students' satisfaction. The F-value also demonstrate that the over all model is significant and fit due to its reported value well above its critical value, i.e F=4. The F-value is significant at 5% level of probability.

T-Test for Comparison in public and private sector universities Service qualities

Table NO 5 T-Test for mean comparison between public and private

VVariables	Mean Difference	Leven Test P.Value	Sig2Tail
TTangibility	0.0452	0.003	0.000
AAssurance	0.1356	0.000	0.000
RReliability	0.1567	0.634	0.076
RResponsiveness	-0.1311	0.001	0.000
EEmpathy	-0.1221	0.002	0.001

Table no 5predicts the results of independent t-test conducted for knowing the difference in service quality in public and private sector universities. The levens test and sig2 tail test both are significant at 5% probability level, which show that there is significance difference in the responses public and private sector universities students regarding the tangibility dimension of service quality. The results show positive sign of mean difference which conform that public sector universities are better in tangibility. Similarly assurance demonstrates positive mean difference between public and private universities and show significance values for levene test and sig 2 tail, which predicts a significance difference in public and private universities in term of assurance, here the results show that public sector universities do well in term of assurance. The results show insignificant value for reliability in both levene's test and sig 2 tail, which signifies that reliability dimension of service quality is the same in both categories of universities. However responsiveness and empathy showing greater value in private sector universities, which signify that private sector universities are rich in term of responses and empathy.

Conclusion

This study was aimed to know the level and relationship of education service quality and students satisfaction in higher education institutions in KPK.

The competitive landscape of higher education institutions market is changing like other service sector industries. Higher education institutions are striving to position themselves at strategically better place against their competitors. Although there is not much competition at the moment between public and private sector universities of Khyber Pukhtunkhwa because of the public labeling with one of the group. The sample size for the study is 650 students. The study uses stratified random sampling techniques. The results have obtained through T-Test, Correlation and Regression. The questionnaire has been tested through factor loading. The data reliability has been measured through Cronbach Alpha. The service quality of both sectors universities was measured on the basis of student responses where universities competitiveness was analyzed through administrative staff responses. The t-test results reported significance mean difference of service quality i.e tangibility dimension, assurance, administrative responses and empathy dimension of service quality show significance difference in public and private sector universities. The reliability dimension of service quality showing insignificance mean difference in both public and private sector universities. The results show strength for public sector universities in term of tangibility and assurance, whereas private sector universities showing strength in their responses services and empathy dimension. The impact of service quality on student's satisfaction show a positive impact of the service quality dimensions on the students satisfaction. These are in line with the findings of previous researchers who asserted that service quality has significant impact on students satisfaction (Sultan and Wong, 2010; Gruber et al, 2010). This study can help the authorities in higher education institutions by knowing the level of service quality dimensions in public and private sector universities. Similar studies cane be conducted comparing engineering universities to each other and medical colleges to each other.

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