Impact of Service Quality on Customer Satisfaction in Higher Education Institutions
(A Case Study of Gomal University, DIKhan, Khyber Pakhtunkhwa Pakistan)

Ghulam Muhammad Kundi, PhD
Muhammad Saqib Khan, M.Phil Scholer
Qamar Afiaq Qureshi
Department of Public Administration, Gomal University, DIKhan, KP, Pakistan
E-mail: kundi@gu.edu.pk, saqiblecturer@gmail.com
Yahya Khan
Institute of Engineering & Technology, Gomal University DIKhan
Khyber Pakhtunkhwa, PAKISTAN Email: saqiblecturer@gmail.com
Robina Akhtar
MPhil Education, IER, Gomal University, DIKhan, KP, Pakistan

Abstract
Relationships have diverse categories and have different significances and implications. Among different connections existing in this word, there is a very influencing connection that survives between a SURVQUAL model and its importance in service providing sector. This study is carried out on nearly 200 students of Gomal University DIKhan of Pakistan to find out Impact of service quality on customer satisfaction in education sector. We have two variables in this research dependent and independent in dependent there is the customer satisfaction while in independent there is responsiveness, reliability, assurance, Empathy, tangibility The Pearson correlation and regression was applied on data, and results exposed a positive and a significant relationship between the variables. This study found is significant relationship between the tangibility and assurance as the sample population of the study considers them important for improvement of service quality in universities. Hence, it is not only the bookish knowledge to which the students of the education institutions pay attention, rather there are also other factors on which student take more care before making a decision for enrolment in any university.

INTRODUCTION
Education sector is one of the most important sectors of economy. Most of the countries are now shifting their economies from manufacturing to services sector. Education sector is one of the most important service sectors. Education sector is now considered as important as other sectors of the economy. Competition is now increasing within the industries in service sector. This is why the researchers and academicians are emphasizing their attention towards educational sector.

Today, organizations are facing new challenges set by the stakeholders and the competitive business environment due to globalization. Organizations requires highly skilled, knowledgeable and experienced managers that are able to deal with these issues and finding the best suitable ways to accelerate their organizations both at local as well as at international level. Due to the expansion and growth in the service sector, education institutions in Pakistan especially in public sector are facing mounting pressures from their stakeholders and their competitors from private sectors. It is need of the hour that public sector institutions had to make strategies and continuously monitor their education quality to make their customers, and stakeholders happy and gain strategic advantage over their competitors.

Education institutions plays a significant role to develop and train management specialists for the industry by integrating their programs and benchmark with best institutions in the world is tp enable their students to lead their industry. The objective of this study is to evaluate the student perceptions about the service quality of Gomal University with reference to satisfaction of their students. Secondly, a service quality and student satisfaction model will be developed by using SERVQUAL instrument to observe the relationship among them. The objective of the study was to investigate the impact of service quality on customer satisfaction in education sector and try to get to know that what are the main priorities for what a student looking for while getting admission in any education institution including Gomal University that how much quality is matter for a student. Overall it is a contribution to the extant literature from Pakistan’s perspectives. There are very few studies available on the concept of service quality in academic institutions and those too don’t consider student’s willingness to put more efforts.

LITERATURE REVIEW
In most of the studies in which researcher’s tryout surveys of the customers’ use SERVQUAL instrument, which
is one of the most widely used scales for the measurement of perceived service quality. Several research studies found that the service quality gaps, and the relative importance of the five dimensions of service quality, were the same for students and staff, albeit with some specific differences. Reliability was the most important dimension for all customers and the greatest improvement in service quality could be achieved through improved service reliability (Smith et al., 2007).

In general, studies like Hanaysha et al. (2011) indicate that five dimensions of service quality have significant impacts on the student satisfaction. However, Khan et al. (2011) found that responsiveness, empathy and reliability are also significantly related to service quality; similarly, reliability and empathy were also found with positive relationship with customer satisfaction but according to them, responsiveness was not significantly related to customer satisfaction. Likewise, service quality is significantly related to customer satisfaction (Agbor, 2011) concludes in his findings. Furthermore, previous research indicates that there is a significant relationship between dimensions of service quality i.e. Reliability, Assurance, Responsiveness and Empathy with satisfaction of the customers while, Tangible was having an insignificant relation with student satisfaction. Khan et al. (2011) have also observed that higher the level of students’ satisfaction greater will be their willingness to put great efforts towards their studies.

Rasli et al. (2011) are of the view that to achieve the dual goals of satisfaction and loyalty, service quality in the education sector especially in universities need to be evaluated from both the internal (customers) and external (service providers) perspectives. However, Swaner & Brownell (2009-2010) criticized this view and points that strength of evidence for these outcomes, however, is weakened by the limitations of existing research. In today’s competitive environment, the education has not only become a main player of the industry and need of the day but it is also an investment into national economy by the parents, whose children are enrolled in these national institutions. Both in public as well as in private sector, the quality of education is an important predictor of national development which is must be considered while devising strategies for attracting and retaining the students who want to get higher education (Malik et al., 2010). Bahadori et al. (2011) also suggested that proper planning is needed to better serve employees and increase their communication skills, in order to help reduce the educational quality gap. Kayastha (2011) shared similar views, and further asserts that in their study they asked the students that how technology would impact their own learning, as a result they found that students perceive the use of technology positively.

Quality of service of educational institutions is a key determinant for customers before purchasing a product or availing any type of service that plays significant role in measuring the performance of product/service and the organization as well (Archambault, 2008). Thus quality education is also a challenge for the all the public and private sector universities including Gomal university. This is why many of the universities round the globe are putting their heads and efforts to deliver quality of educational services to their customers for their satisfaction. Research studies undertaken mostly investigate the service quality of educational institutions especially higher education was successful in identifying the factor that determine the student satisfaction. Ijaz et al. (2011) however used a modified SERVQUAL instrument to evaluate the service quality of four business schools of public sector universities based on the student’s perceptions. They found that, students who paid their own dues and fees had high expectations of service quality and were less satisfied as compared to the students whose dues/fee was paid by others. Kayastha (2011) and Archambault (2008) however concluded in their independent studies that there is significant relationships between service performance and student satisfaction that will aid private, post-secondary institutions to predict and measure student satisfaction and retention.

Several studies on the other hand for example Dib & Alnazer (2013), however, have shown that, in general, students’ satisfaction is important to attract and retain customers; therefore, the concept of student satisfaction is also relativity new concept in public sector universities in general and Gomal University in particular it is novel to the psyche of administration and faculty. Therefore, the research findings of this study can be used by universities to enhance the level of students’ satisfaction. Finally looking, at the performance aspect of students’ academic career, (Ahmed, et al., 2010) have observed that both student’s satisfaction and motivation are important for better performance of students.

**Evidence**

We proposed 5 hypotheses, based on the review of the previous studies of Hanaysha et al. (2011) with reference to service quality and students’ satisfaction at higher learning institutions. The research was conducted on SURVQUAL in education sector. The dependent variable of the study was satisfaction of student, whereas independent variables include Reliability, Responsiveness, Assurance, Empathy, and Tangibles.
**Operationalization of Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Operational Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td></td>
<td>Ability to perform the promised services with rigor and precision</td>
<td>Does service quality affect students’ performance? Ahmed et al. (2010).</td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
<td>Employees and their ability to transmit their trust and knowledge</td>
<td>Student perceptions of how technology Impacts the quality of instruction and iearning. Davieset al. (2013)</td>
</tr>
</tbody>
</table>

**Description of Local variables**

1. **Reliability**: The ability to carry out the promised service suitably and precisely.
2. **Responsiveness**: Ready to help customers and provide prompt service.
3. **Empathy**: Care and attention to individual company provides to its customers.
4. **Assurance**: The knowledge and courtesy of employees and their ability to promote confidence and trust.
5. **Tangibles**: bodily facilities, tools, and staff outer shell.
6. **Satisfaction**: is the state fulfillment of human need and want after using a product or serious

**Theoretical Frame Work**

This study has adopted the dimensions used in parasuramans SURVQUAL in which they found the relationship between service quality dimensions as independent variable on the student satisfaction which is taken as dependent variable in this case. Hanaysha et al. (2011) reliability is the most important service quality dimensions and plays significant role in customer (student satisfaction) while providing them the superior quality in service, likewise, Beaumont (2012) argued that until or unless the educational sectors empahys the intrinsic condition of the student they will never full fill their expected level of satisfaction to the students. In higher education, the motivation of the student is highly debated topic because over all the reputation and growth of that institute is dependent on the student performance (see for example, Ahmed, et al., 2010).

Thus understanding all the reliability factors helps the educational institutions to retain the students inside the premises of educational institutions and this automatically leads to develop the professional academic environment (Malik et al., 2010). All the five dimensions of service quality have their importance in educational sector and playing the vital role in the student satisfaction; whenever there is any kind of lack in the service quality dimension, it will ultimately affect the student’s satisfaction negatively.

**Hypothesis**

In this research we proposed five hypotheses with brief analysis as suggested by Beaumont & Goatman (2012).
**H₁**: There is significant relationship between reliability and student satisfaction.

**H₂**: There is significant relationship between responsiveness and student satisfaction.

**H₃**: There is significant relationship between assurance and student satisfaction.

**H₄**: There is significant relationship between empathy and student satisfaction.

**H₅**: There is significant relationship between tangibles and student satisfaction.

**RESEARCH METHODOLOGY**

To understand the significant relationship between the dependent and independent variables used in this study a survey was undertaken. A structured questionnaire was developed based on 5-point Likert scale, as was administered directly to the respondents by the researchers.

Population of the study was students of Gomal University, however students of Master in Business and Public Administration was taken as sample. Purpose and convenient sampling was done. Sample size was determined through finite statistical formula. The sample size of the study was 200.

To check the reliability of the instrument Cronbach’s reliability analysis was done, below table show the results.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.766</td>
<td>24</td>
</tr>
</tbody>
</table>

The reliability specifies the strength and consistency with which the instrument measures the opinion and helps to evaluate the reliability of a measure. For 24 items measuring the one dependent and five independent variables, the obtained value was .766 which was greater than the threshold value acceptable in social sciences i.e. .6, this implies that questionnaires was reliable in obtaining the responses from the sample respondents.

**FINDING OF THE STUDY**

Based on previous studies and primary data, below tables show results and brief description of the descriptive and inferential analysis.

**Descriptive Analysis**

From 200 questionnaires, 176 questionnaires were filled by male and 24 questionnaires were filled by females. Most of the respondents belonged to 18-23 age groups. The mean score of gender was 1.1200 with standard deviation.32578, whereas means score of age group was 1.0600 mean with standard deviation .23808.

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Range</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>200</td>
<td>1.00</td>
<td>1.1200</td>
<td>.32578</td>
<td>.106</td>
</tr>
<tr>
<td>How old are you</td>
<td>200</td>
<td>1.00</td>
<td>1.0600</td>
<td>.23808</td>
<td>.057</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Inferential Analysis**

SPSS 16 was used for data analysis, correlation coefficients and regression analyses were used to know the relationship among and impacts of independent on dependent variables. Below are the results and their brief analyses.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Tangibility</th>
<th>Reliability</th>
<th>Responsiveness</th>
<th>Assurance</th>
<th>Empathy</th>
<th>Student SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.140*</td>
<td>.285**</td>
<td>.284**</td>
<td>.151</td>
<td>.319**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.048</td>
<td>.000</td>
<td>.000</td>
<td>.033</td>
<td>.020</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.004</td>
<td>.031</td>
<td>.031</td>
<td>.031</td>
<td>.020</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).
Analysis
Pearson correlation technique was used to identify the relation between the six variables. Tangibility, reliability, assurance, responsiveness, assurance, empathy, student satisfaction show a positive and significant relationship towards service quality.

Regression Analysis

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>SE of the Estimate</th>
<th>R² Change</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>.463</td>
<td>.214</td>
<td>.194</td>
<td>2.90145</td>
<td>.214</td>
<td>10.579</td>
<td>5</td>
<td>194</td>
<td>.000</td>
<td>1.414</td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), Empathy, Assurance, Reliability, Tangibility, Responsiveness
- b. Dependent Variable: student satisfaction

Coefficients of Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-std. Coefficients</th>
<th>Std. Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>(Constant)</td>
<td>8.483</td>
<td>2.037</td>
<td>4.165</td>
<td>.000</td>
<td>4.466</td>
</tr>
<tr>
<td>Tangibility</td>
<td>.220</td>
<td>.075</td>
<td>.203</td>
<td>2.946</td>
<td>.004</td>
</tr>
<tr>
<td>Reliability</td>
<td>.083</td>
<td>.086</td>
<td>.064</td>
<td>.966</td>
<td>.001</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>.100</td>
<td>.079</td>
<td>.089</td>
<td>1.277</td>
<td>.000</td>
</tr>
<tr>
<td>Assurance</td>
<td>.344</td>
<td>.080</td>
<td>.305</td>
<td>4.303</td>
<td>.000</td>
</tr>
<tr>
<td>Empathy</td>
<td>.101</td>
<td>.080</td>
<td>.083</td>
<td>1.264</td>
<td>.208</td>
</tr>
</tbody>
</table>

a. Dependent Variable: student satisfaction

Regression table measures the amount of total variation in dependent variable due to independent variables. The value of R square in below table is 0.194. This value indicates that there is almost 19% variation in dependent variable (student satisfaction) due to one unit change in independent variables i.e. Empathy, Assurance, Reliability, Tangibility, Responsiveness. Likewise, it could be seen from the coefficients table that beta value of independent variable (Tangibility) is .203 with t value 2.946 and significant level of 0.004. The beta value of independent variable (Reliability) is -.064 with t value - .966 and it is not significant with the value of .335. The beta value of independent variable (responsiveness) is .089 with the t value 1.277 which is not significant with the value of .203. The beta value of assurance is .305 with t value 4.303 and significant 0.000. The beta value of empathy is .083 and t value is 1.264 which is not significant with the value of .208. These beta values indicate the amount of change in the dependent variable (student satisfaction) due to changes in independent variables i.e. Empathy, Assurance, Reliability, Tangibility and Responsiveness. Based on the above results, therefore, we accept H1, H2, H3, H4 and reject H5.

Conclusions
To investigate the impact of service quality on customer satisfaction in education sector in general and Gomal University DIKhan in particular that how the independent variables of this study effect the dependent variable, the researchers have used the tool of SERVQUAL, a came to the conclusion that there is significant relationship between the tangibility and assurance as the sample population of the study consider these two factors as most important factors for improvement of service quality in higher education system. This study also conclude that it is not only the bookish knowledge to which the students of the education institution pay attention, rather there are also other factors on which student take more care before making a decision for enrolment in any university, however, we safely assume that though the mental level and maturity of the students was found different between newly admitted and senior ones. Our found that our results are consistent with previous studies, therefore, based on our results, students attach greater value to their satisfaction from the institution and its credibility before taking admission. Over all, we have found significant and positive impacts of the independent variables on the customer satisfaction which was taken as a dependent variable

References


