COMPETITIVE ANALYSIS OF PAKISTAN HIGHER
EDUCATION AND STRATEGIC RESPONSE
(A Case Study of Khyber Pakhtunkhwa Private and Public Sector Institutions)
(Ph.D Thesis)

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ACKNOWLEDGMENT

Starting with the name of Allah Almighty I want to dedicate this research thesis to the most beautiful and charming lady on the earth, my mother, Nusrat Jehan, the most handsome and caring man on the earth, my father, Haji Muhammad Riaz Khalil and the most supporting and perfection oriented man, my husband, Syed Waleed ul Hassan.

I would like to express my special thanks to my parents who supported me emotionally, morally and financially. I would like to pay deepest gratitude to my supervisor Dr. Shahid Jan Kakakhel, and my co-supervisor Dr Qadar Bakhsh Baloch for supporting me through the harsh times of my Ph.D. thesis. Their continuous guidance, intellectual insights and motivational attitude enabled me to complete the research in time.

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ABSTRACT

The research study aimed to investigate the prevailing competitive environment of higher education sector of Khyber Pukhtunkhwa with a view to identify existing threats, opportunities and suggest befitting strategies. Most of the researches conducted have not explored both service quality and competitiveness in the context of Higher Education in KPK specifically. The research population was students for measuring service quality and faculty and non faculty staff for measuring competitiveness. The sample was 1000 people including 650 students and 350 respondents (university management and faculty) of the 10 universities (five each from public and private sector) selected randomly. Three different set of questionnaires were administered. The first and second questionnaire aiming to measure students’ satisfaction and education service quality, was distributed among 650 students, out of which 520 were returned, having response rate 80%. The third questionnaire, measuring competitive environment was administered to 350 respondents, out of which 306 were returned, with the response rate of 87%. The research study is a descriptive while the research approach is deductive. The statistical reliability and validity of each questionnaire was tested through cronbach’s Alpha and factor analysis with positive responses. The research applied t-test, correlation and regression to predict the results.

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, assurance, responsiveness and reliability dimension of service quality in public and private sector universities, however, empathy dimension of service quality showing insignificance mean difference in both public and private sector universities. The results report strength for public sector universities in term of tangibility and assurance, whereas private sector universities showing strength in their responsiveness and reliability dimension. The impact of service quality on student’s satisfaction show a positive impact of the service quality dimensions on the students’ satisfaction. The universities competitiveness was tested through T-test which predict a significant mean difference in, height of barrier to
entrants, bargaining power of suppliers, bargaining power of buyer and threats of substitute. However, rivalry is showing insignificant difference.

The study will provide awareness among the national policy makers, it will facilitate universities to develop well structured design of competiveness and quality.

The originality of work of this research work holds a lot of academic and organizational value. The current research study contributes significantly to the existing literature as the majority of previous studies did not focus Khyber Pakhtunkhwa on the whole. Thus, it expands the body of knowledge in this particular field. Contextual approach regarding its investigation in developing country i.e. Pakistan. It will help the policy makers to develop strategies to get competitive advantage in the current competitive environment Similar studies can be conducted using the data of professional colleges in both private and public sector set up. The study can be widened to other areas of Pakistan as well. Service Quality and competitiveness can also be measured using other models as well.
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- The study can be widened to other areas of Pakistan as well
Service Quality and competitiveness can also be measured using other models as well.

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Measuring service quality was one of the most interesting topic which numerous researchers had focused in many years. For instance, service marketing literature paid attention to the relationship between service quality dimensions and customer satisfaction in the context of service sector such as hotels and restaurants (Alexandris, Dimitriadis, & Markata, 2002). Banking sector has been also explored for the services quality (Angur, Natarajan, & Jahera, 1999). The health care sector, transportation sector along with banking sector habe been also analyzed by previous researchers (Angur et al., 1999) The transportation sector for knowing their services quality has also been analyzed (Shefali, 2010). Howat et al., (2002) have analysed sports and leisure. Although, most of the studies’ main focus was private industries but recently, it has been recognized that provision of the quality in the services stand the objective of the first importance of the private education sector as well as public institutions. Service quality is the most determining element which can also be applied to HE the same as business sector. Universities have to provide an excellence service to their students; they have to search effective and innovative ways to attract, retain and foster stronger relationships with students because most of its income are generated from enrolment related. This will put the universities at a competitive advantage. Students in higher education are more concerned to the service quality; they seek excellence education and tremendous services at study environment which will satisfy them and develop their capabilities to gain an effective educational personality (Malik, Danish, & Usman, 2010). Nowadays, the vital role of education is very much known from the fact that education now contribute to the country revenue and can be termed well in case of developing countries (Truong and Pham, 2016) This has made many institutions to encourage and attract both national level and foreign level students due to its competitive nature (Pohyae, Romle, Darus et al., 2016). The majority of higher Edu institutions have highly attempted to make the quality of their education based on the utmost curriculums and administrative processes. Regarding to these processes institutions have to consider students as their customers and seek to maximize their satisfaction based on educational services provided. The SERVPERF model is effective in service sort of quality measurement in the higher type education
environment and useful to guide for the various shortcomings in respect to changes to prevent weakness and improve it to be more strength as there were many extensive evidences in higher education literature suggested.

Similarly, in today’s globalization of market nation’s economic prosperity is not inherited but created through its competitiveness and the basis of competitiveness are shifted towards more and more creation and assimilation of knowledge. According to Porter (1990) a nation that has sustained possession of ability to participate competitively in international markets is said to have competitive advantage. To achieve economic growth, governments shall identify their strengths and weaknesses with regards to its national resources, and play upon them to increase their national competitive advantage in international market. Porter is a pioneer of a diamond-shaped diagram which helps to establish a framework comprised of four key factors that can be imminant to make the organization very competitive. These four key elements of diamonds are the resources availability, information regarding opportunities to be exploited, the individual company’s goal and the pressure of innovation and investing.

A cursory look at the today’s corporate world competitive environment finds them fluid, meandering, challenging and thriving with competitive opportunities and threats. The rapid infusion of technology and changing sources of energy has drastically changed means of communication and communication technology that has dramatically changed the global economic environment (Tofler, 1978). The new global competitive landscape characterized with shorter cicle relating to product, the rate of its acceleration and the various kind of changes have made competition intense and Aveni (1997) went further ahead and termed the ongoing competitive landscape as “hyper competition” due to accelerated pace of innovation.

People of any nation are asset of their competitive advantage amongst the community of nation provide they are skilled and trained otherwise they prove to be the biggest liability to drag down. Therefore, it is vital and cannot be denial the fact that investing in the sort of education and training infrastructure to enhance skills and competencies of its people is a crucial determinant for a country's competitiveness. Return on investment on people results in to producing Human Capital that impact on
the Global Competitiveness Index (GCI). The GCI of any nation or type of country is
directly related to the kind of education and training components of that country which
includes; quality of primary education, higher education, brain drain, and innovation
and research. And in the latest GCI report of World Economic Forum Pakistan stands
at 129 in rankings against 144 nations and occupies the lowest position even amongst
the South Asia Association for Regional Cooperation (SAARC) nations:


*Fig 1.1* Pakistan’ GCI 2014-2015

Analysis of the Factors governing GCI indicates that the quality of HE training
considered very determining and stands vital to move up their value chains beyond
the kind of simple level of production in term of processes and products. Once one
scans the World Economic Forum report 2014-20, the factors that are dragging
Pakistan at disadvantageous competitive position is lacking in human capital
investment, because its education and training that is negatively corresponding to other
factors those stand as follow among 144 nations:

- Institutions at 123th
- Infrastructure 121th
- Macroeconomic regarding environment 145th
- Health and primary education 128th
The strategy is all about creating new things to establish a position for the organization (Porter, 1996) The company strategy regarding competitiveness is based on its determining environment (Porter 1980). Michael porter’s Industry Analysis framework (Porter, 1980) provides a checklist to analyze the competitiveness level of an industry and Porter (1980) Diamond Model suggests actions for the leadership to improve the environment. Porter believes that besides the factors of endowment (Porter, 1980) the various industries profitability are purely and mainly based on the pillar of five forces which can effect (Porter, 2008); which are well known forces we consider and read in the book of strategic management also called the five forces model.

The strategy adopted to pursue shall not only aim to perform well than its competitors rather it must be able to maintain its superior performance with sustained outcome for a reasonable time and space. This superior performance over other rivals is directly dependent upon the Competitive advantage that a firm possesses. Hence, to attain, maintaing and a kinf sustaintion for its competitive and core advantage, is the need of every organization. And for this the organization needs to keep its people, structure, system and processes aligned with its strategy. Unless this strategic alignment is not done in its true perspective neither the organization can stay competitive nor achieve its goals in productive manner thereby doomed to failure. Porter is right in claiming that a firm can only be in win- win position once it has succeeded in attaining and sustaining its competitive advantage either on the face of industrial forces or factors conditions (Oguto,2015).

It has been historically evident that the development of societies has always been directly linked with the educational development. Within the education sector HEIs have been mainly responsible to formally equip individuals with appropriate modern advanced knowledge, which can help the employees to better perform both in these sort of universities representing the domain of public as well as sector organizations (Farhat, 2011). This kind of advanced knowledge is vital for all level of professional i.e doctors, teachers, engineers, civil servants and many more. Without
serious steps regarding equipping employees with modern knowledge economic
development cannot be made progressive and society cannot be made on the right path
and direction. Seeing the 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.

Table 1.1

*Pakistan’s Higher Education Institutions: Growth Pattern*

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Sector Universities</th>
<th>Private Sector Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947/48</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1960/61</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>1970/71</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1980/91</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>1985/86</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>1995/96</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>2000/01</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td>2006/07</td>
<td>57</td>
<td>54</td>
</tr>
<tr>
<td>2013/14</td>
<td>79</td>
<td>67</td>
</tr>
<tr>
<td>2014/17</td>
<td>87</td>
<td>115</td>
</tr>
</tbody>
</table>

Source: The H.E.C, Islamabad

It is universally accepted principal that growth of any country is typically and
directly proportional to sort of growth covering education of higher rank (Farhat, 2011). 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 15 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 universities representing the profile of public sector and one only of the same type in private sector exited till 2001 and since then the sector grew to 22 institution or universities of the public and 10 of the same universities of the private sort of universities in last thirteen years. Much of this growth is credited to the mismatch existed in supply and demand ratio, the desire for greater social mobility, growing population, global pattern of diversified higher education. Responding to mass demand of industrial economies the Private Sector higher education institution was driven to its expansion in Pakistan and elsewhere.

1.1 Background of the Research

Today’s unprecedented competitive era puts an ever-growing pressure on an individual to have sufficient and contemporary skills and capacity to meet the core expectations and need of the knowledge economy (Sutton, 2017; Carnoy, 2014). Until the 1930s, higher education institutions are traditionally very much limited limited to determine the uplifting of the country economic development by simply and particularly enabling the kind of individuals to grasp market opportunities. However, over past few decades the fundamental restructure of economies created the dying need for the knowledge-intensive efforts and to encourage producing workers having updated intellectual and utmost professionalism to account for their development. In this regards the HEIs are mainly responsible for delivering knowledge based approaches to be an advanced unit in the developing of the society profile, Higher education can play a significant role to provide quality education (full of contemporary knowledge, skills and competencies) as a substantial key player in building human capital (Tilak, 2018; Escrigas, 2008). Higher education contribution establishes and develops the key resource that is considered indispensable for the country growth,
uplifting, economic uplift and societal sort of development of a nation (Kapur and Crowley, 2008; Gordon and Whitchurch, 2007).

The HE education of the country ad the prevailing system has been considered to be contributed towards knowledge economy in the cas of developed nation. The drastic output of the developed nations can be seen from their contribution in term of producing class papers chapters and books and also the use and application of other methods which support the activities (Peril and Promise, 2000). However the debate is there going on in this respect in the developing nations and countries are in the position to deal with the demand of knowledge based economies or not?

The past few years in particular has turned more dynamic for the deloping nations in term of reshaping and encouraging various multi level changes at the HEIs and in this regard a great amount of reshaping has been made to deliver better results in term of service quality (Rowley, Lujanand Dolence, 1998). This improvement is evident from the growth of HE institutions in Pakistan in previous more than 12 years, and its private sector even occupies nearly 44% country’s share today. The private sector higher education is for-profit or quasi for-profit, represents the fastest-growing sector nationwide. Though pursuing a noble cause, in general, the private sector provide admission and absorb students who seem difficult to be accommodated in universities of public type and hence due to the merit or the availability of very few and limited entry for students in the counterpart universities. Due to this most of the students are absorbed in the various sort of institutions and universities exhibiting the characteristics of private nature. This sector is mostly run as the business model and the authority lies with Board of directors and Chief Executive Officers, where faculty doesn’t hold authoritative or positions with less authority and the students are the main consumers. Owing to the shrinking funds, even public sector institutions are being asked to earn more of their operating expenses by generating their own revenue. Most often in these institutions the financial sources work as commercialization, which is a cause of conflict with the university’s traditional role. Therefore, the most current approaches determine that the users are one to pay for the fundings of these institutions. This all is going to make the Higher education sector earning oriented thereby highly rival industry where only fittest will survive (Qureshi et al, 2012).
In conjunction to this significant importance, educational environment is extremely
dynamic and challenging that creates the stiff intensifying competition in both public
and private sector provisions (Abdullah Hokoma, Khan, & Hussain, 2008; Quintal,
Wong, Sultan, & Yin Wong, 2012). The emergence of globalization and
internationalization of educational trends drives the educational institutes to focus on
the sustainable competitive advantage instead of short term influence, visibility and
market share (Cervero, 2000; Hune & Park, 2010).

In this particular era of intense competition in the field of education and academia
carrying many options for students to have many options to avail nationally and
internationally and so the students’ attraction, satisfaction, retention and loyalty are
major apprehensions for an educational institute (Brotherton, Rockey, & Etzel, 2005;
Cervero, 2000). To address this challenge, extensive review of literature revealed that
sustainable competitive advantage can only be possible through quality services;
means how well the higher education institute fulfill the customers’ need and
expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).

According to Hanaysha, Abdullah and Warokka (2011), to address the
apprehension as mentioned above, universities need to build and maintain strong
relationship with their primary customers through quality services. Despite the
realization of its importance, researchers and scholars found it difficult to properly
define and measure the concept “service quality” due to its unique SERQUAL model
(Muhammad Butt & Cyril de Run, 2010; Nadiri, Kandampully, & Hussain, 2009).

There cannot be denied the fact about the organization and products are developed
to meet the demand cycle but stay to survive only if competitive. The same case is
presumed in case of sector representing the HE of our country (Pakistan) in general
and the KP in particular. The mushroom growth that emerged after 2001 is likely to
diminish at the result of intensity of competition with the minimization of supply and
demand gap. The only surviving institution would be one whose strategic management
has succeeded in correctly reading the competitive/ industrial environment, timely
identifying the fleeting opportunities, devising matching strategies, and creating
strategic fit by aligning its skills and resources.
The above 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. However, the degree of competitiveness has to be based on either cost leadership or differentiation.

1.2 Statement of the Research Problem

Since 1970, World has witnessed a dramatically transformation of economic system from manufacturing economies to service economies (Grönroos & Ojasalo, 2004; Youtie & Shapira, 2008). Among various service sectors, higher education sector proved as an economic engine (H. S. Abdullah & Kalianan, 2009; Sultan & Yin Wong, 2010). By realizing its importance, education sector facing challenges and stiff competition for its survival in both public and private sector provisions (Abdullah Hokoma, Khan, & Hussain, 2008; Quintal, Wong, Sultan, & Yin Wong, 2012). The survival can only be possible by creating competitiveness that can only be possible through quality services; means how well the higher education institute fulfill the customers’ need and expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).

There is still a controversy around the marketing metaphor “customer” of educational institutes; we have a dire need to identify the true primary customers on which educational institutes need to focus for their attraction, satisfaction, retention, motivation and loyalty (Jeevarathnam Parthasarathy Govender, Veerasamy, & Noel, 2012). Michaela and Antony (2007) categorized the term “customers of universities” that includes parents, students, staff, community, funding agencies and employers. However, the students are considered as a primary customer, because students’ satisfaction can lead towards the satisfaction of all stakeholders (Jeevarathnam Parthasarathy Govender et al., 2012; Jeevarathnam P Govender, Veerasamy, & Noel, 2014).

According to Hanaysha, Abdullah and Warokka (2011), to address the apprehension as mentioned above, universities need to build sort of very strong bound of relationship with their primary customers through quality services. The emergence
of globalization and internationalization of educational trends drives the educational institutes to focus on the sustainable competitive advantage instead of short term influence, visibility and market share (Cervero, 2000; Hune & Park, 2010). To address this challenge, extensive review of literature revealed that sustainable competitive advantage can only be possible through quality services; means how well the higher education institute fulfill the customers’ need and expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).

In 1985, Porter presented presented framework through which competitiveness at any level within the organization and with other organizations can be measured. In the current research it is used for measuring the competitiveness among the higher education institutes in Khyber Pukhtunkhwa.

A lot of studies have been conducted on higher education quality to produce and generate the momentum of such class act of the students who will definitely be committed and will transform advanced technology as well (Qureshi et al., 2012). Similarly, Shah (2013) & Kundi et.al., (2014) studied the determinants of service quality and satisfaction relating to students in Higher education in the context of Pakistan in general. While, there is no single study focusing on service quality measures and factors of both type of counterpart universities in this country region of KPK Pakistan in specific.

Moreover, Farhat (2011) conducted a study on Competitive analysis through Porter Five forces’ Model in higher sort of education in the specific context and domain of Gaza. Likewise, Pringle (2011) studied the various determinants of analysis of the industry which is about the big five force forces Model for understanding the universities in Ontario Canada. Ogutu (2015) studied Porter’s five forces framework for measuring the competitiveness in public sector universities in Kenya. But there is no study found focusing the private as well as the public sector universities of KPK Pakistan related to Porter’s Five Forces framework in order to measure the academic competitiveness.

Most of the studies previously conducted are in context of Pakistan in general or otherwise limited to just one institute, the current research aimed to explore both kind
of the universities encompassing the huge two counterpart universities of KPK in specific for their service quality and for competitiveness as well. Higher education is known for the role in both social and economic development. Universities are the platform where higher education is provided. However, these institutions are facing problems in the wake of competition to survive and sustain (Pringle & Huisman, 2011). In this view different studies are conducted to determine and compare the competitive position of different higher education institutions and accordingly determine their strategic direction. In Pakistan higher education institutions have different problems like predominantly to sustain in competitive environment. Besides, very few studies are conducted in Pakistan like Qureshi, et.al., (2012), Shah (2013), Kundi, et.al., .(2014). However, these studies have not taken into account the pertinent dimensions like service quality and use of relevant model to check and compare the competitiveness of the public sort of unis and private sort of universities. Therefore, this study is aimed to fill the underlying theoretical and empirical gap to compare the competitiveness between public and private sector universities of the KP

The study aimed to focus on two folds because service quality matters for the students and competitiveness for the administration and faculty, and these both are important for the higher education institutes to maintain its quality and its market position. To address the existing gaps in the previous studies, current study therefore has two folds that aim, firstly to investigate the prevailing level of students’ satisfaction as derived from service quality between public and private sector institutions in KPK Pakistan. This is done by SERVPERF model by Chronin and Taylor in 1992.

Secondly, the research study is vitally aiming to investigate prevailing competitiveness of the universities of Khyber Pukhtunkhwa on Porter’s five factor analysis model. The research focus would be delimited to the institutions of H-education located and operating in Khyber Pakhtunkhwa.

1.3 Research Objectives

a. To compare and analyze the level of educational service quality in students between public and private sector universities in Khyber Pukhtunkhwa.

b. To investigate the effects of Service Quality on students’ satisfaction.
c. To find out the differentiation in term of competitive analysis in public and private universities based on Porter’s Five Forces Analysis Model.

1.4 Research Questions

In order to solve the research problem, the study attempted to find answers of the following questions:

a. Is there any difference in education service quality in public and private sector universities?

b. Is there any relationship between education service quality and students’ satisfaction?

c. Is there any difference between public and private sector universities in term of competitiveness using porter five forces models?

1.5 Contributions of the Research

The research holds multi-dimensional significance for the organization and the society both as follow:

a. The study would help to create awareness amongst national policy makers and the strategic leadership of the higher education institutions about the prevailing environment and identifying so as to develop pro-active response to environmental dictates in national and international context. This awareness would facilitate decision makers to successfully steer their institutions in highly intensive competitive environment surrounding private sector higher education.

b. The study will facilitate universities to develop desired competencies and capacity that can with stand thrust of industrial rivalry in sustained way in pursuit of their goals and objectives.

c. The study will help society to achieve continued socio-economic development via higher education institution in diversified disciplines and learning in cost effective and innovative ways.
d. The study will help other researchers and academicians pursuing somehow similar studies.

e. The study would be helpful in local literature, robust statistical techniques and comprehensive description of both private and public sector universities. As the study focuses on the specific region of Pakistan that is KPK.

1.6 Justification and rationale of the study:

Beaumont (2012) studied service quality in higher education institutions in UK in the city of Manchester and found that service quality matters a lot in terms of education. A similar study was conducted in the context of USA by Quinn, Lemay Larsen & Johnson (2009) which stated that service quality has a major level contribution in the area of sort of education. Kontic (2014) in Serbia found that service quality should be considered while studying the various improvement in the area of the higher type of the education.

A kind of study was also carried and conducted by Ilias, Rehamn & Razak (2008) about service quality and student’s satisfaction in the context of Malaysia and found that both have significant relationship with each other. Hanaya, Abdullah. & Warokka (2011) stated the importance of the HE quality as the main pilar of the countrys competitiveness and asserted that quality is the outcomes of the good learning and the observed level of satisfaction by the public. Student confidence in the satisfaction is vital and play a key role and part in telling about the quality in HE institutions. Similarly, Ntabthia (2013) studied the impact of service quality on students’ satisfaction in private universities. Alnazer & Dib (2013) also studied service quality and students'satisfaction in the context of Syria. Asaduzzaman & Rahman (2013) studied the sort of service quality in effecting the students’ satisfaction in private universities of Bangladesh.

Qureshi et al., (2012) examined while deliberately analyzing the sort of role of quality in HE- institutions and explained and delivered that it generally produce steady nd committed people and is a good process of transforming the sort of advanced knowledge. Shah (2013) studied service quality and customer satisfaction in Higher education in the context of Pakistan in general. Kundi et al. (2014) studied the
contribution of the Service Quality and the kind of Satisfaction in Higher Education Institutions limited to Gomal University D.I Khan, KPK, and Pakistan. There is no study focusing both type of universities i.e private and public to be examined for the differences in KPK Pakistan in specific.

Farhat (2011) explained Competitive analysis through Porter Five forces Model to explore the highest level education in area of the Gaza. Pringle (2011) studied the sort of Porter approach as well called Porter’ 5-F Model for understanding the universities in Ontario Canada. Ogutu (2015) Studied Porter’s five forces framework for measuring the competitiveness in the universities in the domain of the public with the context to Kenya. There is no study found focusing the private along with universities in public domain of KPK Pakistan.

Most of the studies previously conducted are in context of Pakistan in general or otherwise limited to just one institute, the current research aimed to explore both the private and public sector universities of KPK in specific for their service quality and for competitiveness as well.

1.7 Limitation of the study

The sample was limited to different universities of Khyber Pakhtunkhwa and hence the limitation of time and also the kind of resources in scarece.

The study only attempted to understand the relationship between service quality and students’ satisfaction and competitiveness among these universities.

The data collected was limited to internal stake holders like students, faculty and administrative staff, external stake holders were not involved in the study.

1.8 Outline Organization of the Thesis

The proposed dissertation is planned to be composed in five chapters as follow:

- Chapter 1 - Introduction of the research dissertation including a brief overview of the problem, hypothesis and the research methodology
• Chapter 2 - Silents from Review of the literature

• Chapter 3 - Research methodology applied during the course of research.

• Chapter 4 - Present the data analysis

• Chapter 5 - Findings, conclusions and recommendations
Chapter-2

LITERATURE REVIEW

This particular chapter in hand presents and describe the silent detailed points of the literature review for the purpose of this research. The review of literature is arranged in the following sequence:

- Services
- Service quality
- Customer (students) satisfaction
- The techniques for competitive analysis
- Theoretical framework
- Hypotheses

2.1 Services, Service Quality and Service Quality Models

Zeithaml et al. (1993) argue that service marketing was not considered as a separate discipline in research until the late 1970s. In very few decades this discipline got importance and now plays a very important role in the economies of many countries (Abdullah, 2006). There is a very strong positive relationship encountered in service sector country economic development play a determining role and the advanced economies are more driven to service quality (Palmer, 2011). This can be assumed from an example like UK around 77% workers belong to the services sector in comparison to 38% in Thailand (International Labour Organization, 2009, Palmer, 2011).

Palmer (2011) also elaborated and defined a service is very much necessary and is associated things with tangible product which in some way satisfy the customers’ need. In the same line Lovelock and Wright (1999) focused on a kind of informal approach, defining a service as: “Something which has value and is bought but cannot be dropped to customers as product. Zeithaml et al. (2009) stated and asserted the mechanism of the services are the co-produced things with the main product. It has some satisfaction for the customers. Hill (1995) argued about the differentiation in services and goods and stated that services are consumed till the process continues. Gronroos (1978) asserted that goods are always different from
services and he elaborated and services should not be considered like goods. Baines et al. (2008) conformed that goods maintain actually high properties of search and services are having higher level of both experience and credence characteristics.

Each definition encompasses a kind of an intangible sort of nature of services, explaining the difference in service and good. However, kind of similarities also there between goods and services. The reason being it is vital to find out the differentiation between services and goods

While demonstrating the dimension of service quality it is definitely important to investigate the characteristics of services, when goods and services are differentiated. These were explored by Parasuraman et al. (1988), and the same later on by Giese and Cote (2000). It is difficult to measure the services and define it properly, as services have unique characteristics (Zeithaml et al., 1985) these are, kind of having intangibility, and sort of inseparability, heterogeneity, perishability and lack of ownership. These are the characteristics which really differentiate service from goods, as mentioned by so many academicians (Fisk et al., 1993) also the same kind results by Nadiri, et al., (2009) other like Palmer, (2011;) also got like the same. Parasuraman et al. (1988) demonstrated the same exhibition. Firstly, the intangible nature of services problems is arisen for both the service provider and the consumer. This always cause a problem to a service provider he tries to differentiate his offerings from his competitors (Hill, 1995). Secondly, the element of heterogeneity, which makes the services unique result in problem as to standardize a service (Parasuraman et al., 1985). Thirdly, as services are exhibiting experience, it can be used and consumed when it is availed to the customers. Due to this reason the production and consumption incur at the same time, which stands that most services are inseparable (Palmer, 2011). A further approach used and delivered that service is unique because it is un storable. Similarly, ownership lacking can also pose a problem, as when service is performed, and then there happen nothing between seller and buyer (Palmer, 2011). In other words, it is said that services give right the buyer to take part in service process. It is evident that each characteristic has a unique importance to better manage the service delivery. It demonstrates that how the service is considered and believed, the consumption has some satisfaction for the customers (Hill, 1995).
Juran (1974) defined quality as “fitness for use” in kind of user-based approach and “conformance is to the requirements” in the bases of manufacturing-based sort of approach (Cross, 1979).

A researcher in this regard termed 5 approaches (Garvin, 1984)

(1) **The transcendent approach of philosophy**;

As per transcendent view, quality is the innate excellence. It cannot not be compromised it prove a source of high achievement.

(2) **The product-based approach of economics**;

As per this approach, quality is predicted as a precise and somehow measurable variable” and as per this approach quality is always due to very high cost. Means cost of quality is very high.

(3) **The user-based approach of economics, marketing, and operations management**;

In this approach the quality is always compared with the satisfaction. The more the quality, the higher will be the satisfaction of the customer.

(4) **The manufacturing-based**

In manufacturing-based approach, quality is defined as “making it right the first time.” It is supply based and concerned with engineering and manufacturing practice

(5) **Value-based approaches of operation management**.

This approach predicts quality purely on the basis of cost and price. The utmost and main point of difference about service and goods can be the characteristic of tangibility and intangibility.

Many previous researchers showing different claims regarding service quality and concluded it to be difficult to measure and define (Parasuraman et al., 1988; Carman, 1990; Bolton and Drew, 1991; Cronin and Taylor, 1992). Baron et al. (2009) argued that service quality can very complex as more technical aspects to be considered, talking about service quality. In the same line, Clewes (2003) claims that
service quality to be rightly defined and to develop an appropriate model for its measurement is very difficult. Crosby (1979) argues that service quality can be something about the conformation to specifications.” According to Crosby (1979) asserted that quality is always mistaken for using so many adjectives for it like talking about quality we say goodness and shiness, these adjectives make the construct very complex ans has indefinable nature of the construct. Similarly, Lewis and Booms (1983) defined quality as how best and well services meet the customer expectation is the quality.

This definition was farther extended and developed by Parasuraman et al. (1988), who argued service quality as a stems which copare the consumer expectation with their actual perception. Quality is that how the customers’ expectation are perceived (Lovelock and Wirtz, 2011). Alternatively, other researchers like Berry et al. (1988) stated that it is the overall evaluation and analysis of the attitude. This explains and illustrates that there is no consensus regarding it among the researchers and academicians.

Different other authors defined service quality as:

- “Quality is meant for the best and certain customer conditions describe the actual use of the product and its selling price (Feigenbaum, 1961)
- “Quality is about all the things which consists to satisfy needs and wants”. (Edwards, 1968)
- The level and degree of the product which satisfy the consumer wants and it is the degree regarding the specific product, conforms the design or specification” (Gilmore, 1974)
- “Service quality reflects about a measure which state that how well the service delivered can match the expectations of the customers”. (Lewis and Booms 1983).

The definitions above support the construct that Service quality and customer satisfaction are directly related to each other. These studies showed consumer satisfaction is substantial when the service provided is equal to or better than expectations. Hence, the review of literature supports the construct that quality of service is one of the primary aspects of customer satisfaction and loyalty.
Fig 2.1 Service Quality and satisfaction
### Table 2.1

**Dimensions of quality**

<table>
<thead>
<tr>
<th>Service Quality Dimensions</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility</td>
<td>Look and physical appearance of the personnel, material, facilities, tools and equipment used for service provision.</td>
</tr>
<tr>
<td>Reliability</td>
<td>Ability to deliver services as promised in an accurate manner</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Willingness and readiness of employees to provide timely service to the customer</td>
</tr>
<tr>
<td>Competence</td>
<td>Possession of skills needed to perform the desired service</td>
</tr>
<tr>
<td>Courtesy</td>
<td>Dealing customers with politeness and respect, in a friendly manner</td>
</tr>
<tr>
<td>Credibility</td>
<td>Having customer belief of Trustworthiness about the delivery of service</td>
</tr>
<tr>
<td>Security</td>
<td>Let the customer feel free from any fear or risk in physical, or financial terms</td>
</tr>
<tr>
<td>Communication</td>
<td>Informing and listening customers, feedback, etc.</td>
</tr>
<tr>
<td>Access</td>
<td>Convenience in approachability of location, office, service delivery place etc.</td>
</tr>
<tr>
<td>Understanding</td>
<td>Having the correct perspective of customer needs and expectations</td>
</tr>
</tbody>
</table>

Source: Parasuraman, Zeithaml, Berry, Leonard (1985)
There are many researchers who argued about the quality models.

Sasser et al. (1978) focused on certain factors, which raise a kind of service quality level for example the security, the attitude, consistency, the completeness, condition, availability, and to train service providers. Rather than above mentioned factors other determinants like, physical, interactive quality, and the kind of corporate quality can be vital too to affect the domain of the level of level (Lehtinen and Lehtinen, 1982). Like wise, Grönroos (1984) has asserted which is called the sort of services and the quality first model (Portrayed in Figure 1) which describes and absolutely determined the the type of perceived sort of SQ purely is and typically elaborated due to the use of various quantitative models. In this model various element like the Technical quality and functional quality, and corporate image used, predicting the service quality dimensions. The element of Technical quality is concerned about the evaluation of customer to predict the service. Functional quality tells about that how the consumer thinks about and takes service as. Corporate image can be predicted as vital element having positive effect on the perception of the customer.
**Table 2.2**

*Models of service quality*

<table>
<thead>
<tr>
<th>Study</th>
<th>Model</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grönroos, 1984</td>
<td>Service Quality Model</td>
<td>Technical, Functional quality and the corporate image</td>
</tr>
<tr>
<td>Philip &amp; Hazlett, 1997</td>
<td>PCP Model</td>
<td>Pivotal</td>
</tr>
<tr>
<td>Parasuraman et al., 1985</td>
<td>GAP Model</td>
<td>Reliability, Access, Responsiveness, Competence, Communication, Credibility, Courtesy, Security, Understanding/Knowing the Customer, Tangibles</td>
</tr>
<tr>
<td>Haywood-Farmer, 1988</td>
<td>Service Quality Attributes</td>
<td>processes and procedures, Physical facilities, People behavior and conviviality, Professional judgment</td>
</tr>
<tr>
<td></td>
<td><strong>SERVQUAL</strong></td>
<td>Tangibility, Reliability, Empathy, Responsiveness, Assurance,</td>
</tr>
<tr>
<td>Parasuraman et al., 1988</td>
<td><strong>SERVPERF</strong> (the current</td>
<td>Same as SERVQUAL but with performance only statements</td>
</tr>
<tr>
<td></td>
<td>research’s model)</td>
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<tr>
<td>Cronin &amp; Taylor, 1992</td>
<td><strong>INTSERVQUAL</strong></td>
<td>Reliability, Tangibles, Assurance, Responsiveness, Empathy (SERVQUAL)</td>
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<td>Frost &amp; Kumar, 2000</td>
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<td>Dabholkar et al., 1996</td>
<td><strong>RSQS</strong></td>
<td>Physical aspects, Reliability, Personal interaction, Problem solving, Policy</td>
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<tr>
<td>Brady &amp; Cronin, 2001</td>
<td>Service Quality Model</td>
<td>Physical service environment quality, Outcome quality</td>
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<td>Personal interaction quality</td>
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Gronroos Model is also used in many studies of the service quality. It has been explained to support the background of the study.
The Gap model has so many dimensions which constitute it (Parasuraman et al., 1985) which provide a framework, which would define and measure the quality of service as when the institute have skillfull employees to motivate the customers (Saat, 1999). This model of Gap has been developed by them which predicts the service quality (Figure 2) via exploratory research, conducted through a formal or informal as like indepth interview and as the focus group interviews. The Gap of Service Quality Model have based on the predicted that showed a kind of various insights which were obtain or gained through the interviews and focus groups approach regarding the conceptual of understanding of services and quality. These Gaps were named as (Gap 1, Gap 2, Gap 3, Gap 4), and the Gap 5 which were based on focusing the group interviews and to tells about the consumer side of the model.

The Gap paradigm and his names can be shown under (Parasuraman et al., 1985).

Gap 1: The Gap is all about the customers means students expectations and the perception, also called the KM Gap.

GAP 2: This gap is also reffered as the perception and specification gap of service quality.

GAP 3: This is called the specifications-service delivery of service quality gap.

GAP 4: The gap entails the communications which predicts the Service quality.

GAP 5: this is called the pure service quality gap.

According to Lovelock (1994) who then explored and add a sort of new and no 6th GAP to this particular model which is too known due to the renowned approach as SDPS, The Perceptions Gap.

1. RELIABILITY: It is the consistency in performance and dependability, a kind of accuracy in different billing, to keep the records correct, it is also about performing the service with true spirit and at the exact time.
2. RESPONSIVENESS: It is a kind of willingness shown by the employees to provide service, doing the transaction and mailing a transaction slip immediately and satisfying the customer quickly and giving them quick response.

3. COMPETENCE: It refers to the possession of skills and knowledge which can be handy in performing the service or the organizational capabilities.

4. ACCESS: It is the approachability and easiness in contact, the service of the organization is easily available and accessible by telephone at the convenient time and place.

5. COURTESY: It contains the politeness and respect and also a type of friendliness.

6. COMMUNICATION: It is all about communicating with customers in language they can quite well understand.

7. CREDIBILITY: It is the trustworthiness and a kind of honesty, the company reputation, which motivate customers.

8. SECURITY: It is a kind of freedom from danger and risk also reflects the physical safety and the financial security.

9. UNDERSTANDING/KNOWING THE CUSTOMER: It means to understand the needs of the customers and satisfying their needs.

10. TANGIBLES: It represents the physical evidence, available facility and representations of the service.

Haywood-Farmer (1988) asserted that there are three attributes of service quality model which are the processes, procedures and the physical facilities, these attributes established by this author were very much associated with the determinants provided by Parasuraman et al. (1985). This particular model has most similarities with Parasuraman et al. (1985) is shown here.
Table 2.3

*Haywood-Farmer (1988) explanation*

<table>
<thead>
<tr>
<th>Haywood-Farmer Service Quality Attributes</th>
<th>Parasuraman et al.’s Service Quality Determinants</th>
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<tr>
<td>These represents all Physical facilities i.e. the process system and other tangible things.</td>
<td>Tangibles</td>
</tr>
<tr>
<td>2. These represents the timely and convenient work with ease and speed and with friendly way.</td>
<td>Reliability, Responsiveness, Access, Courtesy, Communication</td>
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<tr>
<td>3. These represents the professional judgment the diagnosis, and the advice and guidance, an innovation, honesty and confidentiality, discretion, knowledge, skill</td>
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Source: compiled from Ghobadian et al., 1994; Dotchin and Oakland, 1994

Servqual Model is another model used in the services quality of various sectors.

Parasuraman et al. (1988) argued about SERVQUAL as the most prominent model explaining the service quality. This SERVQUAL model (Table 3), model has 22 items representing the whole five sort of various dimensions being exhibited by SQ.

The services quality can be measured using different bases. In SERVPERF model the service quality is gaged on the basis of gap and scale. In this connection, Cronin and Taylor (1992) argued about the measurement scale describe and portray the SQ is based on SERVPERF which used in the empirical studies of various sectors like banking firms, the pest sort of control, the dry cleaners and the sector pertaining the fast food and many more other sector were analyzed using the same scale. While they have created a service quality based on the dimension of customers’ expectations which is 22 ingredients same as SERVQUAL, performance refers to the future
purchase behavior one item, and the overall quality of customer satisfaction one item which can be measured by the seven point of logical differenced scale. While similarly the study displays that the service quality is measured as an attitude, with respect to the supporting of marketing literature measured based on the performance of SERVPERF documented much of the differentiations in the service quality i.e SERVQUAL. Hence the uses of SERVQUAL has a very good impact on the banking sectors and other three sub sectors already mentioned above i.e dry cleans, food and pestal. Brady. Et. al. (2002) have also predicted this model for being the most real and appropriate model predicting service quality and the findings are in line with studies which predicted this model to be useful in measuring service quality. These results have really supported the findings of Cronin and Taylor (1992) who also predicted that this model is very important in other area like sports spectators, health care and entertainment. While Stafford et al. (2011) documented that to bring touch of balance in expectations and perception, this model can be vital to predict the service quality. While in the same line, Rust and Oliver (1994) have asserted that the three basic models which include both non dimentional and dimentional are about the service kind of delivery, service kind of environment and the service related to product. The service quality has provided so many lessons which can improve the service quality. These are the essential to deal with the service quality (Berry et at,.1994). While these lessons are about exploring and fostering the best service design, the reliability, the recovery and fairness in team work and creating leadership in a way to improve the service quality. Hence such factors need to be improved to farther improve the service quality domain of the organization. While another school of thought consider it as the model reflecting the relationship about the gap and the attitudes of the customers. So this SERVQUAL model summarized all the aforesaid dimensions

Superset model has been also widelty used by many researchers. Cronin and Taylor (1992) these two researchers are from those group of other researchers who have level maximum attacks on the SERVQUAL scale model. They called it a SERVQUAL scale. Since Cronin (1992) used SERVQUAL increasing the service quality of different four sectors, i.e. find, building, dry cleaning and pestel scale. They measure the performance of the service quality of these sectors using this model and proved all the results match mathematically. Andaleeb et al. (1992) stated that customer
satisfaction is best to be measured through SERVQUAL model. As these model is widely used in the modern research framework to evaluate the performance of students’ satisfaction with respect to the institute where they learned and developed their career opportunity. Hence these models are very generally used in the present day research work to measure the customer satisfaction using the SERVQUAL model.

2.2 Higher Education as a Service and dimensions of service quality in higher education

Like other services providers, higher education institutions are also using different approaches to be specialized and unique in their delivery of services. DeShields et al. (2005) asserted that the 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 academicians, 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 HE- 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 HE- 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 kind of service reasonable environment (DeShields et al., 2005).

Ldfield and Baron (2000) believe that higher education is a kind of pure service, as it has all the features of a pure service and can be termed as the pure service paradigm. In the more recent time, Gruber et al. (2010) asserted that the level of higher education service exhibit intangibility, perishability and heterogeneity. This is mainly due to the fact that most of these institutions have varying nature of services and difficult to
standardized. Higher education duly a service as it works and satisfy the criteria of perishability and hard to store. But there are numerous approaches that have been identified which can improve the service level like e-learning as well as video conferencing (Cuthbert, 1996) over total 15 years of the past. Keeping this in view higher education service sector attempts to 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. Degree is a sign of skills and quality of those students who's talent and ability is anonymous to the public. It is more important sign for his future employers. Education is a conceivable mark of talent when the manager is not able to extract the efficiency and ability of his employee, and employee also is not able to pretence his talent. So the university certificate is a license to a good job. The demand for the university degree will gets hiked till the university certificate is trustworthy. In late 20th century, a movement started in the university which is subsequent to modernism in order to create a sense of recognition and dismissal of modernism with a need to go back to the ideology and own hereditary culture.

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). Therefore, higher education is now considered to be facing more difficulties in providing the type sort of services for students who are mainly to made them satisfy according to the needs being posessed that may be “quality of education” for some or may be “low fee structure” for others.

The broad focus with the weiv of exploring the SQ dimensions is actually the degree of areas of interest which must should be added. Talking about the service quality dimensions cronion and talor (1994)the customers should be the main determinant instead of management or faculty members of the respective university of higher education. By the customers they clearly meant the students whom should be the main focus of interest for higher education regardless of the management committee.

(1) Tangibles are embodied in to the appearance of the facilities, buildings, equipment and the staff.
(2) Reliability is the degree to which all the relevant skills and knowledge are provided in timely fashion and in accurate way.

(3) Responsiveness is a kind of prompt delivery of services to the customers.

(4) Assurance is the building confidence and trust and showing courtesy.

(5) Empathy is the care being offered to the customers by the service provider organization.

The tangibles are simply the appearance relating to all kind of physical things i.e facilities, various level and kind of equipment and the pattern of the sort of communication. This dimension is one which creates the very first hand information. As every company want to have a good gesture in the eyes and minds of the customers. So it is not the only one to be said important. SERVPERF (Cronin & Taylor, 1992)

Service providers need to have their employees’ appearances and uniforms well organized and equipments to be well placed.

For higher education tangibility means

1) The Get up and Appearances of Lecturers
2) The classrooms lay out
3) The Lighting machnism in classrooms
4) The grounds and building Appearances.
5) The service provider Overall cleanliness
6) The sense of comfortability of the study rooms.
7) The buildings Decoration and its atmosphere
8) The personnel Appearance
9) The parking availability
10) The up to date services
11) Total Number of different courses offered
12) The top class availability of Computers in the labs for students.
13) The rich facilities of IT.
14) Providing the software.
15) Students to provide the Access to Net.
16) The culture of the organization and the employees’ belief and value in this university

Reliability is another dimension of the service quality in higher education institutions which means the consistency in data, as according to the literature review reliability in service quality from the above perspective means that it is connected with the firm’s performance reflecting their objective to fulfill the service requirement. Reliability means that how a company can improve its quality of service promised. It also stressed on the accomplished of accuracy in the services and quality. So it has required the strong relationship between the firms and customers with respect to quality of service. Hence reliability are the key components to the first hand impression, because the customers are willing to know about their supplier’s loyalty and also to fulfill the desired requirement with satisfactions. In SERVPERF model the service quality is gaged on the basis of gap and scale. In this connection, Cronin and Taylor (1992) argued about the sort relating measurement scale of SQ is based on this well renowned one which used in the empirical studies of various sectors like banking firms, the pest type of control, the dry cleaners and the sector maintain and hold the sort of fast food and many more other sector were analyzed using the same scale Competitiveness has been measured in different researches by using the same scale. Our questionnaire had 39 questions on competitiveness which have been extracted and adapted. 10 questions on level of rivalry among existing universities adapted from (Ogutu, 2015), 6 questions on barriers / constraints to new entrants adapted from (Porter, 1980), 12 questions for bargaining power of buyers (students) which have been adapted from (Farhat, 2013), 6 questions for bargaining power of suppliers adapted from (Ogutu, 2015), 5 questions for threats of substitutes adapted from (Farhat, 2013). And questions for strategic response. All questions were designed on five point Likert scale.

Degree of rivalry among existing universities

It has been measured with scale adopted by Farhat (2013) who also explored higher education institutions for analyzing competitiveness.

- The today competition is mainly because of the fact that most of the universities here in KPK offer quality education,
• All the resources which are here available in these universities quite suitable for the universities.
• The government would definitely support the universities once these would be in the time of financial crunch.
• The universities prefer to continue the pace of the higher studies in the particular education sector..
• Other similar local universities also affect the various programs of the university on bases of cost.
• There is extreme Quality in the academic programs being rendered and offered to students of different categories by these universities.
• The genuine fixed cost associated with the quality of the universities is high.
• The universities do offer high level of capacity at the paradigm of the university.
• The universities these days are very divergent in term of specialization offered by these universities.
• The demand of the undergraduate level has a high ratio which encourages the enrollent of the student.
• University seriously offering academic programs with updated and outstanding quality.

Customers need to focus on the the perceived value as they received from his providers. They seem that reliability have not mainly concerned with customer value. Hence it can not predict to find out what the customer value is? So we can say that it is thrice more essential. The providers first of all think that what would be the best way to make it possible and reliable to deliver quality services.

Therefore, it must predict that at which time they will give orders to periodics schedule with regards to the service level of cutomer satisfaction and performance with respect to on time bases. SERVPERF (Cronin & Taylor, 1992)
For higher education reliability is:

- Reliability in Registration means that students are registered timely without any errors
- This university retains its records accurately having no ambiguity in its proceedings
- The general reliability of lecturers ie. They are punctual and never miss the classes
- University Staff are sincere and take a keen interest in resolving student’s problem
- This university delivers exactly the same services what it assures to do
- When lecturers are very skillful and having expertise in their subjects
- When Lecturers are very kind to students and they try their best to resolve student’s problem

Responsiveness is another most particularize dimensions which represents the satisfaction of customers with respect to the service quality. Hence here the company is continuously improving their quality of products and the delivering of services to its customer when the customers are receiving quality good and fastest services from company so they feel sort of determined and valued if they are continuously getting the best sort of the quality it the best possible way and on time bases. This is also one of the best positive dimension of company towards its customers.

An instant and quick response from the company towards customers has worthy impact on the quality of service. It is not necessary to keep one-day wait for customer and to response them through call or email. If the customers are not so quick even to provide a feedback to the service providers still the quick response rate from the service provider is far better in evaluating its service quality.

Service providers get more advantages by setting internal SLAs for response of various things to customers through mails, calls and on website. Whatever may be the response time either short or long but the customer gives it high value by feeling that their requests are entertained. Response is not just important at the time of emergency but a daily and routine response make the service more reliable for customers.
For higher education institutions responsiveness means:

- Personnel are timely available to support you when there is need of solving any fault
- Lecturers are available to students for all sorts of assistance
- Lecturers immediately solve the students puzzle when arise
- The Staffs capacity is representing to solve problems when they arise
- I have rarely get the “run-around” when seeking the information to this University
- Complaints of students are quickly and timely entertained
- Queries regarding different problems are entertained efficiently and punctually

Assurance is another dimension of service quality in higher education institutions. These assurances of quality services have represented the dimensions of the company’s employee. While it also refers to the employees’ technical skills which are very essential for the company growth and as well as for the satisfaction of customers. So when the company have well structure system and also have well experiences skillfull employess it will gain the customer’s trust and their confidence as well. Similarly, if the company have failed to get the customer’s satisfaction and their confidence customer will back to turnoff the transactions with concerned company and vice versa.

Customers have more expectations about the Service providers in the sense that these providers have high experience in the delivery of service thus their expectations should be fulfilled.

Many studies have suggested that this expertise of the service providers should be communicated to the customers. Because, having no knowledge about the skills of service providers will cause to lose the customers’ confidence in the provider, which will further create a bad image of service in the mind of customers.

Assurance for higher education can be defined by these factors:
• University staff is friendly and well-mannered especially in dealing with students
• The Research level of all lecturers is more efficient and more productive
• All faculty have very good academic career
• Lecturers are interested in developing new ideas and acts like agent for positive changes
• University has a good and friendly association with community and general public
• The University staffs and knowledge on rules and procedures
• University have full security measurements
• Communication skills: lecturers have command over their subjects and teach courses according to the will of students.

Empathy services can also be found in higher education institutions. These represents that empathy on Services quality is closely concern to the company’s attention toward individual customers to evaluate the individual customer with some special care and paid them extra attention to capture the individual customers at large. Therefore, all of these foresaid dimension has focuses on the individual customer satisfaction and value at higher level as compared to individual. So therefore if the customers are feeling well and valuable they turnback to company and starting the business with that valuable company because they feel the special quality and attention from that company. Due to the reason the services are delivering as per the provided specification. As customers value the services delivery and care about those service providers who make the delivery well in time.

The customer some time does not feel that how they’re being valued. For higher education empathy can be described as:

• The students convenient is based on the facility and accommodations provide to them.
• The students convenient based on the access for generally to various rooms
• The Staff members are motivated to give extra attention to students

• The level covering the support and sensetativeness of the lecturers and devoting to the customer/students needs

• The using and usage per hour and per week by the students the various computing rooms

• The Universities are rational and impartial in their behavior of to individual students.

2.3 Studies linked with Service quality in higher education

There are very few studies which have explored the determinants of service quality in HE-institutions. Cuthbert (1996) also analyzed that the various kind of impact which the service quality have on customer’s satisfactions and find the customers in hotel and education industry play a key role towards students’ satisfaction. The more the service quality the institution will have the more customer satisfaction. Similarly, Sultan (1995) also explored the service quality of HE-institution using the SEVQUAL the measure the performance of these institutions and found that HE-institutions are competing on the basis of services being provided by them. The results demonstrated that the adequate service quality encourages the satisfaction of customers, which in turn improve the financial as well as the sort of over all performance represent by the organizations.

DeShields et al. (2005) have documented that the impact and associate link of the service quality with and on students’ satisfaction in HE-institutions and found positive and significant covering relationship of the service quality with students’ satisfaction. They argued that higher education should focus on their management while creating and getting profit making institutions. Therefore, it also needs to utilize the marketing principles and strategies with the sole aim to get some competitive edge over their competitors. So these are the basic principles which are mostly use in capturing the competitive advantage and competitiveness exist because of the more assurance of service quality. Brown et al, (1996) have predicted that the results of his study based on the correlation between the kind of service-Q and cust-satisfaction.
The result documented that there is positive relationship between S-quality and customer satisfaction. He believes that service quality can be vital to find out the strength and weaknesses in its service quality mechanism and assured that these institutions enter into competitiveness because of the competition based on service quality in these higher education institutions. Nadiri (2015) also argued that measuring the magnitude of the S-Q using the reliability, empathy, assurance, responsiveness and tangibility is very much necessary for the bigger organizations. These service quality dimensions have rarely effect the satisfaction level of the customers. Baron (2000) demonstrated that service quality is very vital for the organizations like higher education institution. Hence continuously improving service quality means an attempt of improving service quality, means an attempt of encouraging customer traffic and their satisfaction and most importantly enhancing the sales and profitability. Gruber et al. (2010) explained that service quality is very much important for the satisfaction of the students. The finding provided that quality in services is vital as it enhances the satisfaction of the customers and force customer to exhibit the same purchase behavior. Cuthbert (1996) also analyzed that the impact of service quality on customer’s satisfactions and find the customers in hotel industry and education institutions and argued that competition there in services quality in these institutions. The more the service quality the service provider has the customer satisfaction. Sultan (1995) conducted study using the SEVQUAL the measure the performance of the airline business. The results demonstrated that the edquate service quality encourages the satisfaction of customers, which in turn improve the financial performance of the organizations. He believed that more quality services and quality product can be useful in maximizing the company market share and speedy growth.

Keeping this in view, that when an organization has good strategy to accomplish its core objectives and provide the quality services to the customers with respect to customer value chain management perspectives so the organization will preferly gain its competitive edge over their competitors Hill (1997).
2.4 Students as customers’ satisfaction and related theories

The environment of the higher education has been affected by Marketization. We need to know that what is Marketization? The terminology of Marketization can be explained as the institutions of higher education which use the marketing practices. There are many factors which led the approach of Marketization. Some of these factors include the raising market competition, reduced government financing and the raised education cost. There are many options with students for selection of institutes and hence the higher education institutions needed to have a different marketing approach to captivate students and retain them. We can obviously claim that there is a customer focus in higher education as marketing is well established in higher education. Drucker in (1954) indicated the sole reason of a company's existence in the competitive environment is satisfying their customers, adding the argument that marketing is the overall business if it is seen from the viewpoint of its ending result which is the customer's satisfaction and their loyalty. Organization which are market-orientated would obviously agreed to Kotler's (1977) argument which described a market-based orientation as intention on satisfying needs of their customers.

Institutes in today’s global environment and profit based businesses universities are constantly redesigning curriculum, offering new courses, and modernizing facilities to meet needs and demands the students. Universities spend too much time in observing industry demand and forecasting market share in form of anticipated admissions, as they are more market oriented as before. They try to satisfy students’ ‘needs and wants’ while attempting to mold their minds, thus clarifying that universities sell their services which they call products to the students which they call customers.

Even though it is accepted that higher education has many more customers and stackholders (who have an indirect influence over the organization like employees, suppliers, government and society). But Ostrom, Bitner and Burkhard in (2011) state that students are the basic customers because the institution most directly serves them. Further more Motwani and Kumar (1997) cited in Mark (2013) said that students are those one whom the higher education institutes most directly services. So they should be given preferred intention as a basic customers. Cuthbert in (2010) states that taking students as the customers of the university is a real result of taking Marketization as a serious focus in higher
education. (Mazzarol, 1998; Ostrom et al., 2011) said that higher education is a service (servicing students). (Khanna et al., 2014) States that higher education should be taken as an experiential services which are explained by Voss and Zomerdijk (2007) as those services in which the main intention is on the experience of the customer while collaborating with the organization, instead of only reaping the benefits from the delivered products and services. Education should be seen by this way of view and we can say student is also a customer.

Guolla (1999) has documented that there is a very small debates over the importance to the student’s satisfaction that shows the concise sense toward student’s satisfaction which is quite ambiguous to perfectly high light the issue of customer satisfaction. While others researchers have analyzed that from the services of marketing and his previous findings or literature shows that customers are being satisfied when they would generally receive quality regarding the sort of services which are closely related to their needs and demand as they perceived (Hill, 1995). While in higher education sectors the students’ satisfaction arises their pre-determine performance match or cross the students observed expectations (Mark, 2013). Basically the customers (students) focus on the services of quality performance, as compare to give such attentions the performance and other experiences they observed (Wright and O’Neill, 2002). Wilkins et al. (2012) argued that the students’ expectation can be directly influences on their sole needs and communication from the concerned academic deportment or institutions. As when they have seemed the concerned institution attitude pleasure and friendly with their students so it can positively motivate the students as well as their parents and peers. Parasuraman et al. (1988) have created the most important tools for the measurement and comparison of the service quality these are called the determining scale of SERVQUAL tools which are mostly used for the measurement of S-quality. Hence it is a little bit criticized while showing the weak reliability and the validity in a given construct (clemes et al.; 2007). While Cronin and Taylor (1992) have also created a tool for the measurement of customers experiences but it also rejected due to the ignorance of customers’ expectations. There are so many researchers they documented that SERVPERF do better job than SERVQUAL (Clemes et al.; 2007).

It is a very controversial and critical issue since it the beginning that students’ satisfaction is very much difficult for the educational sectors institutions and as well as
for the educators since the origin of the formal educational mechanism (Bloom et al., 1993). While the concept of theoretical model starting from the modern day of study as that was no longer exist at the early stages of man civilization in 1970 century (Ramirez & Lyon, 2012). As at the early of 1970s different kinds of efforts were adopted to analyze the students’ satisfaction Bayer et al, (1968). Hence the study aims were to know about the students’ individual capabilities as compare to their response toward their university or college environment. Therefore, the satisfaction of students was mostly highlight in terms of the students’ characteristics their self-attitude and response (Tinto, 1993). While studying the past as the mid of 1960s and 1970s there are many systematically organize attempts were made to determine the concepts of satisfaction framework that comprises the students’ movement toward their institutions are common (Spady’s et al.; 1970). While studying the same literature spady have suggested two model system to each university and college that there should be two separate systems block in each academic institution i.e. academic and social, he argued that these two factors directly influence on the satisfaction of students. While intellectual and grade development are also related with this literature. As after passing the time latter on spady’s explanations and studies another steps were taken by other researcher that there is the student’s institutional relationship with their peers. So as on 1970s the introductory stage of the terms satisfaction is to explain students’ existence comprises the idea that institution expand the responsibility in falling students’ decisions regarding dropping out (Habley et al.; 2012). As there are so many studies have conducted to elaborate the students’ satisfaction with respect to their environment as when there are a well-qualified, well experiences staff are available to the students in their schooling environment so it can defiantly increase their satisfaction toward institutions and positively motivate the students (Astin et al.,1984). Hence the conceptual and theoretical frameworks of these models are quite different, the writer of the concept of satisfaction have focus on that when there are the desired needs of an individuals have completely or some partially gain as accordingly they have satisfied from that service so same as for the students’ satisfactions when the students obtain a higher marks and or a good grade they fell their self-satisfied from the services provider by that institutions (Van Gennep et al.,1977). while the main center of this study was on the individual students or personnel attributes and shortcoming, so therefore the mix of new additions to the field of early starting in 1970s, so
all of these studies are collected from various sources as from sociology, psychology, organizational behavior (Guolla et al., 1993).

2.5 Service quality and Students’ Satisfaction in higher education institutions

The idea of customer satisfaction is very difficult to realize due to the various kinds of elements that it might effects. There are so many research scholars who focuses on the various assumptions of students’ satisfaction. They argued that students’ satisfaction is a psychological and cognitive process. They have seated some generally accepted guidelines and definitions toward the students’ satisfaction but they have not quite agreed at all due to complexity that students’ satisfaction is a cognitive process and it cannot be easily accessible on range, while In facts that students satisfaction is very important management elements to avail the highest degree of academic experiences and focus on their core objective in a higher valuables learning institutions. Hence there are so many ways to measure the satisfaction of students with respect to their enrolling institution and their leaning procedures. There are different kinds of institutions and some other types of academic branches which offers the various academic career opportunity to the students on students’ form. While all the institutions are different in the data gathering measurement they have to imposed on (Ramsden, 1991). So here to regularize though there is no consensus on this issue regarding its definitions, means students satisfaction as the multi-dimensional nature of customer (students) satisfaction is mostly communicated with, whether for whatever service is they offer in common or for higher education in peculiar (Hartman & Schmidt, 1995). Baron (2000) demonstrated that service quality is very vital for the organization. Hence countinously improving service quality means an attempt of improving service quality means an attempt of encouraging customer traffic and their satisfaction and most importantly enhancing the sales and profitability. Gruber et al., (2010) explained that serv- quality is key factor to encourage the cust-satisfaction. The research finding provided that the quality in services give customers’ satisfactions and force customer to exhibit the same purchase behavior. Cuthbert (1996) also analyzed and fostered the contribution of the variables discussed in this study ie SQ and CS and found the customers in total industry purely prefer quality in services quality attracted with the main product. The more the service quality the service provider has the more will be the customer satisfaction. Sultan (1995) conducted study using the SEVQUAL
to measure the performance of the airline business. The results demonstrated that the
edquate service quality encourages the satisfaction of customers, which in turn
improve the financial performance of the organizations. He believed that more quality
services and quality product can be useful in maximizing the company market share
and speedy growth.

Hence, the main concentration with respect to the idea of student’s satisfaction
regarding the higher education is that there exists the multi-dimensional quality. So
the idea of customer satisfaction has been analyzed in different ways by (Hausknecht,
1990). The same kind of findings was obtained by Giese & Cote (2000) and Wiers-
Jenssen, Stensaker & Grogaard (2002) also explained it in the same way. While a
modification of the early beginning of customers’ satisfaction reflecting students was
projected by Elliot et al. (2001) who has investigated that the students’ satisfaction is a
very short-run cognitive process that upshot from the analysis of their recent contents
with the educations’ services and other related elements as they are generally accepted.
While Seymour (1993) have argued that the most of the satisfied customers usually
represent the students studying in different universities and their parents, the alumni
and other types of employees serving different organizations and firms. Therefore, to
focus on the increasing of students’ satisfaction at schools and colleges or universities
level as they are very critical processes to developed the customers’ values and
satisfaction. Bolten (1998) has documented the association among the customer
retention, and willingness of customer satisfactions. While his study argued that
modification in the customer satisfactions can have so many crucial and monetary
significance impact on the firms due to its long-term receipts. Students (customer)
satisfaction is not only showing the relationship with customer trueness, but also
impact on the corporate image, corporate goodwill and as well as the reputation of
brand (Oliver, 1980). Selnes (1993) also dumented that it boosts the goodwill and
reputation of the firm. Anderson et al (1994) also got the same kind of results
regarding service quality and student satisfaction. Some other researchers also follow
the findings of the above researchers (Johnson & Gustafsson, 2000). Johnson et al.,
(2001) also desperately provided the same kind of findings. Marzo-Navarro et al.,
(2005) have also argued that customers’ satisfaction shows the purpose to capture the
courses to others. Keeping that sort of things in view the above arguments and

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findings which are pertinent to researchers it is concluded that the student satisfaction is the key consideration for all universities’ top level authority. Students’ satisfaction can be measured with the help of following set of questions from students:

1) Am I satisfied with my decision to join this institute?
2) If I make the choice to take all over, so I will remain enroll to this institute?
3) My option to take enrollment to this institute is wise turn?
4) I will be happy on my decision to enroll with this institute?
5) I have make the right decision when I wants to decide to enroll in this institute?
6) I am pleasure that I enrolled to this institute?

2.6 Market competitiveness and competitive analysis

Competition exist in every field of life and typically in services sector it is found on a huge scale. Companies and firms compete with their products and politician competes for votes. The results are that the competitor people in common workforce work challenging and that improved persons, or product can be introduced and compensated accordingly. The worth of competitions in economic and social executions has been widely unquestioned since the development of modern-day neoliberalism in the 1989s, based on the economic and philosophical recording of Hayek and Friedman (Friedman, 1962; Hayek, 1973). Contesting in academic for realizing and encouragement is general. For a fresh academic it starts at graduate level study with contesting to achieve into a good university, where a student will develop his or her knowledge, skills, and competencies. It is also in this surrounding that by diffusison, Brain s. smith academics develop cognitions and worth that will serve them in their academic expertise (Wood, 1990). When stretch the post graduate level Brain S. Smith will desire out a supervisor who will turn as a mentor and role model reassuring him in his own communications beginning him off well in his self-career (Wood, 1990). In that career academics will busy in sequence until they are employed in a well reputed institution with a high quality of doctoral training, peer ship, and right to means. In the competitive surrounding of scientifically developed nations academics are bucked up to compete against each other to become experts in their field and concentrate over all of their struggles toward achieving advancement and enhancing salaries (Roberts, 2007).
The role of the Marketization in the higher education is almost totally different in today’s modern world than what it had few decades ago: All its activities going from advertisement to publicity, lobbing and financing, systematic and non-systematic activities, totally new dimensions are developed in marketing with attention on goodwill and brand name creation, attracting modern ways for finance arrangements.

Helena and Mirna (2012) Stetes that based on the core marketing principles of the business industry, the Marketization in higher education institutes, help the institutes while facing the challenges arised from the changes in internal or external environment and the philosophy is called “environment learning”

“which is customized to satisfy the recognized needs of the customers. In the context of marketing orientation, the process of higher education is seen as an exchange process where institutions offer different knowledge, skills and competencies, preparation for career, satisfaction and other benefits to their customers by using different resources, and in return they receive tuition fees, donations, time and energy from their stakeholders (students, funders, labor market). Due to the better choice possibilities of higher education service providers, students today look for value added: better service, program quality and value for money. If we consider that the major goal of higher education institutions is delivery of high quality service it is necessary, that all stakeholders cooperate in creation of such service which opens space for customer relationship marketing. In order to fulfill this goal higher education institutions, have to implement marketing on both strategic and operational level in order to create stable but flexible structure and system. However, it is still open for discussion: how well is marketing implemented in higher education and is there an efficient system and network between all stakeholders that enables organization and implementation of marketing orientation (Birnbaum, 2000). While talking about providing satisfactions to the students, it is essential that all public and private sector universities should understand the environment where they compete and apply all those stratasies to survive and beat the competition. These ompetetive analyses are very vital for every university and higfher institution to know about its position in this particular market.

According to Zahra and Chaples (1993) stated that competitive analysis is all about knowing the competitors in industry and knowing the strengthand weaknesses of
the competitors and than to make proper move to get an edge over others in the same industry. Moreevr companies and institution should use its intelegence unit should collect the data about its competitors and rivals and then to use the data of these competitors in their own decision making. This also can help the organization to discuss its capabilities and its occupying position in the market. There fore it is assumed that competitive analysis helps in formulating the organization’s strategies and provide a key foundation in this regard.

Competitive analysis can form the strategic analysis which helps in investigating the organization internal and external environment. The organization need to formally understand the industry where it operates and the other competitive positions for the reason to determine its competitive capabilities, strength, weaknesses and resources in formulating its strategies. Competitive analysis is mostly concerned with the organization’s external environment (Abraham, 2006). Competitive analysis encompasses the process of formulating strategic plans in variety of organizations, most often it helps in firm’s long term decision making. According to Stacey (1996) the rational process to select plans as per the rationale criteria helps to the acceptability of starategy for each organization.

Talking about competitive analysis, one should recognize the importance of it to the broader aspect. In this regard the very frist step is to the structure of the industry and then to analyze the market. A market is founded by customers who have same need and therby organization providing the same specific product or service they demand. The boundary of these markets is fouded by the closeness.

After been through the industry the next tuen is that of the analysis of the market by analyzing the market and to determine the factors that can influence the over all structure of the market. Keeping this in view there can be found a lot of factors influence the market. In order to comprehend the market analysis researchers, do and conduct the Porter (1980) five factor model in this regard. The different forces of this model are the bargaining power of the buyer, bargaining power of supplier, threats of the substitutes, threats of new entrants and the rivalry among the competitors. Porter’s this work really built a kind of structure, conduct and established a paradigm of industrial organization economics. The pure essence of this
model contains the market and determines the state of competition in the market and then sets the context of strategy for the organization. This helps to determine the structural forces (five forces), which determine the mean profitability of the market and tells about factors that effect the corporate strategies and profitability of the organization.

In nut shell the competitive forces helps to determine the power competitors have and the type of competitions they are in, and the forces which help them to achieve competitive edge as compared to others in the market place.

Competition is having a kind of positive influence on firm’s performance, but its relationship is complex one not the simplest one. Firms which have around only three competitors can be termed as three competitors or monopolies. In such a situation the dominance of the market is based on the sales growth and market structure, as such a situation will have a positive impact on the firm’s value and reputation.

Analyzing all these forces and making their relative importance can be seen that how these firms deal with these factors. Once mangers analyze the market then they know about the position and dominance the firm has. The structural analysis by a firm is to bring the fit in its strategies and to better deal with the customers’ needs and want (Courtney, Kirland and Viguerie, 1997). Strategy by itself has largely been founded on a framework which was first conceived by Andrews (1971). Andrew defined strategy the ability of the firm it can in the particular set of market.

Based on this kind of framework, the managers and decision makers need to formulate logically needed strategies. Means that such actions should be taken need to make the strategy successful and therby get results of it. Therfore firms need to have certine actions to fulfill a strategic logic. These actions and plans include SWOT Analysis, The Life Cycle Analysis, the company’s value chain, Portfolio, industry and benchmark analysis.
2.7 Market Competitiveness and copetetiveness model for Service Quality in Higher Education

The elements of globalization in higher education (HE) is now well widespreaded and is multifaceted. The Higher education market is well established now then before and is a global phenomenon. In the recent time, there has been a drastic shift in the paradigm of governance of the higher education system around the world as in most of the countries where making strategies regarding higher education were limited now widely support such actions and strategies (Jongbloed, 2003). In most of the countries, marketization is referred as the compromise between privatization, academic autonomy and state control” (Young, 2002). Such kind of free regulations about higher education has been widely supported globally and governments have been forced to work out regulations in this regard (Dill, 2003).

The literature of such background specifies that the higher education market can be find well established in the shape of global phenomenon, specifically in the countries where English is the first language like USA, Canada, UK and Australia. In these countries the completion in higher education is very high and intense competition can be find (Binsardi & Ekwulugo, 2003) and it is also observed that marketization and the special deregulation regarding universities has widely emerged in US (Allen &Shen, 1999; Dill, 2003) and also the same kind of regulations have been made in Canada (Kwong, 2000; Young, 2002). The Student are very much desperate for satisfaction and mostly the students’ satisfaction is purely analyzed purely using the mechanism of the quality of education which is being provided to them and the same is distinctly being got from this sort of educational platform so called institutions. The sort of Quality of education in this regard means the essential criteria which help and assists students to get admission in the institution of their choice. Similarly, Shekarchizadeh, Rasli and Tat (2011) argued that most of service organizations including educational institutions to do well and outperform its competing institutions in respect to providing better services. Similar practices have been emerged in the UK (Middleton, 1996; Williams, 1997; Gibbs, 2001; Taylor, 2003). While, Australia has also taken steps to make its higher education competition more competitive (Baldwin & James, 2000) and similar attributes towards can be seen in New Zealand (Ford et al., 1999). However, some of the governments have also taken deregulatory policies, like

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in Japan it has been promulgated (Arimoto, 1997). In Russia the deregulatory framework has been adopted (Hare & Lugachev, 1999). The Eastern countries have been also worked out the regulatory plans in higher education institutions (Czarniawska & Genell, 2002), Holland also have taken steps for the globalization commitments in higher education (Jongbloed, 2003). Spain has also taken serious steps in this regards (Mora, 1997). Israel has also taken similar steps of its higher education set up (Oplatka, 2002) China too emerged as a great mover in this regard. In response to these changes, to have value, effectiveness and potential benefits most of the universities around the globe have taken these marketing strategies for the reason to have competitive edge and to gain a huge market share in both national and international market. Rasli and Tat (2011) argued that most of service organizations including educational institutions to do well and outperform its competing institutions in respect to providing better services. The determination of both global marketization and privatizations of higher education is essential to be understand (Arimoto, 1997). Kwong, (2000) also have the same feeling. It has also been discussed in the context of many instances and has got the importance in institutions both nationally and internationally (Conway et al., 1994; Farr, 2003), and most of the funding issues (Brookes, 2003), and that most of the widening contribution or social subdivision (Reay et al., 2002; Farr, 2003).

Researchers proved that an individual institution need to have analysis of the factors to understand the consumer behavior and the higher education market and that these institutions have to understand the students’ choices to deliver better than the competitors (Foskett & Hemsley-Brown, 2001) Such frameworks are formulated in UK and Australia. This is a kind of attempt by the government to appraise and uplift the quality of higher education and to improve the environment to make perfect information available to students in the prevailing education environment (Baldwin & James, 2000). But as most of the work in higher education has been conducted on marketization, consumer behavior the education institutions have to work on the supply side. Therefore, in the current scenario universities need to equip it to meet the students’ expectation and satisfy their demands and foster higher quality education, which is the demand due to internal competition in this market (Binsardi & Ekwulugo, 2003).
Based on the above review it can be argumented that the higher education marketing literature is incoherent and mostly lack the theoretical models and framework which reflect the kind of services these higher education institutions provide in their service both in long term and short term. Further, we assume that research on HE marketing the same despite the differences from simple service organizations. It can be best explored below.

Interest in competition has contributed in the 21st century to a revival of competition studies, including those that focus on measuring its intensity, while literature on competition in higher education sector clearly demonstrates that cooperation is a mean to reduce the intensity of competition (Czakon and Rogalski, 2014). The Stud-satisfaction most often is sort of analyzed purely bases used as the education quality being provided to them and actually are being received from various educational units. Quality of education in this regard means the essential criteria which help and assists students to get admission in the institution of their choice. Similarly, Shekarchizadeh, Rasli and Tat (2011) argued that most of service orginations including educational institutions to do well and outperform its competing institutions in respect to providing better services.

The effectiveness and potential benefits to have in the market place most of the educational institutions applying models and theories to have a competitive advantage over others and to have huge market share in the existing educational market (Williams et al., 1997). Similar findings were documented by (Mok, 1999). Gray et al. (2003) also predicted the same thoughts. Ivy (2001) also augmented similarly. Some other researchers have the same feelings (Maringe & Foskett, 2002; Maringe, 2004). Service quality has got importance as a lot of competition has been emerged in the field of education. As both national and international educational institutions competing in the same market (Conway et al., 1994; Kemp & Madden, 1998). Similar findings were documented by other researchers as well. DeShields et al. (2005) have documented that the impact of higher education on service quality is positive and significant impact on each other. They argued that higher education focuses on his management while creating and getting profit making institutions. Therefore, it has also needs to utilize the marketing principles and strategies with the sole aim to get
some competitive edge over there competitors. So these are the basic principles which are mostly uses on capturing the competitive advantage.

2.8 Value Chain Analysis in Higher Education

Van der Merwe and Cronje, (2004) introduced the educational value chain concept, defining as a "graphical tool" that might be used by developers while re-engineering efforts for defining possible obstacles that seems to be occurred, and also providing a way to be followed while identifying elements of value added by the use of technology. A high level process model is usually used by the developers which is defined as the model which delineate all the basic processes and their correlations for completing the objectives of high-level for model action/exertion. The researchers noted that the processes which are the part of an educational value chain must should include the essential processes of high-level which are considered necessary to obtain a pre-settled output. With the great intention on output results, they given some steps as a route to find out the value chain.

In these steps first of all we should define output or scope which will be the main intention of value chain. Then recognizing a requirement's abstract methodology which will focus on identifying the processes of high-level in the domain of application. Then go to identify the processes of high-level within the context of application domain. Once you identify, the next and last step is using the developed model of high-level process in order to acquire the arrangement of processes which are needed to get a pre-settled output.

2.9 Industry analysis through five forces model

This model is considered the modified model of this study so; it is being elucidated in detail.

Michael Porter was considered to be the pioneer author who familiarized the word of competitive advantage to the terminology of the profile of strategies and discipline of strategies. Primarily, it was a bit confusion for the researchers and other acadimications who want to know this word (Markides, 2000) since, it has been used by different researchers in different set ups and they argued that it makes sense when different industries and markets get competitive dynamics when different firms in industry try to have value added activities and best combination of products and services. Barney (1991) argued that the practices of competitive advantage and to have value in the market place exist when firms doing well as compared to the
counterparts and not been yet used by competitors. He also documented that some
time firm gets sustained competitive advantage when the firm out perform the market
with a combination of services and products not being duplicated and imitated by the
competitors. Such a practices realy give firm more profitability and reputation.
However, Barney (1991) argued that their possibility exists when the competing
firms involve in more innovations and creative practices which shift the market place
to a new space (Tushman and O’Reilly, 2004). Kim and Mauborgne (2005) also
found the same feelings, believing that proper innovation can effect the firm’s
competitive advantage. For this purpose, to be in the market with competition a
company should make analysis. For such firms in intense competitive market should
have a strategic analysis fram work which can help them to find out about the
competing firms. To have strategic analysis framework different firms have different
strategic choices from which a firm can understand and can use one of it. Among these
kind of available strategic framework, the most used one are the SCP approach, the
porter mechanism and the VNM model. The Structure kind of Control Performance is
usually used to make the industry analysis for the reason to have a moredetailed view
of the industry (Fu, 2003). Mason (1949) have used the SCP for the industry analysis
and (Bain, 1959) also based analysis on the same model. Goddard (2005) has also
worked on the same model. It means that this model analyse the structure of the
market, the company’s conduct and the performance of the firm.Ajlouni (2010) also
argued the firm’s conduct is very much vital as it effects functionality of the company
in the market place, which then impact the performance of firm. He farther argued tha
firm’s conduct is very essential to uplift the company performance. So it is assumed
that this model comprised of three steps. In first step the firm go for structural analysis
where it analyzes its distribution, size, slae, purchasers and other things. In second step
the firm analyze the behavior of the company in term of the different strategies it has
for the pricing, R& D and other policies and the third step determine the performance
of the firm in term of its profits, growth and other efficiency measures. The SCP was
considered to be the best model till 1980 as it was based on empirical based than
theoretical based. (Slade, 2003). Therefore, it has been observed that this model has
certain shortcommings and a lot more criticism on the empirical evidence of this
model.
This model was found to be in hard water due to the fact that it is difficult to analyze the firm in respect of all these three factors. Criticising this model, Schmalensee (1990) came up with new model i.e New Industrial Organization (NIO) in which most of focus was put on the strategic conduct. The Game theory was the one considered amongst the other theories which are used for the decision making, relating to the different determinants of the industry and he argued that there are internal strategies which can effect the firm... However very huge number of economists criticized the model (Goddard, 2005). Thus, inspite of the rapid growth in Industrial Organization, the Porter’s model was formally applied which is called the five forces model of porter which further elaborated the above mentioned model and add new parameters to this model and is widely used in industry. The author documented that it can effect the outcomes and productivity (Goddard, 2005). Porter (1979) developed a model which contains all the factors which influences the structure of the industry. This model spotlight the structure of the industry and the market which can be affected by various factors i.e the new entrants, the supplier power, the bargaining power of the buyers, substitute threats and the kind of rivalry. As said by Porter it is assumed that the more tougher will be these factors the more likely that the firms will have more competition in the market and if it is not there than firms will earn a lot and very limited competition will be there in the market place. Kevin Coyne and Somu Subramaniam (1996) also determined that the five forces model can be vital to explore the industry competitiveness and argued that all the five forces mentioned by porter can be vital to analyze the industry and competition. Mintzberg (1994) argued that the future of any industry can be predicted from the environment of that industry as it is assumed that the technological innovation with passage of time can also effect future of the industry.

As per the above literature the external environment is formulated on the basis of five forces which accounts for economic, political, technological, legal and environment. This can be vital to affect the firm and its performance (David, 2001). Hill & Jones, (1995) also argued about these forces to be vital for the company. Pearce & Robinson (2000) have also the same kind of feeling to this concern. The main goal and reason of the Competitive analysis predicts the through understanding regarding the competitive forces which can be find in the environment of an organization. The
organization can be find form its competitive position in the industry, which can be revealed from its competing paradigm (Oxenfeldt & Schwartz, 1981). To know the competitive environment is very necessary as it help the firm to formulate strategies accordingly (Porter, 1980).

The aforementioned forces should be considered as of stress or dynamics to compel to run. The model does not specify the systematic forces of external environment which would influence the whole industry in a same way such as change of government rules and regulations, International environment or Technology change. Another defect is that instead of the forces individually influence, the effect on an organization is determined in the model by the collaboration of the forces (Turban, Volonino and Wood, 2013).

2.9.1 Threat of entry of new competitors

Entering in an industry as a new corporate body is a very difficult and costly action. Usually those industries attract new competitors to setup business there, which are less costly for setting up a business and there are huge margins for profit earning. These new corporate bodies then attack on the already settled businesses and endeavor to cut off them, also hurting the margins of profit across the overall industry. The threat of new entry is specifically more strong the company enters in industry through Diversification phenomena using expand strategy. In this case the company just alter the industry using their already existing abilities, skills and cash flows for entering in new sector of business (Porter, 2008). These industries have some protection from the threat of new entrants, which based upon the complex ISs.

Universities management should answer following questions for having competitive advantage

a) Universities establishment requires big capitals in the shape of Endowment fund and Working Capital
b) University requires to have classrooms, laboratories and sufficient number of academic staff in different specializations
c) The university is known for the point of excellent academic type programs and also known for the exact level of reputation that usually attract the students traffic for enrollment.
d) The university will reduce fees for students as marketing penetration strategy in the presence of the determined entry of class universities into higher education sector

e) University has variety of academic programs

f) University has multi campuses

2.9.2 The bargaining power of suppliers

When the firm or its brand name are strong and when the consumer or buyer of the firm's product (who might be a retailer or a big company) purchases the company's products in bulk and huge amount, the firm can be said as in a powerful position to negotiate and securing a profit of high margin through high price rates or best condition or terms. Some important areas are given below which must should be accentuate by the management of the university (Porter, 1980)

a) The total number of Supplying firms which takes part in giving the furniture and technical tools to the university which are widely used in teaching.

b) To provide books and scientific references in large to the university, the number of publishing house also should be emphasized.

c) Curricula is given by the teachers which should be clear and easy in understanding and the quality should be high taken from different publishing houses.

d) To give its services relating to higher education for the students of undergraduate, the university based on high academic degrees.

e) There are always some teachers in the university who have differences in academic titles, university can be run easily without them.

f) High-quality Curricula is written by teachers which usually used in teaching.

g) For delivering services of education to undergraduate students, enough number of PhD degree holders are available there at higher education sector.

2.9.3 The bargaining power of customers and buyers

There is a new development of technology or the product which can be used as alternative directly to the products which are currently existing. It usually forces the other competitive firms to decrease their existing products rates if they want to compete and survive. (Examples are taken from the book; Kindle which replaced Nook and Fax has been replaced by email). Ajlouni (2010) also argued the firm’s conduct is very much vital as it
effects functionality of the company in the market place, which then impact the performance of firm. He farther argued tha firm’s conduct is very essential to uplift the company performance. So it is assumed that this model comprised of three steps. In first step the firm go for structural analysis where it analyzes its distribution, size, slae, purchasers and other things. In second step the firm analyze the behavior of the company in term of the different strategies it has for the pricing, R& D and other policies and the third step determine the performance of the firm in term of its profits, growth and other efficiency measures. The SCP was considered to be the best model till 1980 as it was based on empirical based than theoretical based. (Slade, 2003). Therefore, it has been observed that this model has certain shortcommings and a lot more criticism on the empirical evidence of this model.

In the very fast competitive industries the organizations are compelled to minimize their margins of profit because of increasing the amount of investment in advertisement as well as promotions, R&D, CSR and some more actions to get a competitive advantage. This force is placed in the middle or center of the model by mekael Porter because of the reason that it is affected or output from all other forces (such as new entrants, bargaining power of buyers and bargaining power of Suppliers etc). The university should answer the below questions( Porter, 1980)

a) Current level of competition in Khayber Pukhtoon Khawah just because of lot of universities which are offering services of higher education.

b) Ensuring the available capacity, skills and resources of the university suits only the academic departments.

c) If the university is going through a financial recession for covering its expenses so government would support them financially.

d) Whatever the demand and cost of demand is, the university should have a continuation strategy in sector of higher education always.

e) What would be the effect of other local institutes on the level of study fees of the academic program in universities.

f) Other local institutes renders high quality and many types of academic programs to students.

2.9.4 The threat of substitute

A kind of new technology as well as product being developed is likely to replace by any of the substitute product, which will definitely force the companies to lower down the schedued prices to be in the environment of competitive. For threat of Substitute University management should answer following questions: (Porter, 1980).
a) Access to Online degree universities  
b) New for-profit offerings  
c) Training and seminar companies  
d) Corporate universities  
e) Distance, open and e-learning  

2.9.5 The competitive rivalry among the existing firms in the industry

In the very fast competitive industries the organizations are compelled to minimize their margins of profit because of increasing the amount of investment in advertisement as well as promotions, R&D, CSR and some more actions to get a competitive advantage. This force is placed in the middle or center of the model by mekael Porter because of the reason that it is affected or output from all other forces (such as new entrants, bargaining power of buyers and bargaining power of Suppliers etc). The university should answer the below questions( Porter, 1980)

a) Current level of competition in Khayber Pukhtoon Khwah just because of lot of universities which are offering services of higher education.  
b) Ensuring the available capacity, skills and resources of the university suits only the academic departments.  
c) If the university is going through a financial recession for covering its expenses so government would support them financially.  
d) Whatever the demand and cost of demand is, the university should have a continuation strategy in sector of higher education always.  
e) What would be the effect of other local institutes on the level of study fees of the academic program in universities.  
f) Other local institutes renders high quality and many types of academic programs to students.

![Fig. 2.4](image)

Porter five forces Model
This model has been developed for the forces that effect the competition in the industry by Micheal Porter (1980) who represent Harvard Business School at that time. He concluded that these five forces are very much important for industry competition.

(1) He argued the the rivalry in competitors build the competition pressure.
(2) The companies’ various techniques, attempt to get customers from other industries for the reason to motivate them to its own brand.
(3) The new competitors can build pressure so call the entry of new competitors;
(4) The firm can be effected by the supplier bargaining power of the supplier.
(5) The buyers can also a key influencer in this regard (Thompson & Strickland, 2003).

2.10 Porter’s Competitive Framework (industry Analysis)

In today's competitive business world the environment is very much vital for firms in which they compete and focus on all those factors which effect their performance and also look at the capabilities of the competing firms (Ireland, Hockessin and Hits, 2011) therefore, it is always advised for firms to keep focus on the sustaining the strength and to focus on the competitors in this regard as well which will be a fruitfulful attempt and immediately competitors will look for the industry environment and to get advantage of it. According to Grahm, L (2005), a knowledge of competitive slashing is commonly viewed as an important commencing point for successfully strategic formulation. Hence there is so many strategic frameworks exist that are very crucial for conducting the competitive analysis. While the key ingredients to this analysis is the strength weaknesses opportunity and threats for accessing to Porter’s five forces models. The Porter competitive frameworks are the frameworks that used to analyze the firms with four ingredients which are as; the future goals, the current strategy, assumptions and the capacities where the future objectives are discussed i.e, that what to be obtain for the competitor, discussing the firms’ current strategy toward setting of the plan for competitors. So these objectives would be held by the firms to achieve their goals and focus on their capabilities such as the internal factors i.e. strength and weaknesses and to defense the external influences that are usually comes as opportunity and threats (Porter, 1980). Therefore, this is one of the most important issue usually faced by the present day researchers is to negotiate and
analyze the factors of competitive analysis frameworks. In today the researcher have stressed on the competitive analysis. While the most difficult element is the analysis of competitor at a corporate or industry level. (Tsai, Su and Chen, 2011). A pool or number of studies have been analyzed on how the competitor can be judged on at a firm’s levels or a corporate level. Porac (1995) documented the cognitive model which are usually created where the firms have to analyze its competitor’s action and reaction to decide on its strategy based on analysis. Baum and lant (2003) have also documented that the existence on geographic location, price and size are enough for a firm to have an idea about their competitors. While chin (1996) presented a different view about competitor analysis based on market similarity and availability of access resources. But some earlier researchers have found that the two firms’ concept could be difficult to investigate the competitors’ analysis. So the Competitor’s analysis are very crucial for each and every corporate or firms because there are various gaps which the firm’s might not fore-seen usually while deciding about the competitive decisions toward firms strategy. While Zajac and bazerman (1991) have also argued that the association among the strategic decision making towards competitor analysis and setting the name for this space as “the competitive blind spots”. They analyzed that how a wrong assumptions of a company about its competitors may effects blind spots. Rothdchild, (1979) investigated that where the firms are missing too much link while competitors and what are the questions to be posed for a suitable competitor analysis. Tsai, Su and Chen, (2011) have demonstrated that the acumen of the competitor is very much much vital in competitive analysis, so the firm should know and understand its competitors in the market place. Many researchers have documented the above has to challenge the porter’s framework but they have failed to do so and the results have same prominence as to porter’s framework. But there were a great challenge which faces by the competitive framework. Is Porter discuss that when the competitor analysis are done? This will definitely cover the element demonstrating the versions of swot analysis and encourages to deliver for the competitors as well and would proceed to better results in this regards. Keeping in view this type of analysis, it is assumed that such analyses are private in nature and are disconnected with the truth and reality. So this analysis encompasses the strength and weakness as of the porter’s determining framework and the opportunities and kinds of
threats have also discussed in this sequence accordingly. Thus the porter model is the vital one if its limitations are ignored.

2.11 Implication of Porter Five Forces in Higher Sector

Competition survive when various suppliers of a service available in the existing marketplace, who all must match to the identical and lawful rules, regulations, to meet consumers as well as society demands. In porter's five forces theory shows that when there are more competition between suppliers, the prices which a consumer pay for the various services must be lower. While in addition, providers must gain a profit which would be a bit lower, which would be only based on the efficient one. So the higher education sector the children and parents are the consumers and the education suppliers are the different colleges, schools and universities. There has been noticed high class productivity in these institutions with much more outcomes.

2.12 Related Empirical Studies

The rapid infusion of technology and changing sources of energy has drastically changed means of communication and communication technology that has dramatically changed the global economic environment (Tofler, 1978). The new global competitive landscape characterized with shorter cycle relating to product, the rate of its acceleration and the various kind of changes have made competition intense and Aveni (1997) went further ahead and termed the ongoing competitive landscape as “hyper competition” due to accelerated pace of innovation. The company strategy regarding competitiveness is based on its determining environment (Porter 1980). Michael porter’s Industry Analysis framework (Porter, 1980) provides a checklist to analyze the competitiveness level of an industry and Porter (1980) Diamond Model suggests actions for the leadership to improve the environment. Porter believes that besides the factors of endowment (Porter, 1980). In this particular era of intense competition in the field of education and academia carrying many options for students to have many options to avail nationally and internationally and so the students’ attraction, satisfaction, retention and loyalty are major apprehensions for an educational institute (Brotherton, Rockey, & Etzel, 2005; Cervero, 2000). To address this challenge, extensive review of literature revealed that sustainable competitive advantage can only be possible through quality services; means how well the higher
According to Hanaysha, Abdullah and Warokka (2011), to address the apprehension as mentioned above, universities need to build and maintain strong relationship with their primary customers through quality services. Despite the realization of its importance, researchers and scholars found it difficult to properly define and measure the concept “service quality” due to its unique SERQUAL model (Muhammad Butt & Cyril de Run, 2010; Nadiri, Kandampully, & Hussain, 2009) the various industries profitability are purely and mainly based on the pillar of five forces which can effect (Porter, 2008); which are well known forces we consider and read in the book of strategic management also called the five forces model. Hence, to attain, maintaing and a kind sustaintion for its competitive and core advantage, is the need of every organization. And for this the organization needs to keep its people, structure, system and processes aligned with its strategy. Unless this strategic alignment is not done in its true perspective neither the organization can stay competitive nor achieve its goals in productive manner thereby doomed to failure. Porter is right in claiming that a firm can only be in win- win position once it has succeeded in attaining and sustaining its competitive advantage either on the face of industrial forces or factors conditions (Oguto, 2015). It has been historically evident that the development of societies has always been directly linked with the educational development. Within the education sector HEIs have been mainly responsible to formally equip individuals with appropriate modern advanced knowledge, which can help the employees to better perform both in these sort of universities representing the domain of public as well as sector organizations (Farhat, 2011). Today’s unprecedented competitive era puts an ever-growing pressure on an individual to have sufficient and contemporary skills and capacity to meet the core expectations and need of the knowledge economy (Sutton, 2017; Carnoy, 2014). Until the 1930s, higher education institutions are traditionally very much limited limited to determine the uplifting of the country economic development by simply and particularly enabling the kind of individuals to grasp market opportunities. However, over past few decades the fundamental restructure of economies created the dying need for the knowledge-intensive efforts and to encourage producing workers having updated intellectual and utmost professionalism.
to account for their development. In this regards the HEIs are mainly responsible for delivering knowledge based approaches to be an advanced unit in the developing of the society profile, Higher education can play a significant role to provide quality education (full of contemporary knowledge, skills and competencies) as a substantial key player in building human capital (Tilak, 2018; Escrigas, 2008). Higher education contribution establishes and develops the key resource that is considered indispensable for the country growth, uplifting, economic uplift and societal sort of development of a nation (Kapur and Crowley, 2008; Gordon and Whitchurch, 2007). Due to this most of the students are absorbed in the various sort of institutions and universities exhibiting the characteristics of private nature. This sector is mostly run as the business model and the authority lies with Board of directors and Chief Executive Officers, where faculty doesn’t hold authoritative or positions with less authority and the students are the main consumers. Owing to the shrinking funds, even public sector institutions are being asked to earn more of their operating expenses by generating their own revenue. Most often in these institutions the financial sources work as commercialization, which is a cause of conflict with the university’s traditional role. Therefore, the most current approaches determine that the users are one to pay for the fundings of these institutions. This all is going to make the Higher education sector earning oriented thereby highly rival industry where only fittest will survive (Qureshi et al, 2012).

Since 1970, World has witnessed a dramatically transformation of economic system from manufacturing economies to service economies (Grönroos & Ojasalo, 2004; Youtie & Shapira, 2008). Among various service sectors, higher education sector proved as an economic engine (H. S. Abdullah & Kalianan, 2009; Sultan & Yin Wong, 2010). By realizing its importance, education sector facing challenges and stiff competition for its survival in both public and private sector provisions (Abdullah Hokoma, Khan, & Hussain, 2008; Quintal, Wong, Sultan, & Yin Wong, 2012). The survival can only be possible by creating competitiveness that can only be possible through quality services; means how well the higher education institute fulfill the customers’ need and expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).

There is still a controversy around the marketing metaphor “customer” of educational institutes; we have a dire need to identify the true primary customers on
which educational institutes need to focus for their attraction, satisfaction, retention, motivation and loyalty (Jeevarathnam Parthasarathy Govender, Veerasamy, & Noel, 2012). Michaela and Antony (2007) categorized the term “customers of universities” that includes parents, students, staff, community, funding agencies and employers. However, the students are considered as a primary customer, because students’ satisfaction can lead towards the satisfaction of all stakeholders (Jeevarathnam Parthasarathy Govender et al., 2012; Jeevarathnam P Govender, Veerasamy, & Noel, 2014).

According to Hanaysha, Abdullah and Warokka (2011), to address the apprehension as mentioned above, universities need to build sort of very strong bound of relationship with their primary customers through quality services. The emergence of globalization and internationalization of educational trends drives the educational institutes to focus on the sustainable competitive advantage instead of short term influence, visibility and market share (Cervero, 2000; Hune & Park, 2010). To address this challenge, extensive review of literature revealed that sustainable competitive advantage can only be possible through quality services; means how well the higher education institute fulfill the customers’ need and expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).
2.13 Conceptual Framework

Service Quality
- Tangibility
- Reliability
- Assurance
- Responsiveness
- Empathy

Students’ Satisfaction

Competitive Analysis of Public and Private sector Universities of Khyber Pakhtunkhwa through Poerter’s Five Forces Model

Bargaining power of buyers

Intensity of rivalry

Bargaining power of Suppliers

Threats of new entrants

Threats of substitutes
2.14 **Hypotheses**

H1. Tangibility has significant effect on the students’ satisfaction.

H2: Reliability has significant effect on the students’ satisfaction.

H3. Assurance has significant effect on the students’ satisfaction.

H4: Responsiveness has significant effect on the students’ satisfaction.

H5: Empathy has significant effect on the students’ satisfaction.

H6: There is significant difference in tangibility of public and private sector universities.

H7: There is significant difference in reliability of public and private sector universities.

H8: There is significant difference in assurance of public and private sector universities.

H9: There is significant difference in responsiveness of public and private sector universities.

H10: There is significant difference in empathy of public and private sector universities.

H11: There is significant difference in the Industrial Rivalry of public and private universities.

H12: There is significant difference in the Height of barriers of new entrants of public and private universities.

H13: There is significant difference in the Bargaining power of the buyer of public and private universities.
H14: There is significant difference in the Bargaining power of suppliers of public and private universities.

H15: There is significant difference in the Threats of substitutes of public and private universities.
Chapter-3

RESEARCH METHODOLOGY

3.1 The Research Philosophy

This research is basically seeking to investigate multiple aspects independently. The prominent part is the first part and this reflects service quality and students’ satisfaction was based on primary data from students and was collected through questionnaires, similarly the second part of the research determines the competitiveness among the private and the competing sort of universities representing the public sector was also based on the primary data, collected through well structured questionnaire from respondent (administrative, faculty and non faculty staff).

Before presenting any well knowledged claim, a researcher seeks to find out the process necessary to get the work done on research along with obeying some of the particular assumptions related the analysis of the research work (Creswell, 2003). Researcher usually claims about the given facts of what the knowledge is (which is called ontology), what are already known and how (which is called epistemology), values which are used into it (called axiology), what is written and how is written about this ( called rhetoric) and the way or process of its study (called the methodology) said by (Creswell, 1994). The aforementioned claims are usually called paradigms (Mertens, 1998; Lincoln and Guba, 2000), are named as assumptions of philosophy, epistemology and ontology by (Crotty, 1998), and widely accepted as methodology of research said by (Neuman, 2000). What is a paradigm? We can explain it as " a group of correlated assumptions related to the world's society which gives the concept and philosophy based framework related to the well established study of that society" said by (Filstead, 1979). Choosing a good paradigm provides a clean image of (philosophy based assumptions, techniques selection instrument to be used, variables and methodology to be used in the work) to the researcher, stated by (Guba and Lincoln, 1994 ; Denzin and Lincoln, 2000).

Generally three schools of thought are used about the knowledge claims: these are constructive, positivism also called post-positivism, and the pragmatism school of thought. The founded assumptions of the research work of scholars such a Berger and Luckmann
(1967), Lincoln and Guba (1985, 2000), Crotty (1998), Schwandt (2000) and Neuman (2000) states that the Constructivism (which is also called the Qualitative research) is seeking to know the Universe by every sing individual where they are spending life. Depends on the meaning of their experience which is subjective (collective and multiple), the Constructivistic researchers goes through bringing complexity in views and opinions instead of minimizing the scope of meaning to a narrow Ideology (creswell, 2003). Hence, the main aim of the Constructive research is highly inductive in nature where the researcher collects meaning from subjective methodology of generation of data process (Creswell, 2003).

Positivism can be expressed as it find outs the data consistency analysis and Gamble on while using the research tools (Blaxter, Hughes, & Tight, 2006). Positivism is a deductive method (goes from conclusion to the particularity) which is used to approve or disapprove the research hypothesis (Green, 2008). Anyhow we links the positivism with the Qualitative research method (Blaxter, Hughes, & Tight, 2006).

Currently we are examining the quality service and nature of competition in company's of public and private industry of KPK for which we used positivism (the Quantitative Method) just due to the fact that positivism find outs the data consistency analysis and gamble on while using the research tools said by (Blaxter, Hughes, & Tight, 2006). Qualitative method of positivism is applied here. The framework for the positivism is developed and presented by lot of different researchers, but the most important scholar who took part is Robson (2002). He suggested 5 steps of the positivism research process.

The process is as, first of all deduct the hypothesis from theory, then express the deducted hypothesis in terms of operations, then check or test the deducted hypothesis. After testing hypothesis find out and analyze the result of the work and the last step is to alter the theory, if needed. The research can be said as positivism and meeting the criteria if it meets the below characteristics considered by Ester & Smith (2002).

a) There should be an independent data collector who will not take part as a population of the study.
b) Nonrelevant the sort of human interest might and should be there, where researcher should have no interest in the output and the responses of candidates of research.
c) Causality effect must should be evidenced in the description. The required relationship is approved by the regression and correlation analysis.

d) The hypothesis of the research must should be collected from the literature review which is already given in the work.

e) The overall framework should be operationalized which means all the research variables are expressed and measured in operational terms.

f) A most simple terms should be used for denoting the analysis unit, as here the analysis unit is used as all of these sort of universities of both types.

g) First of all, while using sample technique, the stratified random sampling tool have been used for the division of all universities into just two groups of private and public sector, then to select both candidates and students the simple random sampling has been used.

h) In this type of research the Statistical techniques are must to be used hence to the data analysis of the research, the Statistical treatment is given.

3.2 Introduction to Research Methodology

The first step of researcher is to explore the research question after examining and analyzing the literature related to the concepts and their associations. Thereafter, the variables are computed including in the kind of theoretical as well as conceptual framework. The questionnaire is developed by researcher with the help of operational definition of variables to gather the data for estimation. In order to test various level reliability and the kind of validity as a pilot study, the identical data gathering technique (questionnaire) is divided amongst the target population. An attempt is done to gather the relevant and appropriate data which closely shows the population mechanism which is used as a base for sample being representative after building the validity and reliability of questionnaire. Certainly, Social researchers and scientists duly rely and are mainly dependent on the descriptive research portray and design which tries to describe the prevailing state, design and relationship using the comprehensive sort of techniques to deliver results.
3.2.1 Aim of the Research

- Identify the service quality provided by private and public sector universities and to determine the satisfaction of the students.
- Draw comparison profile of competitiveness structure between public sector institutions and the private universities so as to identify prevailing gaps or lessons for each other.

3.3 Nature and Type of Research

Quantitative research includes different research kinds: descriptive, intervention studies and associational.

The research problem is examined and described by Descriptive research which summarises the various determinants and characteristics possess by the sample, their attitudes and other representing the issue or problem (Fraenkel and Wallen, 2000). Such type of organised information about the issue is likely to be collected with the help of content analysis and surveyor qualitative approaches.

The second general group demonstrating the quantitative research can be called the experimental study or may be termed as manipulation study (Fraenkel and Wallen, 2000), that gives permission to the investigator for introduction of changes in kind of people or the demonstrating kind of environments which apparently influence outcomes or particular results of interest. This technique is appropriate to test the theoretical type of associative models and exploring the concern or issue of causation (Fraenkel and Wallen, 2000).

By contrast, the type of associational research is obviously associated with exploring the nexus among the different variables (Fraenkel and Wallen, 2000). The pure ssociational research can brocken into two dimensions i.e causal approach and correlational approach (Ary et al., 1996). Fraenkel and Wallen, (2000) also delivered same results. Correlation kind of research explores the data set of the variables to predict the relationship of variables in this regard.
The research study is applied, in nature having focused on quantitative data acquired from primary sources. Seeing the aim and dimensions of the research, one can confidently group the research in the category of descriptive and correlation. Deductive type of approach analyzes the existing theory in the researches so the current study is also deductive based on the type due to the reason it sets to test the institutional performance in line with the already established models—SERVPERF model for service quality and Porter Five Forces Analysis:

- To verify service quality of various institutions alongside the SERVPERF Model of each institution thereby ascertaining their position on ranking continuum and comparing them at the final stage.

- To measure as well as determine the degree of competitiveness of both type of universities i.e. public/private institutions independently by applying Michael Porter’s Five Forces Industrial Model and draw conclusions thereof.

### 3.4 Research Population

Population is the vital to the all type of researches as it is the baseline of every research (Hair et al., 2003) The population of this research is comprised of all of the universities / Degree awarding institutions (general nature or class of universities) of both charter and operating within Khyber Pakhtunkhwa. Hence the population is heterogeneous therefore needs to be stratified before selection of sampling units. The N is all universities of private sector and public sector universities. However, the working population includes only those universities which have been having their chartered age not less than 5 years. Therefore, the working population excludes two public sector universities i.e. Sawabi University and Bacha Khan University. Hence the target population lies in all universities with equal numbers of both public and private sector institutions working in KPK Pakistan. The various number of students whom are being enrolled in these both classes of universities of KPK is the population for measuring service quality as well as the students’ satisfaction while all administrative and faculty staff of these universities is the research population for measuring the competitiveness among these universities.
3.5 Sampling Plan

There is no particular researcher who can demonstrate the analysis based on the prescribed whole population as there is a need of excessive resources in this type in the form of capital as well as the other dimension that is time; that’s why to find ways is essential and ways of minimizing the figure of the respondents demonstrates the research without fostering better results and delivering findings and in order to get this goal sampling is considered as one of such techniques. One of the chief goals of taking sampling is to confirm that outcomes or results can be announced using the procedures of sampling as representing the population which is the right part of the population (Fox et al., 2009).

Sampling is considered the main stage in a research process that shows the ways of choosing a part or segment demonstrating the population for examination (Fraenkel and Wallen, 2000). From the ending conclusion based on sample the academicians and researchers predict the whole population. In general various approaches are being carried out by the researchers ie probability as well as non probability, the probability area of sampling represent the whole population to be considered as the same and can be added in the data analysis of the study. Researchers mostly use probability type of sampling on huge and large scale in the kind of various quantitative studies due the reason that in such studies each unit is equally important and can be the part of analysis and the results obtained via this method is allowing the best magnitude of the results and provide better sampling adequacy and reduce errors and give meaningful results based on the population. On the other hand, non-probability type of sampling contains the mechanism where sample taken of the population is not definitely known. A qualitative approach is best served by this type of sampling in research of academia where the choice of a sample comprises purely based on judgements possess by the researcher (Babbie, 1990). Considering the kind of general approach used for the quantitative research, this research in hand has applied the dimensions of probability sampling due to the fact that it is more accurate and meaningful in term of providing results comparatively to the counterpart non probability sampling and the same non probability is less costly and also consume less time.
Sampling represent the portion or representative of the population based on which the researchers come to the logical conclusion whereas; sample is a subset of the population which is small in size but true representative of the population (Sekran, 2003). By generally studying the size of the sample, the researcher can be in a better position to predict on the basis of it and to generalize the population however, for generalizability of the research results the most appropriate sampling technique is probability sampling. The sample size representing and deliver a function which is the variability possess by the population, precision and confidence level (Sekran, 2003). Population in particular regarding its size is oftenly presented by the kind of uppercase “N” and the research sample size is always presented through the lower case “n”. It implies that if the research desires more precision and more confidence or both than it should have increased sample size (n). For this research sampling process was undertaken.

3.6 Selection of Sample

Probability type of sampling is a practice used to via its various types based on the situation of the research. Sekaran & Bougie (2015) mentioned that stratified random type of sampling creates various units or division of groups exhibiting same characteristics and likel to be relevant, seems appropriate and deliver meaningful results in the context of the study. In this research at first stage two stratas were created for both public as well as private for comparing both the sectors and to enhance the capacity of maximising the probability of being selecting and choosing representatives in term of sample from both varieties of segments determining the population. The research focused on concrete data for these both well known type of universities in pakistan.

At second stage at second level 10 universities were selected randomly but with true presentation of population. The size decided was 50% which means 5 universities each from the universities in both this charter based of KP, from the total population (Dixon, 2002). As most of the universities are located in Peshawar region of Khyber Pakhtunkhwa 2 public and 3 unis from private sector are taken from Peshawar, to cover the south region Kohat university, Abdul Wali Khan university mardan was taken and to represent Malakand region Malakand university was taken.
Table 3.1

Sample frame

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sample size of public sector universities</th>
<th>Sample size of private sector universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University Of Peshawar</td>
<td>Abasyn University Peshawar</td>
</tr>
<tr>
<td>2</td>
<td>Islamia College Peshawar</td>
<td>Cecos University Peshawar</td>
</tr>
<tr>
<td>3</td>
<td>Shaheed Benazir Bhutto WomenUniversityPeshawar</td>
<td>City University Peshawar</td>
</tr>
<tr>
<td>4</td>
<td>Abdul Wali Khan University Mardan.</td>
<td>Preston University Kohat</td>
</tr>
<tr>
<td>5</td>
<td>Malakand University</td>
<td>Qurtuba University D.I.Khan</td>
</tr>
</tbody>
</table>

The required level of sample size is very much essential before formally collecting data for the research, with a view to coe on the conclusion for better size of the statistical power (McQuitty, 2004). The sample size can be a key in effecting the statistical analysis and also in the generalizability regarding the results (Hair et al., 1998). Although the sort of thing is liked and too preferred for any researcher to work on a huge sample size while doing research but the various constraints like time and money make it soe how difficult to have larger sample size (Dillman, 2000). Schreiber et al. (2006) argued about the normality issue and the kind of various estimation method and techniques can both would have an impact search sample size. However, Nunnally (1967) as well as Schreiber et al. (2006) argued that the value of ten in total observations if there for any variable is desirable in survey research.

These type of studies range in various kinds of recommendations in this regard was from a number of total 50 (Barrett and Kline, 1981) may it be 400 (Aleamoni, 1976). Sivo et al., (2006) also got and obtained similar results, Graver and Mentzer (1999) also declared similar results. Hoelter (1983) also suggests that another model called SEM would have opt for a sample size of 200. But to get maximum results and accurate results in PCA method 300 observations would be appreciable. (Stevens, 1996). Therefore, to cover the recommendations of the above researchers regarding
Sample size the questionnaires were distributed to 1000 respondents with convenient random sampling to select for true presentation of students and faculty and administrative staff. Total 1000 sample size of students and administrative and faculty staff was taken by convenience sampling techniques where 650 respondents (students) were taken for measuring service quality and 350 respondents (administrative staff and faculty) were taken for measuring competitiveness, for the sort of data analysis representing both classes of these mentioned universities, where all the respondents will have equal chances of selection. As per the guidelines provided by Roscou (1975), there should be 10 times data available for each variable to be tested, that’s why this number of respondents is enough. According to Nunanaly (1978), if there is 150 sample size or 10 times of a variable in behavioral studies is enough for the research study and the it has been underpinned that enhancing sample size contribute to the accuracy and reduce the error in this regard (Ary et al., 1996).

3.7 Data Collection

The research is based on primary sources of data. The Primary data was collected through questionnaires seeking response as perceived from different stakeholders including; students for measuring service quality and university management, relevant policy makers and the faculty members for measuring competitiveness.

Three research instruments were developed for different stakeholders related to investigate various variables of the theoretical framework. The data was collected through survey (questionnaire). The questionnaire used was defined by (Cronin & Taylor, 1970) while defining the SERPERF model but it was adapted in the context of Higher Education region, that’s why both EFA and CFA are used for robustness of the research. Similarly (Porter, 1980) defined different constraints and in this research those constraints are according to the Higher Education region. Different questionnaires’ details are as follows:

a. Education service quality leading to students’ satisfaction: Annexure A

b. Determine students’ satisfaction: Annexure B
c. Competitive Analysis administered to university management and faculty of HEI: Annexure C

The details of the questionnaires administered and the response rate of each questionnaire is tabulated below:

**Table 3.2**

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Total Served</th>
<th>Total Returned</th>
<th>Return Rate</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education service quality and Customer Satisfaction</td>
<td>650</td>
<td>520</td>
<td>87%</td>
<td>306</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>214</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>520</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Competitors Analysis</td>
<td>350</td>
<td>306</td>
<td>80%</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>121</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>306</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>87%</td>
</tr>
</tbody>
</table>

**3.8 Operational Instruments**

Different instruments and variables used are as follows:

Service quality has been measured in different researches by using the same scale. Our questionnaire had 46 questions on service quality which have been extracted and adapted Kajentheran & Karunanity (2015). 16 questions on tangibility, 7 questions on responsiveness, 7 questions for reliability and 9 questions for assurance. All questions were designed on five point Likert scale.
<table>
<thead>
<tr>
<th>Construct</th>
<th>Dimensions</th>
<th>Items</th>
<th>Adapted from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>Tangibility</td>
<td>16</td>
<td>Chronin &amp; Taylor (1992), Ilias, Rahman &amp; Razak</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>7</td>
<td>(2008)</td>
</tr>
<tr>
<td></td>
<td>Assurance</td>
<td>9</td>
<td>Kajenthiran &amp; Karunanithy (2015),</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students’ satisfaction</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Porter’s Five forces</td>
<td>Level of rivalry</td>
<td>10</td>
<td>Farhat (2013), Hua, 2011; Pringle &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Huisman, 2011)</td>
</tr>
<tr>
<td></td>
<td>New entrants</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bargaining power of buyers</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bargaining power of Suppliers</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Threats of substitutes</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
3.8.1 Tangibles

Tangibles are embodied in to the appearance regarding the numerous facilities, buildings, the various kind of equipment and the staff. SERVPERF (Cronin & Taylor, 1992). Tangibility has been measure with approach provided by previous researchers (Qureshi et al, 2012; Shah, 2013). For higher education tangibility in the context of universities means

- The Get up and Appearances of Lecturers
- The classrooms lay out
- The Lighting machnism in classrooms
- The grounds and building Appearances.
- The service provider Overall cleanliness
- The sense of comfortability of the study rooms.
- The buildings Decoration and its atmosphere
- The personnel Appearance
- The parking availability
- The up to date services
- Total Number of different courses offered
- The top class availability of Computers in the labs for students.
- The rich facilities of IT.
- Providing the software.
- Students to provide the Access to Net.
- The culture of the organization and the employees’ belief and value in this university

3.8.2 Reliability

Reliability is well established measure containing the degree to which all the relevant skills and knowledge are provided in timely fashion and in accurate way SERVPERF (Cronin & Taylor, 1992). The same has been measure by previous
For higher education reliability is:

- Reliability in Registration means that students are registered timely without any errors.
- This university retains its records accurately having no ambiguity in its proceedings.
- The general reliability of lecturers ie. They are punctual and never miss the classes.
- University Staff are sincere and take a keen interest in resolving student’s problem.
- This university delivers exactly the same services what it assures to do.
- When lecturers are very skillful and having expertise in their subjects.
- When Lecturers are very kind to students and they try their best to resolve student’s problem.

### 3.8.3 Responsiveness

Responsiveness is a kind of prompt delivery of services to the customers, SERVPERF (Cronin & Taylor, 1992). The same description has been measure by previous well establishes researches of researchers in the context of higher institutions (Ilias, Rahman & Razak, 2008).

For higher education institutions responsiveness means:

- Personnel are timely available to support you when there is need of solving any fault.
- Lecturers are available to students for all sorts of assistance.
- Lecturers immediately solve the students puzzle when arise.
- The Staffs’ capacity is representing and resolving the recurring issues and problems.
- I have rarely get kind of info the “run-around” when specially seeking the information to this kind of structured University.
• Complaints of students are quickly and timely entertained

• Queries regarding different problems are entertained efficiently and punctually

3.8.4 Assurance

Assurance for higher education can be defined by various factors. It has been similarly measured by the technical and class previous academicians and researchers in the context of higher institutions (Qureshi et al, 2012; Shah, 2013).

• University Staff is Friendly and well-mannered especially in dealing with students
• University lecturers are Friendly and well-mannered especially in dealing with students
• The Research level of all Lecturers is more efficient and more productive
• All faculty Lecturers have very good academic career
• Lecturers are interested in developing new ideas and acts like agent for positive changes
• University has a good and friendly association with community and general public
• The University staffs and knowledge on rules and procedures
• University have full security measurements
• Communication skills: lecturers have command over their subjects and teach courses according to the will of students

3.8.5 Empathy

Empathy is the care being offered to the customers by the service provider organization, SERVPERF (Cronin & Taylor, 1992). Qureshi et al (2012) also used similar discriptions for Empathy.

• The administration has the student’s best interests in their hearts
• The students convenient is based on the facility and accommodations provide to them.
• The students convienetly provided with enough accommodation.
• The Staff members are motivated to give extra attention to students
• The level to the extent the teacher play supportive role covering students needs
• The using number of various hours by students in the computing rooms.
• The Universities are rational and impartial in their behavior of to individual students.

3.8.6 Students’ Satisfaction

Students’ satisfaction has been measured in different researches by using the same scale. Our questionnaire had 6 questions on students’ satisfaction which have been extracted and adapted. All questions of the used construct are being designed based on the 5- Likert scale.

The constructs for measuring students’ satisfaction has been based on the foundations of Qureshi et al (2012), who explained similar arguments for the student satisfaction in their study.

• The students are satisfied with the decisions to attend the university.
• The student will always prefer this university for future studies.
• The choice of this university is wise one
• The student is happy on the decision
• Right decision was taken
• Happiness to enroll in this university

3.8.7 Porter Five Forces Constructs

Competitiveness has been measured in different researches by using the same scale. Our questionnaire had 39 questions on competitiveness which have been extracted and adapted. 10 questions on level of rivalry among existing universities adapted from (Ogutu, 2015), 6 questions on barriers / constraints to new entrants adapted from (Porter, 1980), 12 questions for bargaining power of buyers (students) which have been adapted from (Farhat, 2013), 6 questions for bargaining power of suppliers adapted from (Ogutu, 2015), 5 questions for threats of substitutes adapted from (Farhat, 2013). And questions for strategic response. All questions were designed on five point Likert scale.
1. **Degree of rivalry among existing universities**
   It has been measured with scale adopted by Farhat (2013) who also explored higher education institutions for analyzing competitiveness.
   - The today competition is mainly because of the fact that most of the universities here in KPK offer quality education,
   - All the resources which are here available in these universities quite suitable for the universities.
   - The government would definitely support the universities once these would be in the time of financial crunch.
   - The universities prefer to continue the pace of the higher studies in the particular education sector..
   - Other similar local universities also affect the various programs of the university on bases of cost.
   - There is extreme quality in the academic programs being rendered and offered to students of different categories by these universities.
   - The genuine fixed cost associated with the quality of the universities is high.
   - The universities do offer high level of capacity at the paradigm of the university.
   - The universities these days are very divergent in term of specialization offered by these universities.
   - The demand of the undergraduate level has a high ratio which encourages the enrollment of the student.
   - University seriously offering academic programs with updated and outstanding quality.

2. **Barriers / Constraints to New Entrants**
   It has been measured with scale adopted by previous researchers (Farhat, 2013; Ogutu, 2015) who also explored higher education institutions for analyzing competitiveness.
   - Universities establishment requires big capitals in the shape of Endowment fund and Working Capital

   - All universities are in dare need of to be equipped with state of the art class rooms and specialized academic portion.
• The university with tremendous and superb academia will enhance its reputation and will encourage student reputation.
• The different university will have to reduce fees as a part of their marketing strategy to be in the competition.
• University has multi campuses
• University has variety of academic programs

3. Bargaining Power of Buyers (Students)

It has been measured with scale adopted by previous researchers (Farhat, 2013; Ogutu, 2015). Who also explored higher education institutions for analyzing competitiveness?

• Those students who are involved in graduate studies in the university are usually interested in the level of quality of programs which the university offered to them
• Those students who are studying graduation in the university gets more advantages of the allowances of many services given to them by the university like education continuity, some gaming clubs, library, cafe & restaurants, and students affairs
• The involved students of graduation programs of the university can easily access to the information of the cost of services given to them
• The increase has been found in the number of students who terminates their study at the university during studying year
• The enough information is available to the students about local programs due to which they can easily take decision
• Bachelor programs are offered by university which have an encouraging point for students to get admission and complete graduation
• The university offers some motivational activities to the involved students of graduation for encouraging them to continue study
• Migration facility is given to students at university
• Due to migration the risk of courses equivalency is always there for students
• The graduations' students of the university always need to minimize the expenses of higher education services by all the resources available to them
• The bachelor programs' students students are able to allocate the higher education services given to them by university
• There is a negative effect of new competitive university's registration with higher education on admission at the existing universities
4. **Bargaining Power of the Suppliers- Input power**
   It has been measured with scale adopted by previous researchers (Farhat, 2013; Ogutu, 2015) who also explored higher education institutions for analyzing competitiveness.
   - The various number of suppliers mainly contributing in provision equipment as well as technical support in future.
   - The different houses of publishers provide university with various text books and reference books.
   - The teachers in teaching staff are providing curriculum, which are mainly in accordance to other publishers and maintain high quality.
   - The university provide high class education with utmost quality to the various undergraduate level student.
   - The university and institution can go with easily continuing without the existence of the working teachers who contain and hold numerous titles in the field of academia.
   - The teachers are expert in drafting and writing the high-quality curriculum which is used in the teaching environment.
   - There is reasonable number of phds for the students doing undergraduate degree in quality way

5. **Threats off Substitute**
   It has been measured with similar scale adopted by previous researchers’ i.e (Farhat, 2013; Ogutu, 2015) who also explored higher education institutions for analyzing competitiveness.
   - Access to Online degree universities
   - New for-profit offerings
   - Training and seminar companies
   - Corporate universities
   - Distance, open and e-learning
6. **Strategic response**

Ogutu (2012) gave the following questionnaire measures to calculate the strategic response. Here it is also used for higher education industry. Response was asked from university management.

- There are many universities offering courses and disciplines similar to ours in the market
- Universities in education industry industry are very aggressive in marketing their courses
- Our competitors control a very small market share in our industry
- Our industry attracts many new universities every year
- It is not easy for the students to find an alternative supplier offering same courses and disciplines
- There are many courses and disciplines that are similar to our courses and disciplines in education industry

3.8.8 **Pilot Study**

To determine the level of the internal sort of reliability of the constructs and ensures and to document the simplicity and clarity of the constructs a pilot study was encouraged and formally applied using the observations of 50 using the same questionnaire used in this study and the same were distributed among public and private sector employees of HEIs in KPK and got back 42 means almost 74 percent response rate from both classes of respondents under this study, including Babbie (1998) is sort of a kind of better prevailing response. Reliability was simply ensured through the scale often used by researchers called Cronbach’s alpha. The questionnaire tested for the reliability provided enough consistency generated by the Cronbach’s alpha.
Table 3.3  
*T-test of the variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean difference</th>
<th>Sig.2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility</td>
<td>0.121</td>
<td>0.031</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.173</td>
<td>0.043</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>-0.256</td>
<td>0.012</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.121</td>
<td>0.041</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.001</td>
<td>0.121</td>
</tr>
</tbody>
</table>

The above table tabulates the mean comparison results of private and public universities students towards the students’ satisfaction. The results report a significant sort of prevailing difference in the mean of the students’ responses of private and public type of universities. The Sig.2-tail indicates significant results at 5% level of probability, which document that the prevailing sort of difference is significant in tangibility, assurance, responsiveness, and reliability of public and private universities student responses regarding their satisfaction, while empathy shows insignificant difference. The results report higher mean for the students’ responses of public sector universities in terms of tangibility and assurance while comparing the counterpart universities which indicated higher mean in terms of responsiveness and reliability.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Satisfaction</th>
<th>Tangibility</th>
<th>Assurance</th>
<th>Responsiveness</th>
<th>Reliability</th>
<th>Empathy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.281***</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.044</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Tangibility</td>
<td>.394***</td>
<td>.294</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.032</td>
<td>.056</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Assurance</td>
<td>.307***</td>
<td>.275</td>
<td>.260</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.012</td>
<td>.067</td>
<td>.631</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>.562***</td>
<td>.212</td>
<td>.316</td>
<td>.288</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.022</td>
<td>.141</td>
<td>.290</td>
<td>.221</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Reliability</td>
<td>.335***</td>
<td>.127</td>
<td>.109</td>
<td>.294</td>
<td>.173</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.039</td>
<td>.433</td>
<td>.319</td>
<td>.156</td>
<td>.223</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>

(P-value < 0.05) ***

The table shows 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.
Table 3.5

Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std.Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Tangibility</td>
<td>0.103</td>
<td>0.047</td>
<td>.265</td>
<td>2.11</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.125</td>
<td>0.057</td>
<td>.370</td>
<td>2.10</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.211</td>
<td>0.082</td>
<td>.282</td>
<td>2.56</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.093</td>
<td>0.040</td>
<td>.497</td>
<td>2.22</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.091</td>
<td>.053</td>
<td>.318</td>
<td>1.67</td>
</tr>
</tbody>
</table>

(P-value <0.05) ***

Dependent Variable: Students’ Satisfaction, F Value= 56.89, \( R^2 = 0.68 \), Satisfaction = 0.10 tangibility + 0.12 assurance + 0.21 responsiveness + 0.09 reliability

The above table 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 (t=2.11, p<0.05). The beta value of tangibility 0.103 demonstrates that one unit change in tangibility will account for 0.11 unit change in students’ satisfaction. Assurance shows positive significant impact on students’ satisfaction (t=2.10, p<0.05). One unit change in assurance will cause 0.125 unit change in students’ satisfaction. Similarly, responsiveness also predicts positive significant impact on students’ satisfaction as its underlying t-value is significant at 5% probability level (t=2.56, p<0.05). One unit change in responsiveness will cause 0.211 unit change in students’ satisfaction. Reliability also shows positive significant effect on students’ satisfaction (t=2.22, p<0.05). One unit change in reliability will cause 0.093 unit change in students’ satisfaction Empathy also shows positive insignificant impact on the student’s satisfaction of both public and private sector
universities (t=1.67, p>0.05). The reported beta value is 0.091, which means that one unit change in empathy will bring 0.091 unit change in student’s satisfaction.

The R-square 0.68 indicates that 68% changes are caused by these factors deterring quality of education in terms of service quality on 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.

The results quite well demonstrated that no issue of multicollinearity concern due to the desirable values of VIF and tolerance as per the criteria of (O” Brien & Robert, 2007). These both value predicting reasonable VIF and tolerance values and all these were the ranges of pure acceptability.

Table 3.6

*T-test for competitiveness variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean difference</th>
<th>Sig.2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Rivalry</td>
<td>.32000</td>
<td>0.000</td>
</tr>
<tr>
<td>Height of Barriers to new entrants</td>
<td>.43200</td>
<td>0.000</td>
</tr>
<tr>
<td>Bargaining power of the buyer</td>
<td>.30002</td>
<td>0.000</td>
</tr>
<tr>
<td>Bargaining power of the suppliers</td>
<td>-.11333</td>
<td>0.000</td>
</tr>
<tr>
<td>Threats of substitutes</td>
<td>-.20014</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The results indicate that there is significant kind and sort of difference hold in private and public sector employees of all the factors. The sig.2- tailed is showing significant results which document a kind of significance sort of difference in the responses of these both type universities administrative staff responses towards threats of substitutes. The results report higher mean for the industry of rivalry, height of barriers for new entrants as well as the bargaining power of buyers of public sector universities while it shows higher mean for private universities in terms of bargaining power of suppliers and threats of substitutes.

### 3.9 Data Analysis

The data collected from secondary sources, and primary sources through questionnaires, and structured interviews was treated and subjected to descriptive as well as statistical Analysis applying tools such as:

a. **Demographic Analysis** of the variables such as; gender, age and the nationality of the region/ city wise students, categories of the students and institutions investigated.

b. **Reliability Cron-batch Alpha:** The cronbach alpha is said to the most widely index in researches for knowing the reliability (Cronbach, 1951). This tool is widely used to know and predict the internal consistency in the data. The research study used it for testing the reliability coefficient of both instruments. According to research analysts, the reliability of instrument is considered better as the reliability coefficient gets closer to the value of 1.0 (Burns & Bush, 2004); whereas, Hair, Anderson, Tatham, and Black (2006) maintains that the value of Cronbach’s alpha at 0.60 is regarded as the lower limit of acceptability. Therefore, keeping the above considerations in view, the values of alpha in the current study demonstrates the fair reliability level of the scales that have been adopted.

c. **Validity/ Factor Analysis:**

The validity of a questionnaire refers to its ability to assess the closely relevant perspectives of the measure. The validity assessment enables a researcher to determine that how precisely it appraise the relationship between the measure and its potential characteristics. This assessment is carried out through the following four steps:
**Face Validity.** The first step in assessing the instrument is to ensure its face validity. As according to Burns and Bush (2004), the instrument has to measure precisely the resembling aspects of a measure for which it is basically devised. The expert opinions of few professionals and research analysts regarding the instrument were sought; and after getting the comments and recommendations of the said experts, the final instrument was selected for utilizing in the study under research.

**Predictive Validity.** The second step is the assessment of predictive validity of the instrument. At this stage, the capability of the instrument is tested to observe that the measurement may be able to predict the associated measures of the same subject. For achieving this end, standard questions have been selected from a variety of tested questionnaires with slight customization accordingly.

**Content Validity.** The third step is to ensure content validity that refers to the assessment as if the measurement manifests the particular anticipated area of the research. Hair, Anderson, Tatham, and Black (2006) termed the content validity as “…the degree of correspondence between the items selected to constitute a summated scale and its conceptual definition” (p. 88). Considering this aim, the concerned area of study (from which the contents for the instrument have been obtained), was studied and reviewed comprehensively.

**Construct Validity.** The test of construct validity is extensively carried out technique in the domain of research. This test is conducted to seek as if the likely pattern of relationship exists among the constructs. In this way, it facilitates to institute an accord between the theoretical concepts and the instrument of measurement. The theoretical relationships are required to be described for their precise empirical examination that can be made through a variety of methods including employing correlation coefficients, factor analysis and plain judgment (Cooper & Schindler, 2006)

Conformity Analysis including KMO and Bartlett's and exploratory factor analysis of each of the variable of the instrument is conducted for the current thesis.

i. **T test of independent variable:** In order to compare the means of two groups of universities i.e. five public sector and the selected private sector universities the independent t-test was used.
ii. **Correlation**: The correlation is the tool used to predict the directions of association and the relationship strength in variety of variables. The correlation can be judged from the co-efficient of determination, which usually lies between 1 and -1. If the value of r is near to these two then the correlation is said to be strong. The correlations are divided in different slab which are the weak correlation, moderate correlation and strong correlation.

Cohen’s (1988) gives the following guidelines explain the degree of strength of relationship.

a. 0.5 to 1.0 or -1.0 to -0.5 = Strong

b. 0.3 to 0.5 or -0.5 to -0.3 = Moderate

c. -0.3 to -0.1 or 0.1 to 0.3 = Weak

iii. **Multiple Regressions**: This is a unique kind of a multivariate statistical analysis that research undertakes when needed to correlate more than two variables. However, before its application following two conditions were ensured:

- Variables required predicting (called predictors) have a low correlation with each other.
- The criterion variable should have high correlations with the predictor variables.
Chapter-4

DATA ANALYSIS

(STUDENTS SATISFACTION)

The data Analysis of this research are arranged in two separate chapters, each dealing with separate component of the research. Chapter-4 presents the Analysis of the first component of this research i.e. “student’s satisfaction” and chapter -5 discusses the competitive Analysis of the higher education environment as observed by this research. This chapter contains the responses and results thereof as derived from the analysis of the questionnaires administered to these study based on their analysis. Hence these findings consist of the reliabilities of variable and the regression decomposed sort of analysis which was employed to analyzed the degree of connections and relationship of the analyzed or used variables i.e. independent variables with dependent variables. These chapters are been arranged with a comprehensive order in the following sequence to shows all the finding of this study i.e. results.

a. Demographic Analysis of the variables such as; gender, age and the education of students, categories of the students and institutions investigated.

b. Reliability of the Instrument through Cronbachs Alpha

c. Validity of the Research through Factor Analysis- Conformity Analysis including KMO and Bartlett's and Component Matrix of each of the variable of the instrument.

d. T. Test mean comparisons and one way type of Anova which is so called Post-hoc test with in the individual universities and within the group of both type of universities representing public and private categories.

e. Correlation: to study the significant difference b/w the variables

f. Regression: to investigate the impact of variables.
1.1. Demographic Analysis

For current study a total 650 questionnaires were distributed among the students in which 520 error-free questionnaires were collected back. The various dimensions of demographic variables have been purely based on age, gender, and degree program of the sort and type of respondents (students) or targeted level population. The portfolio of information regarding demographics is mentioned in the table below.

Table 4.1.1

*Table for Age*

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Frequency</th>
<th>Percent Valid</th>
<th>Percent Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 18-22</td>
<td>295</td>
<td>56.7</td>
<td>56.7</td>
</tr>
<tr>
<td>22-30</td>
<td>170</td>
<td>32.6</td>
<td>32.6</td>
</tr>
<tr>
<td>31 and above</td>
<td>55</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The age showing in this particular table that almost the respondents have ages around 18 to 20 and are mostly young as the total number in this case is 295 representing that most of the sample taken is young (n=295), constituting a sort of a valid level of the percentage of 56%. While, students above 22 years constitute a level of desired sample size (n=170) with a percentage of 32%. Similarly, students above 31 represents the portion to the sort of sample size at (n=55), which definitely for the exact percentage of 10%.
Table 4.1.2

*Table for Gender*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent Valid</th>
<th>Percent Cumulative</th>
<th>Percent Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid male</td>
<td>320</td>
<td>58.18</td>
<td>58.18</td>
<td>58.18</td>
</tr>
<tr>
<td>Female</td>
<td>200</td>
<td>38.4</td>
<td>38.4</td>
<td>38.4</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The above table is about the kind of gender’s responses based on and taken on the questionnaire which predicts that almost out of the total respondents the male are in greater number as it accounts for around (n=320) of the sample size with 58%. Whereas, the other gender female respondents accounts for 200 of the sample size (n=200), forming the 38%.

Table 4.1.3

*Table for Education*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent Valid</th>
<th>Percent Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>295</td>
<td>56.7</td>
<td>56.7</td>
</tr>
<tr>
<td>undergraduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>170</td>
<td>32.6</td>
<td>32.6</td>
</tr>
<tr>
<td>Post graduate</td>
<td>55</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The education is also a base of demographics of the respondents (students) is given in the above table, which has showed that the undergraduates are 295 of the whole sample which is about 56%. While, the graduate students of the whole sample is about 170 around 32 percent and the post graduate account for around 55 which is 10 percent of the sample taken and used.
4.2 Reliability Analysis

For the measurement of entered items, coefficients of the cronbach’s alpha can be used for different variables which are as under. According to Sekaran (2003) if Cronbach’s alphas of any item of the questionnaire ranges less than 0.60 then that item may be deleted from questionnaire. The below mentioned table is showing reliability statistics value of variables of questionnaire administered to the students reveals that there is no issue or problem exists to the separations of questionnaire data items.
Table: 4.2

Reliability of the Instrument

<table>
<thead>
<tr>
<th>Variable</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility</td>
<td>16</td>
<td>.817</td>
<td>Yes</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>7</td>
<td>.623</td>
<td>Yes</td>
</tr>
<tr>
<td>Reliability</td>
<td>7</td>
<td>.608</td>
<td>Yes</td>
</tr>
<tr>
<td>Assurance</td>
<td>9</td>
<td>.732</td>
<td>Yes</td>
</tr>
<tr>
<td>Empathy</td>
<td>7</td>
<td>.678</td>
<td>Yes</td>
</tr>
<tr>
<td>Students’ satisfaction</td>
<td>6</td>
<td>.651</td>
<td>yes</td>
</tr>
</tbody>
</table>

The above table shows that the reliability of the data collected for the variable mentioned in column is positively reliable because the results showing the Cronbach’s value above the acceptable ranges. The researchers argued that alpha value of above .60 is acceptable; however, the value of alpha of the variables is well above the desired and acceptable level. So the scale is highly reliable for further analysis of this study.

4.2.1 Validity (Confirmatory Factor Analysis and Exploratory Factor Analysis)

If the reliability of research means that significant results must be inherently repeatable than the Validity of research embraces the concept of research and ensures that the results obtained thereof truly confirms the basic requirements of the scientific research. Seligher and Shoham (1989) said that “any research can be affected by different kinds of factors which can invalidate the research findings”. Therefore, the different parts and contents are examining by the professionals review the validity in measurement instrument i.e. questionnaire. So here the expertise of the study has analyzed the questionnaire of the study and gives the permission for data gathering. Therefore all of these research gathering can be examined and viewed with the help of confirmatory factor analysis. Hence these factor Analysis may help to ensure the
validity of research as it reduces data by eliminating redundant or repeated variables from a set of correlated variables and Provide construct validity evidence.

Factor Analysis encompasses two types i.e. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Confirmatory factor analysis, an extension of factor analysis that tests the theories based specific hypothesis and inter-correlations of their variables (Cooley and Lohnes 1971; Harman, 1976; Tobin, Holroyd, & Reynolds, 1984). Here The KMO test are mainly and widely used to measure the adequacy of sample that had been used in the study. It also shows the validity of the questions in a construct means variables. Therefore, in most academics and business studies have used KMO test as the part of CFA which gives the significant part in deciding about the sample adequacy. So the KMO test range is always from zero 0 to one 1 and these are the world wide accepted parameter as over the 0.6.
4.2.2 Exploratory Factor Analysis

Table 4.2.2.1

*KMO and Bartlett's of Tangibility*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility</td>
<td>0.678</td>
<td>.000</td>
</tr>
</tbody>
</table>

Component Matrix Tangibility

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.81</td>
<td>0.72</td>
<td>0.85</td>
<td>0.61</td>
<td>0.20</td>
<td>0.57</td>
<td>0.76</td>
<td>0.71</td>
<td>0.50</td>
<td>0.44</td>
<td>0.70</td>
<td>0.66</td>
<td>0.73</td>
<td>0.86</td>
<td>0.82</td>
<td>0.82</td>
</tr>
</tbody>
</table>

The above table is showing factor analysis of the Tangibility component of the questionnaire. The results indicate that all questions related to the faculty variable have been loaded at the acceptable value ranges except 5 and 10. This indicates that there exists proper inter-correlation among 14 questions of this variable. The KMO test confirm and indicates sufficiency of sample size and called it is enough for the study analysis, as its value is above.5.
Table 4.2.2.2

*KMO and Bartlett's of Assurance*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance</td>
<td>0.668</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component Matrix Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assur1 0.71</td>
</tr>
<tr>
<td>Assur2 0.62</td>
</tr>
<tr>
<td>Assur3 0.75</td>
</tr>
<tr>
<td>Assur4 0.51</td>
</tr>
<tr>
<td>Assur5 0.66</td>
</tr>
<tr>
<td>Assur6 0.42</td>
</tr>
<tr>
<td>Assur7 0.71</td>
</tr>
<tr>
<td>Assur8 0.73</td>
</tr>
<tr>
<td>Assur9 0.52</td>
</tr>
</tbody>
</table>

The above table is showing questionnaire’s component related to the variable of Assurance. The results indicate that all the questions of the variable have been loaded at the acceptable value range except 6. The KMO is a kind of test which indicates and confirm the ampleness that the sample size is enough for the study analysis, as its value is above .5
<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>0.668</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Component Matrix of Reliability**

- Relib1: 0.51
- Relib2: 0.72
- Relib3: 0.32
- Relib4: 0.61
- Relib5: 0.41
- Relib6: 0.84
- Relib7: 0.73

The above table is showing component related to the variable Reliability. The results indicate that all the questions of the variable have been loaded at the acceptable value range, which indicate proper inter-correlation among 5 questions of this variable, but item 3 and 5 are not loaded in acceptable range. The KMO predicting value which is desirable for the sufficiency of the size taken in sapling as its value is above .5.
Table 4.2.4

*KMO and Bartlett's of Responsiveness*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>.668</td>
<td>.000</td>
</tr>
</tbody>
</table>

Component Matrix: Administration Responsiveness

<table>
<thead>
<tr>
<th>Resp1</th>
<th>Resp2</th>
<th>Resp3</th>
<th>Resp4</th>
<th>Resp5</th>
<th>Resp6</th>
<th>Resp7</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.53</td>
<td>0.24</td>
<td>0.60</td>
<td>0.63</td>
<td>0.51</td>
<td>0.82</td>
<td>0.77</td>
</tr>
</tbody>
</table>

The above tables are showing component relating to the variable Responsiveness. The results indicate that all questions pertaining to the variable have been loaded at the acceptable value range, which indicates proper inter-correlation among all questions of this variable, except item number 2. The KMO is clearly indicating the correct range of sample size due to the recurring value of above.5

Table 4.2.5
### KMO and Bartlett's of Empathy

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.668</td>
<td>.000</td>
</tr>
</tbody>
</table>

Component Matrix: Empathy

<table>
<thead>
<tr>
<th>Empathy1</th>
<th>0.52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy2</td>
<td>0.76</td>
</tr>
<tr>
<td>Empathy3</td>
<td>0.45</td>
</tr>
<tr>
<td>Empathy4</td>
<td>0.62</td>
</tr>
<tr>
<td>Empathy5</td>
<td>0.59</td>
</tr>
<tr>
<td>Empathy6</td>
<td>0.89</td>
</tr>
<tr>
<td>Empathy7</td>
<td>0.72</td>
</tr>
</tbody>
</table>

The above table is showing component of the variable Empathy. The results indicating and determining that all the questions of the variable have been loaded at the acceptable value ranges, which indicate proper inter-correlation among all of the questions of this variable, except item 3. The KMO predicting value of above .5 which validate the size of the sample.

#### Table 4.2.2.6

### KMO and Bartlett's of Students' satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Satisfaction</td>
<td>.767</td>
<td>.000</td>
</tr>
</tbody>
</table>
The above table is showing component of the variable students’ satisfaction. The results vehemently indicated that all the questions of the variable have been loaded at the acceptable value ranges, which indicate proper inter-correlation among all of the questions of this variable, except item 1. The KMO showed the level of the sufficiency in terms of loading and got the values of all questions above .5

### 4.3 Confirmatory Factor Analysis

#### 4.3.1 Confirmatory factor Analysis for the construct used for Measurement of Tangibility

The measurement sort of the model for Tangibility with prominent and exact factor which contains 16 total indicators. Therefore, the measurement of these study have predicted the analysis of these construct which documented that the overall model is well fitted and the observed values of all the variables is feasible and also in a feasible range. The chi-square values are 142.68 with 9 degrees level in total of freedom which is statistically at P<0.004. So it shows that the level of desired associated and fit level statistics indicate that the construct model is acceptable as, mostly its statistics are significant (RMSEA= 0.014; Standardized RMR= 0.031; GFI= 0.929; CFI= 0.938). This predicts the confirmation of the validity of this construct model. The following table provides and delivers the containing results of the recurring CFA for Tangibility:
Table 4.3.1

Confirmative Factor Analysis for Construct used for Tangibility

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tang1</td>
<td>0.81</td>
<td>0.72</td>
<td>0.24</td>
</tr>
<tr>
<td>Tang2</td>
<td>0.72</td>
<td>0.73</td>
<td>0.25</td>
</tr>
<tr>
<td>Tang3</td>
<td>0.85</td>
<td>0.80</td>
<td>0.27</td>
</tr>
<tr>
<td>Tang4</td>
<td>0.61</td>
<td>0.76</td>
<td>0.22</td>
</tr>
<tr>
<td>Tang5</td>
<td>0.56</td>
<td>0.75</td>
<td>0.34</td>
</tr>
<tr>
<td>Tang6</td>
<td>0.57</td>
<td>0.73</td>
<td>0.21</td>
</tr>
<tr>
<td>Tang7</td>
<td>0.76</td>
<td>0.80</td>
<td>0.28</td>
</tr>
<tr>
<td>Tang8</td>
<td>0.71</td>
<td>0.77</td>
<td>0.31</td>
</tr>
<tr>
<td>Tang9</td>
<td>0.50</td>
<td>0.75</td>
<td>0.37</td>
</tr>
<tr>
<td>Tang10</td>
<td>0.76</td>
<td>0.86</td>
<td>0.24</td>
</tr>
<tr>
<td>Tang11</td>
<td>0.70</td>
<td>0.72</td>
<td>0.25</td>
</tr>
<tr>
<td>Tang12</td>
<td>0.66</td>
<td>0.73</td>
<td>0.27</td>
</tr>
<tr>
<td>Tang13</td>
<td>0.73</td>
<td>0.70</td>
<td>0.22</td>
</tr>
<tr>
<td>Tang14</td>
<td>0.86</td>
<td>0.71</td>
<td>0.34</td>
</tr>
<tr>
<td>Tang15</td>
<td>0.82</td>
<td>0.78</td>
<td>0.21</td>
</tr>
<tr>
<td>Tang16</td>
<td>0.82</td>
<td>0.81</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Fit-Statistics

Chi-squa = 142.68 (df= 9, p = 0.004)
Stand-RMR = 0.031
RMSEA = 0.041, GFI = 0.929, CFI =0.938
4.3.2 Confirmative Analysis for the construct used for Measurement of Assurance

The measurement model for assurance has a single value factors which contains 9 indicators that are studied and presented. So here the measurement is predicting the analysis of this construct which documents the fitness of the construct as the values are well in feasible ranges. Therefore the chi-squares values has 122.67 with respect to 9 degrees level of freedom as it statistically at P<0.005. The associated level of the fit sort of statistics indicates and asserts that the construct model is definitely being acceptable as, mostly its statistics are significant (RMSEA= 0.023; Standardized RMR= 0.021; GFI= 0.911; CFI= 0.933). This predicts the confirmation of the validity of this construct model. Thus the underline table have presented CFA results for the variable assurance as under.

Table 4.3.2

Confirmative Factor Analysis for Construct used for Assurance

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely Indic-Reliability</th>
<th>Err-Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assur1</td>
<td>0.71</td>
<td>0.73</td>
</tr>
<tr>
<td>Assur2</td>
<td>0.62</td>
<td>0.70</td>
</tr>
<tr>
<td>Assur3</td>
<td>0.75</td>
<td>0.82</td>
</tr>
<tr>
<td>Assur4</td>
<td>0.51</td>
<td>0.71</td>
</tr>
<tr>
<td>Assur5</td>
<td>0.66</td>
<td>0.74</td>
</tr>
<tr>
<td>Assur6</td>
<td>0.54</td>
<td>0.79</td>
</tr>
<tr>
<td>Assur7</td>
<td>0.71</td>
<td>0.82</td>
</tr>
<tr>
<td>Assur8</td>
<td>0.73</td>
<td>0.72</td>
</tr>
<tr>
<td>Assur9</td>
<td>0.52</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Chi-square = 122.67 (df= 9, p = 0.005)
Stand-RMR = 0.021
RMSEA = 0.023, GFI = 0.911, CFI =0.933
4.3.3 Confirmative Analysis for the construct used for Measurement of Reliability

The measurement type and determining model for reliability has also a single factors which contains with the 7 indicators. Therefore the measurement predicts the analysis of this construct which documents the fitness of the construct as the values are well in feasible ranges. The chi-square value of 109.51 with 9 degrees of freedom is statistically at $P<0.003$. The associated type of fit sort of statistics indicates and confirms that the construct model is of course being acceptable as, mostly its statistics are significant (RMSEA= 0.033; Standardized RMR= 0.036; GFI= 0.941; CFI= 0.903). This predicts the confirmation of the validity of this construct model. The table below is the predictor of CFA used for the Relibility as follows:

Table 4.3.3

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand-Loadings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relib1</td>
<td>0.51</td>
<td>0.83</td>
<td>0.21</td>
</tr>
<tr>
<td>Relib2</td>
<td>0.72</td>
<td>0.80</td>
<td>0.25</td>
</tr>
<tr>
<td>Relib3</td>
<td>0.65</td>
<td>0.72</td>
<td>0.27</td>
</tr>
<tr>
<td>Relib4</td>
<td>0.61</td>
<td>0.81</td>
<td>0.24</td>
</tr>
<tr>
<td>Relib5</td>
<td>0.56</td>
<td>0.76</td>
<td>0.32</td>
</tr>
<tr>
<td>Relib6</td>
<td>0.84</td>
<td>0.74</td>
<td>0.21</td>
</tr>
<tr>
<td>Relib7</td>
<td>0.73</td>
<td>0.81</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Fit Statistics

Chi-square = 109.51 (df= 9, $p = 0.003$)
Stand-RMR = 0.036
RMSEA = 0.033, GFI = 0.941, CFI =0.903
4.3.4 Confirmative Analysis for the construct used for Measurement of Responsiveness

The measurement model for responsiveness has also a single factors which contains with the 7 indicators. Therefore the measurement predicts the analysis of this construct which documents the fitness of the construct as the values are well in feasible ranges. The chi-square value of 134.78 with 7 degrees of freedom is statistically at P<0.002. The associated type and the fit level of statistics indicates and asserts that the construct model is being acceptable as, mostly its statistics are significant (RMSEA= 0.013; Standardized RMR= 0.026; GFI= 0.951; CFI= 0.944). This predicts the confirmation of the validity of this construct model. The CFA results for the variable responsiveness as follows:

**Table 4.3.4**

*Confirmative Factor Analysis for Construct used for Responsiveness*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standardized Loadings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resp1</td>
<td>0.53</td>
<td>0.73</td>
<td>0.32</td>
</tr>
<tr>
<td>Resp2</td>
<td>0.71</td>
<td>0.84</td>
<td>0.34</td>
</tr>
<tr>
<td>Resp3</td>
<td>0.60</td>
<td>0.79</td>
<td>0.21</td>
</tr>
<tr>
<td>Resp4</td>
<td>0.63</td>
<td>0.75</td>
<td>0.20</td>
</tr>
<tr>
<td>Resp5</td>
<td>0.51</td>
<td>0.72</td>
<td>0.30</td>
</tr>
<tr>
<td>Resp6</td>
<td>0.82</td>
<td>0.82</td>
<td>0.26</td>
</tr>
<tr>
<td>Resp7</td>
<td>0.77</td>
<td>0.71</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Fit Statistics

Chi-squ = 134.78 (df= 7, p = 0.002)

Stand level RMR = 0.026

RMSEA = 0.013, GFI = 0.951, CFI =0.944
4.3.5 Confirmative Analysis for the construct used for Measurement of Empathy

The measurement model for empathy has also a single factors which contains with the 7 indicators. The measurement estimation analysis of this construct documents the fitness of the construct as the values are well in feasible ranges. The chi-square level value of 145.77 with 8 degrees representing the freedom is offcourse statistically at $P<0.001$. The associated level of the fit type of statistics indicates and determine that the construct model is to be more acceptable as, mostly its statistics are significant (RMSEA= 0.027; Standardized RMR= 0.038; GFI= 0.917; CFI= 0.908). This predicts the confirmation of the validity of this construct model. The CFA showing validity of the variable empathy as follows:

Table 4.3.5

Confirmative Factor Analysis for Construct used for Empathy

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy1</td>
<td>0.52</td>
<td>0.75</td>
<td>0.22</td>
</tr>
<tr>
<td>Empathy2</td>
<td>0.76</td>
<td>0.81</td>
<td>0.44</td>
</tr>
<tr>
<td>Empathy3</td>
<td>0.61</td>
<td>0.70</td>
<td>0.31</td>
</tr>
<tr>
<td>Empathy4</td>
<td>0.62</td>
<td>0.72</td>
<td>0.40</td>
</tr>
<tr>
<td>Empathy5</td>
<td>0.59</td>
<td>0.78</td>
<td>0.20</td>
</tr>
<tr>
<td>Empathy6</td>
<td>0.89</td>
<td>0.80</td>
<td>0.16</td>
</tr>
<tr>
<td>Empathy7</td>
<td>0.72</td>
<td>0.73</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Fit Statistics

Chi-square = 145.77 (df= 8, p = 0.001)

Standardized Type RMR = 0.038

RMSEA = 0.027, GFI = 0.917, CFI =0.908
4.3.6 Confirmative Analysis for the construct used for Measurement of Student Satisfaction

The measurement model for student satisfaction has also a single factors which contains with the 6 indicators. The measurement predicts an analysis of this construct which also documents the fitness of the construct as the values are well in feasible ranges. The chi-square which recurring value of 128.34 with 8 degrees shows its freedom showing a statistically at P<0.003. The associated nature of the fit statistics level indicates nd portray that the construct model is acceptable as, mostly its statistics are significant (RMSEA = 0.032; Standardized RMR = 0.042; GFI = 0.911; CFI = 0.906). This indicates the confirmation of the validity of this construct model. The confirmatory factor analysis showing the validity of the variable used for student satisfaction as follows:

Table 4.3.6

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standardized Loadings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sat1</td>
<td>0.62</td>
<td>0.73</td>
<td>0.32</td>
</tr>
<tr>
<td>Sat2</td>
<td>0.56</td>
<td>0.82</td>
<td>0.24</td>
</tr>
<tr>
<td>Sat3</td>
<td>0.51</td>
<td>0.73</td>
<td>0.11</td>
</tr>
<tr>
<td>Sat4</td>
<td>0.72</td>
<td>0.74</td>
<td>0.30</td>
</tr>
<tr>
<td>Sat5</td>
<td>0.69</td>
<td>0.72</td>
<td>0.40</td>
</tr>
<tr>
<td>Sat6</td>
<td>0.79</td>
<td>0.81</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Fit Statistics

Chi-square = 128.34 (df= 8, p = 0.003)

Stand level RMR = 0.042

RMSEA = 0.032, GFI = 0.911, CFI =0.906
4.4 T. Test: Public and Private Sector Universities Students

A T-test makes statistical investigation between the two samples as means. This test is a kind of test testing the mean equality. The t. test defines a P value (probability) that determines whether the population means differ from each other or otherwise. A two-sample t-test is examining the differenciation most probably in the two samples. This test clarify the hypothesis testing. The test that compares three or more variables is known as analysis of variance (ANOVA). Other hypothesis tests include the chi-square test and f-test. The ratio used for t-test is 50% for public and 50% for private sector universities.

4.4.1 T-Test for Tangibility

H1: There is significance difference in the Tangibility of services of public and private universities.

Table 4.4.1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility</td>
<td>.03425</td>
<td>.000</td>
</tr>
</tbody>
</table>

The table which represents the difference for tangibility above shows mean comparison results of private and public universities students towards their respective tangibility of services. The results report a significance difference in the mean of the students’ responses of private and public sector type of universities regarding the tangibility of services. The sig.2-tail shows significant results which document that the difference having significance level are there in the responses of both type universities considered for the sample of student responses towards tangibility of services. The results report higher mean for the variable of students’ responses of the universities in the domain of public.
4.4.2 T-Test for Assurance

H1: There is significance difference in the assurance of services quality in public and private universities.

Table 4.4.2

T-test for assurance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2-tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance</td>
<td>.20345</td>
<td>0.007</td>
</tr>
</tbody>
</table>

The table is about showing the differentiation of mean comparison results of the universities which have been considered for the sample of both type universities students towards the assurance factor of service quality. The results report a significance type and level of the difference in the mean of the students’ responses of the universities in both categories. The sig.2-tailed results indicate significant value which document a difference with having significance level in the responses of the universities of the class of both regarding students towards assurance of service quality. The results report higher mean for the level of students’ responses of public sector universities in this regard.
4.4.3 T-Test for Reliability of service Quality

H1: There is significance difference in the reliability of service quality in public and private sector universities.

Table 4.4.3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>- .3404</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The reliability differentiation has been shown above for mean comparison results of private and public universities students towards the reliability of service quality. The results report insignificance difference in the mean of the students’ responses of private and public sector universities regarding the reliability of services. The sig.2-tailed results indicate significant value which document a difference with having significance level in the responses of these universities with both categories universities students towards reliability of service quality. The results report higher mean for the students’ responses of private sector universities in this regard.
4.4.4 T-Test: Responsiveness

H1: There is significance difference in the Responsiveness of public and private universities faculty.

Table 4.4.4

T-test for Responsiveness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>-.01632</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The responsiveness variable has been considered in above table for mean comparison results of private and public universities students’ perception towards the administration responsiveness. The results report a significance sort of difference in the mean of the students’ responses of private and public sector universities. The sig-2 tail showing significant results which document a difference with having significance level in the responses of these universities with both categories universities student responses towards administration responsiveness. The results report higher mean for the level student’s responses of private sector universities.
4.4.5 T-Test for Empathy of the Service Quality

H1: There is significance difference in the Empathy of public and private universities.

Table 4.4.5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.00875</td>
<td>0.134</td>
</tr>
</tbody>
</table>

The above table shows empathy for understanding comparison of mean results of the universities of both categories as responded by the students towards their Empathy. The results report an insignificance difference in the mean of the students’ responses of private and public sector universities. The results indicate that a service of both private and public universities are reliable and reports no significance difference in this regard, as the sig-2 tail showing insignificant value at 5% probability level, which document a difference with having significance level in the responses of these universities with both categories universities student responses towards the empathy of services. The results report almost same mean for the students’ responses of the universities of both domain and category regarding the empathy of services.
4.4.6 T-Test for Students satisfaction

H1: There is significance difference in the students’ satisfaction of public and private universities

**Table 4.4.6**

*T-test for students’ satisfaction*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student satisfaction</td>
<td>.35455</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The above sort of table tabulates the mean comparison results of private and public universities students towards the students’ satisfaction. The results report a significant sort and level of difference in the mean of the students’ responses of private and public sector universities. The Sig-2 tail indicates significant results at 5% level of probability, which document a difference with having significance level in the responses of these universities with both categories universities student responses regarding their satisfaction. The results report higher mean for the students’ responses of students representing both class of universities.
4.5 Correlation Analysis

Table 4.5

Correlation Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Satisfaction</th>
<th>Tangibility</th>
<th>Assurance</th>
<th>Responsiveness</th>
<th>Reliability</th>
<th>Empathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>520</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangibility</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>.244***</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>.046</td>
<td>.520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>.652***</td>
<td>.183</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>.021</td>
<td>.236</td>
<td>.520</td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>.510***</td>
<td>.263</td>
<td>.197</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>.032</td>
<td>.427</td>
<td>.642</td>
<td>.520</td>
</tr>
<tr>
<td>Reliability</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>.681***</td>
<td>.043</td>
<td>.390</td>
<td>.289</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>.012</td>
<td>.141</td>
<td>.210</td>
<td>.221</td>
</tr>
<tr>
<td>Empathy</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>.127</td>
<td>.226</td>
<td>.214</td>
<td>.188</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>.439</td>
<td>.533</td>
<td>.534</td>
<td>.376</td>
</tr>
</tbody>
</table>

(P-value <0.05) ***

The table 4.5 shows the correlation of the different sort of variables analysed in 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 is also demonstrating positive significant correlation with students’ satisfaction, where as empathy shows insignificant correlation with students’ satisfaction.
4.6 Regression Assumptions

4.6.1 Normality Tests of the data

The following normality tests have been conducted for the normality of data in this study.

4.6.1.1 Tangibility Shapiro-Wilk Test of Normality

Table 4.6.1.1

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tang</td>
<td>.14</td>
<td>10</td>
<td>.240</td>
<td>.987</td>
<td>10</td>
</tr>
</tbody>
</table>

The results in above table are showing the normality through KS test and SH-Wilk test. Test is more feasible and appropriate for those researches using small sample sizes (< 50 samples), but this can also be used for sample size having 2000 observations. Keeping in view the sample size of this research, which is 650, that is why Shapiro-Wilk test has been used to assess the normality of the variables of this research study. The data collected about tangibility is normally distributed as the significance value of the Shapiro test is above 0.05. If the recurring value is lessthan 0.05, mmeans significance deviation from a normal distribution. However the results suggest that data of tangibility is normally distributed as the caring value of tangibility is 0.765 that is greater than normal value 0.05, which is well above the threshold value for the data normality.
4.6.1.2 Assurance Shapiro-Wilk Test of Normality

Table 4.6.1.2

Kolmogrov-smirnov Shapiro-Wilk

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assur</td>
<td>.16</td>
<td>10</td>
<td>.278</td>
<td>10</td>
<td>.922</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.590</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in above table are showing the normality through KS test and SH-Wilk test. The Shapiro-Wilk Test is more feasible and appropriate for those researches using small sample sizes (< 50 samples), but this can also be vital to be used for sample size having 2000 observations. Keeping in view the sample size of this research, which is 650, that is why Shapiro-wilk test has been used to assess the normality of the variables of this research study. The data collected about assurance is normally distributed as the significance value of the Shapiro test is above 0.05. If the recurring value is less than 0.05, means significance deviation from a normal distribution. However, the results suggest that data of assurance is normally distributed as the caring value of assurance is 0.590 that is greater than normal value 0.05, which is well above the threshold value for the data normality.
4.6.1.3 Reliability Shapiro-Wilk Test of Normality

Table 4.6.1.3

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relie</td>
<td>.17</td>
<td>10</td>
<td>.266</td>
<td>.843</td>
<td>10</td>
</tr>
</tbody>
</table>

The results in above table are showing the normality through KS test and SH-Wilk test. The Shapiro-Wilk Test is more feasible and appropriate for those researches using small sample sizes (< 50 samples), but this can also be vital to be used for sample size having 2000 observations. Keeping in view the sample size of this research, which is 650, that is why Shapiro-wilk test has been used to assess the normality of the variables of this research study. The data collected about reliability form the respondents is normally distributed as the significance value of the Shapiro test is above 0.05. Mean that when the value of the Shapiro test is insignificant than the data is normally distributed. If the recurring value is less than 0.05, means significance deviation from a normal distribution However, the results suggest that data of reliability is normally distributed as the calculated value of reliability is 0.886, which is well above the threshold value for acceptance of the data normality.
4.6.1.4 Responsiveness Shapiro-Wilk Test of Normality

Table 4.6.1.4

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resp</td>
<td>.15</td>
<td>10</td>
<td>.211</td>
<td>.688</td>
<td>10</td>
</tr>
</tbody>
</table>

The results in above table are showing the norality through KS test and SH-Wilk test. The Shapiro-Wilk Test is more feasible and appropriate for those researches using small sample sizes (< 50 samples), but this can also be vital to be used for sample size having 2000 observations. Keeping in view the sample size of this research, which is 650, that is why Shapiro-wilk test has been used to assess the normality of the variables of this research study. The data collected about the variable responsiveness is normally distributed as the significance value of the Shapiro test is above 0.05. If the recurring value is less than 0.05, it means significance deviation from a normal distribution. However, the results suggest that data of Trust is normally distributed as the caring value of responsiveness is 0.633, which is well above the threshold value for the data normality.
4.6.1.5 Empathy Shapiro-Wilk Test of Normality

Table 4.6.1.5

<table>
<thead>
<tr>
<th>Kolmogrov-smirnov</th>
<th>Shapiro- Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>Empth</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td>.992</td>
</tr>
</tbody>
</table>

The results in above table are showing the normality through KS test and SH-Wilk test. The Shapiro-Wilk Test is more feasible and appropriate for those researches using small sample sizes (< 50 samples), but this can also be vital to be used for sample size having 2000 observations. Keeping in view the sample size of this research, which is 650, that is why Shapiro-wilk test has been used to assess the normality of the variables of this research study. The data collected about empathy from the respondents are normally distributed as the significance value of the Shapiro test is above 0.05. Means that when the value of the Shapiro test is insignificant than the data is normally distributed. If the recurring value is less than 0.05, it means significance deviation from a normal distribution. However, the results suggest that data of empathy is normally distributed as the calculated value of empathy is 0.891, which is well above the threshold value for acceptance of the data normality.
4.6.1.6 Students’ satisfaction Shapiro-Wilk Test of Normality

Table 4.6.1.6

<table>
<thead>
<tr>
<th>Kolmogrov-smirnov Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
</tr>
<tr>
<td>Sat</td>
</tr>
</tbody>
</table>

The results in above table are showing the normality through KS test and SH-Wilk test. The Shapiro-Wilk Test is more feasible and appropriate for those researches using small sample sizes (< 50 samples), but this can also be vital to be used for sample size having 2000 observations. Keeping in view the sample size of this research, which is 650, that is why Shapiro-wilk test has been used to assess the normality of the variables of this research study. The data collected about students’ satisfaction from the respondents are normally distributed as the significance value of the Shapiro test is above 0.05. If the recurring value is less than 0.05, means significance deviation from a normal distribution means that when the value of the Shapiro test is insignificant than the data is normally distributed. However, the results suggest that data of students’ satisfaction is normally distributed as the calculated value of students’ satisfaction is 0.891, which is well above the threshold value for acceptance of the data normality.
4.7 Regression Analysis

H1: there is significant impact of service quality on students’ satisfaction

Table 4.7

Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Colinerity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std.Error</td>
<td>Beta</td>
<td></td>
<td>VII</td>
</tr>
<tr>
<td>Tangibility</td>
<td>0.114</td>
<td>0.045</td>
<td>.221</td>
<td>2.53</td>
<td>0.016</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.127</td>
<td>0.055</td>
<td>.632</td>
<td>2.28</td>
<td>0.029</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.178</td>
<td>0.047</td>
<td>.539</td>
<td>3.78</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>0.112</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>0.051</td>
<td>.041</td>
<td>.642</td>
<td>2.13</td>
<td>.046</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.07</td>
<td>.041</td>
<td>.109</td>
<td>1.67</td>
<td>.083</td>
</tr>
</tbody>
</table>

(P-value <0.05) ***

Satisfaction = 0.114 tangibility + 0.127 assurance + 0.178 responsiveness + 0.11 reliability

**Dependent Variable: Students’ Satisfaction, F Value= 56.89, R² = 0.68**

The above table 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 (t=2.53, p<0.05). The beta value of tangibility 0.114 demonstrates that one unit change in tangibility will account for 0.114 unit change in students’ satisfaction. Assurance shows positive significant impact on students’ satisfaction (t=2.28, p<0.05). One unit change in assurance will cause 0.127 unit change in students’ satisfaction. Similarly, responsiveness also predicts positive significant impact on students’ satisfaction as its underlying t-value is significant at 5% probability level (t=3.78, p<0.05). One unit change in responsiveness will cause 0.178 unit change in students’ satisfaction. Reliability also shows positive significant effect on students’ satisfaction (t=2.13, p<0.05). One unit change in
reliability will cause 0.112 unit change in students’ satisfaction. Empathy also shows positive insignificant impact on the student’s satisfaction of both public and private sector universities (t=0.07, p>0.05). The reported beta value of empathy is 0.07, which means that one unit change in empathy will bring 0.07 unit change in student’s satisfaction.

The R-square 0.68 indicates that 68% changes are caused by these factors of education service quality on 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.

4.7.1 Higher Education Institutions Competitive Analysis: Strategic Management Perspective

(Porter’s Five Forces Industry Analysis)

The second component of the data Analysis of this research related to the “competitive environment analysis of the higher education institutions of KHYBER PUKHTUNKHWA as per Porter’s Five Force Model” is arranged in this chapter-5. This chapter contains the responses and results thereof as derived from the analysis of the questionnaires administered to the various academic administrative echelons of the universities. The chapter comprises of the reliability of variables and regression analysis which was employed to investigate the degree of association and relationship of independent variables with dependent variables. This part is arranged in the following sequence to show all the results.

a. Demographic Analysis of the variables such as; gender, age designation of the the respondents are investigated.

b. Reliability of the Instrument through Cronbachs Alpha

c. Validity of the Research through Factor Analysis- Conformity Analysis including KMO and Bartlett's and Component Matrix of each of the variable of the instrument.

d. T. Test mean comparisons with in the individual universities and within the group of public and private sector universities
4.8. Demographic Analysis:

For current study a total 350 questionares were distributed among the students in which 306 errors free questionare were collected back. The demographic variables in the current research effort include age, gender, and degree program of the respondents (administrative, faculty and non faculty staff) or target population. The demographic information about the respondents is provided in the following tables:

Table 4.8.1

Table for Age

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent Valid</th>
<th>Percent Cumulative</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 22-32</td>
<td>154</td>
<td>50.9</td>
<td>50.9</td>
</tr>
<tr>
<td>32-40</td>
<td>100</td>
<td>32.6</td>
<td>32.6</td>
</tr>
<tr>
<td>41 and above</td>
<td>52</td>
<td>16.9</td>
<td>16.9</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The age showing in this particular table that almost the respondents have ages around 22 to 32 and are ostly young as the total number in this case is 154 representing that ost of the sample taken is young (n=100), constituting a valid percentage of 32%. While, employees abcove 41 years constitute sample size (n=52) with a percentage of 16%.
### Table 4.8.2

**Table for Gender**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent Valid</th>
<th>Percent Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid male</td>
<td>216</td>
<td>70.5</td>
<td>70.5</td>
</tr>
<tr>
<td>Female</td>
<td>90</td>
<td>29.4</td>
<td>29.4</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The above table is about the kind of gender’s responses based on and taken on the questionnaire which predicts that almost out of the total respondents the male are in greater number as it accounts for around (n=216) of the sample size with 70%. Whereas, the other gender female respondents accounts for 90 of the sample size (n=90), forming the 29%

### Table 4.8.3

**Table for Designation**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent Valid</th>
<th>Percent Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid administration staff</td>
<td>136</td>
<td>44.4</td>
<td>56.7</td>
</tr>
<tr>
<td>Non faculty staff</td>
<td>120</td>
<td>39.2</td>
<td>32.6</td>
</tr>
<tr>
<td>Faculty staff</td>
<td>50</td>
<td>16.3</td>
<td>10.5</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The designation showing the respondents is almost 136 which stand as 44 percent of the whole sample used in the data analysis. While the respondents other than faculty is the same and the non faculty is 120 which is 40 percent and faculty is 50 accounts for around 16 percent.
4.9. Reliability Analysis

The degree of reliability is measured through correlation coefficient, if a test is reliable it shows a high positive correlation. Closer the coefficients are to +1.0 and -1.0, greater is the strength of the relationship between the variables. (Beck, Steer & Brown, 1996). Reliability of research includes internal as well as external reliability such as:

a. Internal reliability that evaluates the steadiness of results across items within a test.

b. External reliability denotes that which a measure varies from one use to another

Inter-item sort of reliability which determine the coefficient i.e. the Cronbach’s alpha represent for different variables are mentioned below. According to Sekaran (2003) if Cronbach’s alphas of any item of the questionnaire ranges less than 0.60 then that item may be deleted from questionnaire. The below mentioned is showing reliability statistics value of variables of questionnaire administered to the students reveals that questions stand valid and deletion should be avoided.
Table: 4.9

Reliability of the Instrument

<table>
<thead>
<tr>
<th>Variable</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>level of rivalry among existing universities</td>
<td>10</td>
<td>.766</td>
<td>Yes</td>
</tr>
<tr>
<td>Barriers / Constraints to New Entrants</td>
<td>6</td>
<td>.719</td>
<td>Yes</td>
</tr>
<tr>
<td>Bargaining Power of Buyers (Students)</td>
<td>12</td>
<td>.700</td>
<td>Yes</td>
</tr>
<tr>
<td>Bargaining Power of the Suppliers- Input power</td>
<td>6</td>
<td>.651</td>
<td>Yes</td>
</tr>
<tr>
<td>Threats of Substitute</td>
<td>5</td>
<td>.731</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The above table shows that the reliability of the data collected for the variable mentioned in column one is positively reliable because the results showing the Cronbach’s value above the acceptable ranges. The researchers argued that alpha value of above .60 is acceptable; however, the value of alpha of the variables is well above the desired and acceptable level. So the scale is highly reliable for further analysis of this study.

4.10. Validity and Confirmatory Factor Analysis

If the reliability of research means that significant results must be inherently repeatable than the Validity of research embraces the concept of research and ensures that the results obtained thereof truly confirms the basic requirements of the scientific research. Seligher and Shoham (1989) opines that “any research can be affected by different kinds of factors which can invalidate the research findings” (p.95). The content and face validity of measurement instrument i.e. (questionnaire) was checked by the supervisor and other qualified research type scholars. The various scholars give proper validity of all the questions and give a go for the collection of the purposeful data. For the sort of both convergent/construct validity this model has been examined
using the approach of CFA. The factor Analysis helps ensure validity of research as it reduces data by eliminating redundant or repeated variables from a set of correlated variables and provide construct validity evidence.

Factor Analysis encompasses two types i.e. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Confirmatory factor analysis, an extension of factor analysis that tests the theories based specific hypothesis and inter-correlations of their variables (Cooley and Lohnes 1971; Harman, 1976; Tobin, Holroyd, & Reynolds, 1984). The KMO & Bartlett’s Test of Sphericity is a measure of sampling adequacy that is recommended to check the case to variable ratio for the analysis being conducted. In most academic and business studies. KMO & Bartlett’s test, part of CFA plays a significant part in deciding about the sample level of adequacy. In this regard KMO is predicting the sufficient level and the recurring range is upto 1.
4.10.1 Exploratory Factor Analysis

Table 4.10.1

*KMO and Bartlett’s of Rivalry*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rivalry</td>
<td>.682</td>
<td>.000</td>
</tr>
</tbody>
</table>

Component Matrix Rivalry

- Q1: .662
- Q2: .341
- Q3: .522
- Q4: .686
- Q5: .721
- Q6: .684
- Q7: .549
- Q8: .632
- Q9: .422
- Q10: .567

The above table shows the factor analysis of component “Industrial Rivalry”. The results are showing enough inter-correlation among all questions of the variable and also showing that the sample is sufficient enough as the KMO test is significant. All the variables have been loaded at values above .5 which shows that the questions of this variable is inter related except Q 2 and 9.
Table: 4.10.2

*KMO and Bartlett's of “Height of Barriers to new entrants”*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Entrants</td>
<td>.682</td>
<td>.000</td>
</tr>
</tbody>
</table>

Component Matrix Barrier to entry

<table>
<thead>
<tr>
<th>Question</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>.581</td>
</tr>
<tr>
<td>Q2</td>
<td>.654</td>
</tr>
<tr>
<td>Q3</td>
<td>.598</td>
</tr>
<tr>
<td>Q4</td>
<td>.712</td>
</tr>
<tr>
<td>Q5</td>
<td>.210</td>
</tr>
<tr>
<td>Q6</td>
<td>.743</td>
</tr>
</tbody>
</table>

The above tables are showing the factor analysis of the variable “Height of the Barrier to new entrants”. The results are showing enough inter correlation among all questions of the variable and also showing that the sample is sufficient enough as the KMO test is significant. All the variables have been loaded at values above .5 which shows that the questions of this variable are inter related except Q5.
Table: 4.10.3

*KMO and Bartlett's of Bargaining power of buyers*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
<th>of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargaining power of buyers</td>
<td>.682</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

**Component Matrix: Bargaining power of buyers**

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
<th>Q9</th>
<th>Q10</th>
<th>Q11</th>
<th>Q12</th>
</tr>
</thead>
<tbody>
<tr>
<td>.672</td>
<td>.568</td>
<td>.723</td>
<td>.673</td>
<td>.219</td>
<td>.593</td>
<td>.754</td>
<td>.751</td>
<td>.801</td>
<td>.512</td>
<td>.649</td>
<td>.321</td>
</tr>
</tbody>
</table>

The above table is showing the factor analysis of the variable Bargaining power of the buyers. The results are showing enough inter correlation among all questions of the variable and also showing that the sample is sufficient enough as the KMO test is significant. All the variables have been loaded at values above .5 which shows that the questions of this variable are inter related, except Q 5, 12.
Table: 4.10.4

*KMO and Bartlett's of Bargaining Power of Suppliers*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargaining power of suppliers</td>
<td>.682</td>
<td>.000</td>
</tr>
</tbody>
</table>

Component Matrix Bargaining power of suppliers

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>.598</td>
</tr>
<tr>
<td>Q2</td>
<td>.614</td>
</tr>
<tr>
<td>Q3</td>
<td>.712</td>
</tr>
<tr>
<td>Q4</td>
<td>.221</td>
</tr>
<tr>
<td>Q5</td>
<td>.621</td>
</tr>
<tr>
<td>Q6</td>
<td>.717</td>
</tr>
</tbody>
</table>

The above table reflects that the factor analysis of the variable—“Bargaining power of suppliers”. The results are showing enough inter correlation among all questions of the variable and also revealing that the sample is sufficient enough and the KMO test is significant. All the variables have been loaded at values above .5 which shows that the questions of this variable are inter related except Q4.
Table: 4.10.5

*KMO and Bartlett's of Threats of substitute*

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO value</th>
<th>Bartlett’s test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats of substitute</td>
<td>.682</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Component Matrix Threats of substitute**

<table>
<thead>
<tr>
<th>Q1</th>
<th>.401</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>.791</td>
</tr>
<tr>
<td>Q3</td>
<td>.510</td>
</tr>
<tr>
<td>Q4</td>
<td>.743</td>
</tr>
<tr>
<td>Q5</td>
<td>.784</td>
</tr>
</tbody>
</table>

The above table is showing the factor analysis of the variable “threats of substitute” The results are showing enough inter correlation among all questions of the variable and also showing that the sample is sufficient enough as the KMO test is significant. All the variables have been loaded at values above .5 which shows that the questions of this variable are inter related except Q1.
4.10.2 Confirmative Analysis for the construct used for Measurement of Rivalry

The measurement model for Rivalry having a single factor with 10 indicators is presented in the below table. The measurement estimation analysis of this construct documents the fitness of the model due to the values well in feasible ranges. The chi-square reporting value of 138.62 with 7 degrees representing its freedom shows the significance by 5%. The associated level of fit-statistics indicates and portray the vital acceptability of the model as, mostly its statistics are significant (RMSEA= 0.013; Stand- RMR= 0.030; GFI= 0.918; CFI= 0.927). This predicts the confirmation of the validity of this construct model. The table discussed bellow are evidencing the CFA for the variable of Rivalry as follows:

Table 4.10.2.1

Confirmative Factor Analysis for Construct used for Rivalry

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely Standardized Loadings</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rival1</td>
<td>0.83</td>
<td>0.71</td>
<td>0.23</td>
</tr>
<tr>
<td>Rival2</td>
<td>0.73</td>
<td>0.75</td>
<td>0.26</td>
</tr>
<tr>
<td>Rival3</td>
<td>0.87</td>
<td>0.81</td>
<td>0.28</td>
</tr>
<tr>
<td>Rival4</td>
<td>0.59</td>
<td>0.74</td>
<td>0.23</td>
</tr>
<tr>
<td>Rival5</td>
<td>0.55</td>
<td>0.73</td>
<td>0.35</td>
</tr>
<tr>
<td>Rival6</td>
<td>0.56</td>
<td>0.70</td>
<td>0.24</td>
</tr>
<tr>
<td>Rival7</td>
<td>0.75</td>
<td>0.82</td>
<td>0.29</td>
</tr>
<tr>
<td>Rival8</td>
<td>0.70</td>
<td>0.79</td>
<td>0.33</td>
</tr>
<tr>
<td>Rival9</td>
<td>0.52</td>
<td>0.76</td>
<td>0.39</td>
</tr>
<tr>
<td>Rival10</td>
<td>0.77</td>
<td>0.87</td>
<td>0.23</td>
</tr>
</tbody>
</table>
4.10.3 Confirmative Analysis for the construct used for Measurement of New Entrants

The measurement model for New Entrants having a single factor with 6 indicators is presented in the below table. The measurement estimation analysis of this construct documents the fitness of the model due to the values well in feasible ranges. The chi-square value of 137.82 with 8 representing its freedom shows the significance by 5%. The associated level of fit-statistics indicates and portray the vital acceptability of the model as, mostly its statistics are significant (RMSEA= 0.015; Standardized RMR= 0.032; GFI= 0.917; CFI= 0.929). This predicts the confirmation of the validity of this construct model. The table discussed bellow are evidencing the CFA for the variable of New Entrants as follows:

Table 4.10.3

*Confirmative Factor Analysis for Construct used New Entrants*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standardized Loadings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Entran1</td>
<td>0.82</td>
<td>0.72</td>
<td>0.24</td>
</tr>
<tr>
<td>New Entran2</td>
<td>0.72</td>
<td>0.76</td>
<td>0.27</td>
</tr>
<tr>
<td>New Entran3</td>
<td>0.86</td>
<td>0.82</td>
<td>0.29</td>
</tr>
<tr>
<td>New Entran4</td>
<td>0.58</td>
<td>0.75</td>
<td>0.24</td>
</tr>
<tr>
<td>New Entran5</td>
<td>0.54</td>
<td>0.74</td>
<td>0.36</td>
</tr>
<tr>
<td>New Entran6</td>
<td>0.55</td>
<td>0.71</td>
<td>0.25</td>
</tr>
</tbody>
</table>
4.10.4 Confirmative Analysis for the construct used for Measurement of Bargaining Power of Buyers

The measurement model for Bargaining power of buyers having a single factor with 12 indicators is presented in the below table. The measurement estimation analysis of this construct documents the fitness of the model due to the values well in feasible ranges. The chi-square value of 143.66 with 7 representing its freedom shows the significance by 5%. The associated level of fit-statistics indicates and portray the vital acceptability of the model as, mostly its statistics are significant (RMSEA= 0.013; Standardized RMR= 0.033; GFI= 0.934; CFI= 0.931). This predicts the confirmation of the validity of this construct model. The table discussed bellow are evidencing the CFA for the variable of bargaining power of buyers as follows:

**Table 4.10.4**

*Confirmative Factor Analysis for Construct used for bargaining power of buyers*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barg1 1</td>
<td>0.83</td>
<td>0.73</td>
<td>0.25</td>
</tr>
<tr>
<td>Barg1 2</td>
<td>0.73</td>
<td>0.74</td>
<td>0.26</td>
</tr>
<tr>
<td>Barg1 3</td>
<td>0.86</td>
<td>0.81</td>
<td>0.28</td>
</tr>
<tr>
<td>Barg1 4</td>
<td>0.62</td>
<td>0.75</td>
<td>0.25</td>
</tr>
<tr>
<td>Barg1 5</td>
<td>0.57</td>
<td>0.74</td>
<td>0.35</td>
</tr>
<tr>
<td>Barg1 6</td>
<td>0.58</td>
<td>0.72</td>
<td>0.22</td>
</tr>
<tr>
<td>Barg1 7</td>
<td>0.77</td>
<td>0.81</td>
<td>0.27</td>
</tr>
<tr>
<td>Barg1 8</td>
<td>0.72</td>
<td>0.76</td>
<td>0.33</td>
</tr>
<tr>
<td>Barg1 9</td>
<td>0.51</td>
<td>0.73</td>
<td>0.36</td>
</tr>
<tr>
<td>Barg1 10</td>
<td>0.78</td>
<td>0.85</td>
<td>0.26</td>
</tr>
<tr>
<td>Barg1 11</td>
<td>0.70</td>
<td>0.72</td>
<td>0.21</td>
</tr>
<tr>
<td>Barg1 12</td>
<td>0.66</td>
<td>0.73</td>
<td>0.29</td>
</tr>
</tbody>
</table>
4.10.5 Confirmative Analysis for the construct used for Measurement of Bargaining power of suppliers

The measurement model for bargaining power of suppliers having a single factor with 6 indicators is presented in the below table. The measurement estimation analysis of this construct documents the fitness of the model due to the values well in feasible ranges. The chi-square value of 133.32 with 6 representing its freedom shows the significance by 5%. The associated level of fit-statistics indicates and portray the vital acceptability of the model as, mostly its statistics are significant (RMSEA= 0.011; Standardized RMR= 0.039; GFI= 0.913; CFI= 0.922). This predicts the confirmation of the validity of this construct model. The table discussed bellow are evidencing the CFA for the variable of bargaining power of suppliers as follows:

Table 4.10.5

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barg2 1</td>
<td>0.84</td>
<td>0.75</td>
<td>0.25</td>
</tr>
<tr>
<td>Barg2 2</td>
<td>0.74</td>
<td>0.78</td>
<td>0.26</td>
</tr>
<tr>
<td>Barg2 3</td>
<td>0.88</td>
<td>0.83</td>
<td>0.28</td>
</tr>
<tr>
<td>Barg2 4</td>
<td>0.59</td>
<td>0.77</td>
<td>0.23</td>
</tr>
<tr>
<td>Barg2 5</td>
<td>0.56</td>
<td>0.76</td>
<td>0.37</td>
</tr>
<tr>
<td>Barg2 6</td>
<td>0.57</td>
<td>0.73</td>
<td>0.24</td>
</tr>
</tbody>
</table>
4.10.6 Confirmative Analysis for the construct used for Measurement of Threats of substitute

The measurement model for threats of substitute having a single factor with 6 indicators is presented in the below table. The measurement estimation analysis of this construct documents the fitness of the model due to the values well in feasible ranges. The chi-square value of 134.38 with 5 representing its freedom shows the significance by 5%. The associated level of fit-statistics indicates and portray the vital acceptability of the model as, as, mostly its statistics are significant (RMSEA= 0.017; Standardized RMR= 0.035; GFI= 0.919; CFI= 0.932). This predicts the confirmation of the validity of this construct model. The table discussed bellow are evidencing the CFA for the variable of threats of substitues as follows:

Table 4.10.6

Confirmative Factor Analysis for Construct used for Threats of substitute

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats 1</td>
<td>0.86</td>
<td>0.74</td>
<td>0.26</td>
</tr>
<tr>
<td>Threats 2</td>
<td>0.77</td>
<td>0.77</td>
<td>0.27</td>
</tr>
<tr>
<td>Threats 3</td>
<td>0.89</td>
<td>0.82</td>
<td>0.29</td>
</tr>
<tr>
<td>Threats 4</td>
<td>0.53</td>
<td>0.76</td>
<td>0.23</td>
</tr>
<tr>
<td>Threats 5</td>
<td>0.52</td>
<td>0.75</td>
<td>0.39</td>
</tr>
</tbody>
</table>
4.11 Mean Comparison Test between Private and Public Universities

A T-test makes statistical investigation between the two population means. The test statistic in the t-test is known as the t-statistic. The t-test defines a P value (probability) that determines whether the population means differ from each other or otherwise. A two-sample t-test examines whether two samples are different and is commonly used. The t-test is one of a number of hypothesis tests. The test that compares three or more variables is known as analysis of variance (ANOVA). Other hypothesis tests include the chi-square test and f-test.

H1: There is significance difference in the Industrial Rivalry of public and private universities.

Table: 4.11.1

*T test for knowing the “Industrial Rivalry”*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- Tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Rivalry</td>
<td>.54000</td>
<td>0.145</td>
</tr>
</tbody>
</table>

The results indicate that there is insignificant difference in the mean of private and public sector employees toward “industrial rivalry” factor. The sig.2- tailed showing significant results which document that there is insignificance difference in the responses of public and private universities administration staff responses towards industrial rivalry. The results report higher mean for the administration responses in terms of industry rivalry of public sector universities.
H1: There is significance difference in the Height of barriers of new entrants of public and private universities.

Table: 4.11.2

*T test for knowing the “Height of barriers of new entrants.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig-2 Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height of Barriers to new entrants</td>
<td>-.85400</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results indicate that there is significant difference in the mean of private and public sector employees toward the heights of barriers to new entrant’s factor. The results signify that there is significant difference between private and public sector universities. The sig-2 tail also showing significant results which document that there is significance difference in the responses of public and private universities administrative staff responses towards height of barriers of new entrants. The results report higher mean for the administrative staff responses of height of barriers to new entrants in private sector universities.
H1: There is significance difference in the Bargaining power of the buyer of public and private universities.

Table. 4.11.3

*T test for knowing the bargaining power of buyers*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- Tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargaining power of the buyer</td>
<td>- .50114</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results indicate that there is significant difference in the mean of private and public sector employees toward Bargaining power of buyer factor. The results indicate significant difference between private and public sector universities regarding buyer bargaining power. The sig.2-tailed showing significant results which document that there is significance difference in the responses of public and private universities administrative staff responses towards bargaining power of buyers. The results report higher mean for the administrative staff responses in bargaining power of buyers of private sector universities.
H1: There is significance difference in the Bargaining power of suppliers of public and private universities.

**Table. 4.11.4**

*T test for knowing the bargaining power of suppliers*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>sig.2 -Tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargaining power of the suppliers</td>
<td>.22566</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results indicate that there is significance difference in the mean of private and public sector employees toward Bargaining power of supplier factor. The t-test value is significant, which signifies that there is significant difference between private and public sector universities regarding supplier bargaining power. Public sector universities show high level than private. The sig.2- tailed is also showing significant results which document that there is significance difference in the responses of public and private universities administrative staff responses towards bargaining power of suppliers. The results report higher mean for the administrative staff responses of public sector universities.
H1: There is significance difference in the Threats of substitutes of public and private universities.

**Table. 4.11.5.**

* T test for knowing the Threats of Substitute

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>Sig.2- Tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats substitutes</td>
<td>-.40127</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results indicate that there is significant difference in the mean of private and public sector employees toward threat of substitute factor. The sig.2-tailed is showing significant results which document that there is significance difference in the responses of public and private universities administrative staff responses towards threats of substitutes. The results report higher mean for the administrative responses of private sector universities.

**4.12 Strategic Response**

Strategy covers the most important element of the management direction which is mainly concern about direction for the better achievement of the various objectives (Armstrong, 2006). Strategy is all about the management and fit in organization internal as well as external conditions to properly comprehend the various strategic issues and problems (Klaas, 2004 and Porter, 1985). In view of this context, fit is essential which only matches the organizational particular structure and the contingency factors which lies effect on the fir performance as well as competition (Bernard and Koerte, 2007). Cui et al. (2005) and Avison et al. (2004) argued about such issues that a firm is a proactive kind participant for the environment which would be capable of adapting a kind of strategy which will responsive for the environment which covers the kind of strategic responce.
Table 4.12

*Measuring Strategic Response*

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There are many universities offering courses and disciplines similar to ours in the market.</td>
<td>250</td>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>2. Universities in education industry are very aggressive in marketing their courses</td>
<td>260</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>3. Our competitors control a very small market share in our industry</td>
<td>50</td>
<td>56</td>
<td>200</td>
</tr>
<tr>
<td>4. Our industry attracts many new universities every year</td>
<td>120</td>
<td>50</td>
<td>136</td>
</tr>
<tr>
<td>5. It is not easy for the students to find an alternative supplier offering same courses and discipline</td>
<td>30</td>
<td>40</td>
<td>236</td>
</tr>
<tr>
<td>6. It is not easy for the students to find an alternative supplier offering same courses and discipline</td>
<td>260</td>
<td>30</td>
<td>16</td>
</tr>
</tbody>
</table>
Chapter-5

RESEARCH FINDINGS AND CONCLUSION

This chapter presents the findings of the research as derived from the detailed analysis in preceding chapter 4. Chapter 4 described the data Analysis, results and discussion on students’ perceptions related to their satisfaction level with regards to the quality of education and service environment prevailing in their respective universities and it also presented the detailed profile of competitive environment as prevalent in higher education institutions of Khyber Pakhtunkhwa. On the basis of the data analysis the following research findings can be presented:

5.1. Students Satisfaction in terms of education service quality

The research study derived following findings with regards to the students’ satisfaction and the quality of service being delivered in higher education institutions of Khyber Pakhtunkhwa:

5.1.1 Tangibility dimension of service quality

H1: there is significant difference in tangibility of public and private sector universities

This dimension is all about related to the appearance and and facilities of these institutions.

The results report a significance difference in the mean of the students’ responses of private and public sector universities regarding the tangibility of services. So the hypothesis tested for differentiation in service quality of public and private sector proved that there is significant difference in the tangibility dimension of service quality supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results. Here by the alternate hypothesis is accepted. The results find significance difference in the form of physical spaces, equipments and facilities in both public and private sector universities.

H2: there is positive impact of tangibility on students’ satisfaction

The above analysis shows that the mean comparison results of private and public universities students towards the students’ satisfaction. The results report a significant
difference in the mean of the students’ responses of private and public sector universities. The sig.2- tailed indicates significant results at 5% level of probability, which document that there is significance difference in the responses of public and private universities student responses regarding their satisfaction. The beta value of tangibility 0.11 demonstrates that one changes in tangibility will account for 0.11 unit change in students’ satisfaction. This implies that tangibility dimension of service quality has significant impact on the students’ satisfaction. The results report higher mean for the students’ responses of public sector universities as compared to private sector universities.

The hypothesis tested for the impact of service quality on students’ satisfaction proved validated and results declared that tangibility dimension of service quality carries significant impact on the students’ satisfaction supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results.

5.1.2 Assurance Dimension of Service Quality

H3: there is significant difference in assurance of public and private sector universities

This dimension reflects the skills of the employees of these institutions which help to motivate the customers, which are the students. Students’ satisfaction is very vital as it can help retain and motivate them. Service providers are expected to be the experts of the service they’re delivering.

The results report a significance difference in the mean of the students’ responses of private and public sector universities. The sig.2- tailed (t-test value) results indicate significant value which document that there is significance difference in the responsiveness of public and private universities students towards assurance dimension of service quality supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results. Hence alternate hypothesis is accepted

H4: there is positive impact of assurance on students’ satisfaction

The results indicate that there is positive significant impact of assurance factor and students’ satisfaction. The results demonstrate that assurance has positive significant impact on the students’ satisfaction as the t-value is significant at 5% level of probability. The beta value of assurance 0.12 demonstrates that one unit change in assurance will account for 0.12 unit change in student’s satisfaction. The result shows higher mean for
public sector universities as value of mean difference is positive value. The hypothesis tested for the impact of service quality on students’ satisfaction proved validated and results declared that assurance dimension of service quality carries significant impact on the student’s satisfaction supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results.

5.1.3 Responsiveness Dimension of service Quality

H5: there is significant difference in responsiveness of public and private sector universities.

This Dimension is all about the willingness of these institutions to foster and deliver better and improved services in fastest way. This can be vital in attracting students’ traffic towards the institution.

The results report a significance difference in the mean of the students’ responses of private and public sector universities. The sig.2- tailed showing significant results which document that there is significance difference in the responses of public and private universities student responses towards administration responsiveness. So the hypothesis tested for differentiating in service quality of public and private sector proved that there is significance difference in the responsiveness dimension of service quality supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results. Here by the alternate hypothesis is accepted.

H6: there is positive impact of responsiveness on students’ satisfaction

The results demonstrate that responsiveness has positive significant impact on the students’ satisfaction as the t-value is significant at 5% level of probability. The beta value of assurance 0.12 demonstrates that one unit change in responsiveness will account for 0.12 unit change in student’s satisfaction. The results report higher mean for the student’s responses of private sector universities. This predicts that private universities in KPK are well versed in term of responsiveness dimension of service quality, providing adequate responses to the students well in time as compared to public sector universities. The hypothesis tested for the impact of service quality on students’ satisfaction proved validated and results declared that responsiveness dimension of service quality carries significant impact on the student’s satisfaction supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results
5.1.4 Reliability Dimension of Service quality

H7: there is significant difference in reliability of public and private sector universities

This Dimension predicts that the institutions and organizations are performing and completing their scheduled promised services with quality and utmost accuracy as desired by the customers. Reliability works as the first hand impression, due to the fact that every customer wants a better and reliable supplier.

The results report significance difference in the mean of the students’ responses of private and public sector universities regarding the reliability of services. The results indicate that services of both private and public universities are reliable and reports no significance difference in this regard, as the sig.2- tailed is showing significant value at 5% probability level, which document that there is significance difference in the responses of public and private universities student responses towards the reliability of services. The results report for the students’ responses of public sector universities regarding the reliability of services supporting the studies of Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results.

H8: there is positive impact of reliability on students’ satisfaction

The results demonstrate that responsiveness has positive significant impact on the students’ satisfaction as the t-value is significant at 5% level of probability. The beta value of assurance 0.12 demonstrates that one unit change in reliability will account for 0.12 unit change in student’s satisfaction. The results report higher mean for the student’s responses of private sector universities. This predicts that private universities in KPK are well versed in term of reliability dimension of service quality, providing adequate responses to the students well in time as compared to public sector universities. The hypothesis tested for the impact of service quality on students satisfaction proved validated and results declared that reliability dimension of service quality carries significant impact on the student’s satisfaction supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results

5.1.5 Empathy Dimension of service quality

H9: there is significant difference in empathy of public and private sector universities
The empathy specifically relating to Service Quality is all about caring the individuals as well as customers to make the customers more valuable and good for the company.

The results report an insignificance difference in the mean of the students’ responses of private and public sector universities. The sig.2- tailed showing an insignificant result at the 5% probability level, which document that there is no significant difference in the responses of public and private universities student responses towards empathy. So the hypothesis tested for differentiation in service quality of public and private sector proved that there is no significant difference in the empathy dimension of service quality in public and private sector universities supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results

H10: there is positive impact of empathy on students’ satisfaction

The results demonstrate that empathy has positive significant impact on the students’ satisfaction as the t-value is insignificant at 5% level of probability. The beta value of assurance 0.09 demonstrates that one unit change in empathy will account for 0.09 unit change in student’s satisfaction. The results report no difference in mean for the students’ responses of private sector universities. This predicts that there public and private sector universities are same in term of empathy dimension of service quality, for both public and private sector universities. The hypothesis tested for the impact of service quality on students’ satisfaction is rejected supporting Ilias, Rahman & Razak (2008), Kajenthiran & Karunanithy (2015)’s results

5.2 Research Findings of the competitive forces

The findings of competitiveness are as follows:

5.2.1 Intensity of the Rivalry among Higher Education Institutions of Khyber Pukhtunkhwa

H11: there is significant difference in industrial of public and private sector universities

‘Competition is a fact of globalization of market in which universities compete for the quality and quality of enrolment, rankings, and funding and market share. Degree of competition is increased as the rivalry amongst the competing players is intensified. The intensity of rivalry amongst the higher education institutions is dependent on the
inter-play and tradeoff between the height of the barriers to new entrants, bargaining power of the customers, bargaining power of the suppliers and the threat of substitutes. The t. test results of the responses upon the “degree of rivalry among the higher education institutions of Khyber Pakhtunkhwa” indicated insignificant difference. The insignificant value means that there is no such a difference as for as rivalry between these two groups of public and private sector universities are concerned supporting Farhat (2013), and Ogutu (2015). The main reasons for the insignificant difference between the private and public sector universities are:

a. Both sector universities are competing in few selected departments and have no competitions in most of the disciplines. The competing disciplines fall under the domain of most attractive and market based areas where demand is much more than supply e.g. business education, medicine, engineering, computers, pharmacy etc. The disciplines with less market demand are being taught mostly in public sector universities like a social commodity.

b. Barring engineering and medicines, the fee structure of the degree programs in rest of the disciplines is identical in public and private sector universities.

c. Public sector universities have no fear of bankruptcy because of the granted funding / financial support from the government. Therefore, public sector do not operate under any pressure of rivalry, demand or cost.

5.2.2 Height of Barriers to New Entrants

H12: there is significant difference in height of barriers to new entrants of public and private sector universities

The t test result revealed that there exists a significant difference between public and private sector universities in the variable “height of barriers to new entrants”. The mean of ‘barrier to entry’ in private sector universities has been reported touch higher supporting Farhat (2013), and Ogutu (2015). It means that private sector universities are at much risk of barriers for new entrants as compared to public sector universities.

5.2.3 Bargaining Power of Buyers (Student customers)

H13: there is significant difference in bargaining power of buyers (students) of public and private sector universities

[149]
The t. test of the responses has shown a significant difference in ‘bargaining power of buyers’ between public and Private sector universities. The mean value for the private sector universities is found much higher than the public sector supporting Farhat (2013), and Ogutu (2015). Owing to the impression of being public sector / government backed, the public universities policies/ terms and conditions are morestrict and rigid. Because of their public sponsorship the students in Khyber Pukhtunkhwa prefer Public Sector University over private sector and show overwhelming demand. Government funding and financial support to the public sector universities and their students gives further edge to the preferred choice of students. The private sector university get the remaining share of students who have either failed in securing their admission in public sector or the academic program is being offered only in private universities. Private sector universities have no choice but to raise students’ enrolment so as to cover-up the fixed cost already incurred on stricture and faculty. This constraint adds in to bargaining power of the students which help them to squeeze more benefits from the university at comparative lower cost.

5.2.4 Bargaining Power of the Suppliers

H14: there is significant difference in bargaining power of suppliers of public and private sector universities

The barraging power of supplier indicated a significant difference between public and private universities. The reported mean value of public universities is higher the private universities supporting Farhat (2013), and Ogutu (2015). This is mostly observed in the undergraduates’ students seeking admission in graduate or post graduate classes.

5.2.5 Threats of Substitute

H7: there is significant difference in threats of substitute of public and private sector universities

The results reported significant difference in public and private sector universities. This implies that private sector universities are more exposed to the threats of substitute as compared to public sector universities, supporting Farhat (2013), and Ogutu (2015).
5.2.6 Strategic response

The strategic response shows that there is greater number of competition among the universities, so all the universities are required to adopt the strategies to cope with such environment of competition through cost leadership or through uniqueness.

5.3 Conclusion

Since 1970, World has witnessed a dramatically transformation of economic system from manufacturing economies to service economies (Grönroos & Ojasalo, 2004; Youtie & Shapira, 2008). Among various service sectors, higher education sector proved as an economic engine (H. S. Abdullah & Kalianan, 2009; Sultan & Yin Wong, 2010). By realizing its importance, education sector facing challenges and stiff competition for its survival in both public and private sector provisions (Abdullah Hokoma, Khan, & Hussain, 2008; Quintal, Wong, Sultan, & Yin Wong, 2012). The survival can only be possible by creating competitiveness that can only be possible through quality services; means how well the higher education institute fulfill the customers’ need and expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).

There is still a controversy around the marketing metaphor “customer” of educational institutes; we have a dire need to identify the true primary customers on which educational institutes need to focus for their attraction, satisfaction, retention, motivation and loyalty (Jeevarathnam Parthasarathy Govender, Veerasamy, & Noel, 2012). Michaela and Antony (2007) categorized the term “customers of universities” that includes parents, students, staff, community, funding agencies and employers. However, the students are considered as a primary customer, because students’ satisfaction can lead towards the satisfaction of all stakeholders (Jeevarathnam Parthasarathy Govender et al., 2012; Jeevarathnam P Govender, Veerasamy, & Noel, 2014).

According to Hanaysha, Abdullah and Warokka (2011), to address the apprehension as mentioned above, universities need to build sort of very strong bond of relationship with their primary customers through quality services. The emergence of globalization and internationalization of educational trends drives the educational institutes to focus on the sustainable competitive advantage instead of short term influence, visibility and market share (Cervero, 2000; Hune & Park, 2010). To address this challenge, extensive review of literature revealed that sustainable competitive advantage can only be possible through quality services; means how well the higher education institute fulfill the customers’ need and expectations (Helms & Nixon, 2010; Sursock, Smidt, & Davies, 2010).
In 1985, Porter presented framework through which competitiveness at any level within the organization and with other organizations can be measured. In the current research it is used for measuring the competitiveness among the higher education institutes in Khyber Pukhtunkhwa.

A lot of studies have been conducted on higher education quality to produce and generate the momentum of such class act of the students who will definitely be committed and will transform advanced technology as well (Qureshi et al., 2012). Similarly, Shah (2013) & Kundi et.al., (2014) studied the determinants of service quality and satisfaction relating to students in Higher education in the context of Pakistan in general. While, there is no single study focusing on service quality measures and factors of both type of counterpart universities in this country region of KPK Pakistan in specific.

Moreover, Farhat (2011) conducted a study on Competitive analysis through Porter Five forces’ Model in higher sort of education in the specific context and domain of Gaza. Likewise, Pringle (2011) studied the various determinants of analysis of the industry which is about the big five force forces Model for understanding the universities in Ontario Canada. Ogutu (2015) studied Porter’s five forces framework for measuring the competitiveness in public sector universities in Kenya. But there is no study found focusing the private as well as the public sector universities of KPK Pakistan related to Porter’s Five Forces framework in order to measure the academic competitiveness.

Most of the studies previously conducted are in context of Pakistan in general or otherwise limited to just one institute, the current research aimed to explore both kind of the universities encompassing the huge two counterpart universities of KPK in specific for their service quality and for competitiveness as well. Higher education is known for the role in both social and economic development. Universities are the platform where higher education is provided. However, these institutions are facing problems in the wake of competition to survive and sustain (Pringle & Huisman, 2011). In this view different studies are conducted to determine and compare the competitive position of different higher education institutions and accordingly determine their strategic direction. In Pakistan higher education institutions have different problems like predominantly to sustain in competitive environment. Besides, very few studies are conducted in Pakistan like Qureshi, et.al., (2012), Shah (2013), Kundi, et.al., .(2014). However, these studies have not taken into account the pertinent dimensions like service quality and use of relevant model to check and compare the competitiveness of the public sort of unis and private sort of universities. Therefore, this study is aimed to fill the
underlying theoretical and empirical gap to compare the competitiveness between public and private sector universities of the KP.

The study aimed to focus on two folds because service quality matters for the students and competitiveness for the administration and faculty, and these both are important for the higher education institutes to maintain its quality and its market position. To address the existing gaps in the previous studies, current study therefore has two folds that aim, firstly to investigate the prevailing level of students’ satisfaction as derived from service quality between public and private sector institutions in KPK Pakistan. This is done by SERVPERF model by Chronin and Taylor in 1992.

Secondly, the research study is vitally aiming to investigate prevailing competitiveness of the universities of Khyber Pakhtunkhwa on Porter’s five factor analysis model. The research focus would be delimited to the institutions of H-education located and operating in Khyber Pakhtunkhwa.

The competitive landscape of higher education institutions market is changing like other service sector industries. Higher education institution is 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 Pakhtunkhwa because of the public labelling with one of the group. However, time is not far off when the emerging private sector forces the public sector to respond competitively merely to ensure their survival in the market. The research found that private sector universities are reshaping their competitiveness by globalization and the digital revolution and competing on both; cost and quality of education. There are growing pressures on the public sector universities related to declining sources of income from government sector and rising costs of running academic and research program alongside maintaining huge structure of the universities. The private sector universities are competing in their choice of academic and research program where they feel that they can sustain and gradually develop their competitive advantage for a longer time and space.

The sample size for the study is (students 650 + faculty 350) 1000. The study uses stratified random sampling techniques. The results have obtained through T-Test, Correlation and Regression. The questionnaire has been tested through EFA and CFA. The data reliability has been measured through Crobach 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 reliability dimension of service quality show significance difference in public and private sector universities. The empathy dimension of service quality showing insignificance mean difference in both public and private sector universities. The results report strength for public sector universities in term of tangibility and assurance, whereas private sector universities showing strength in their responses of reliability and responsiveness dimension. The impact of service quality on students’ satisfaction show a positive impact of the service quality dimensions for tangibility, reliability, responsiveness, assurance, while empathy has a positive insignificant impact on the students’ satisfaction. The universities competitiveness was tested through T-test which predict a significant mean difference in, height of barrier to entrants, bargaining power of suppliers, bargaining power of buyer and threats of substitute, while the result shows insignificant difference for rivalry dimension. The results report higher mean for public sector universities in terms of bargaining power of suppliers while height of barrier for new entrants, bargaining power of buyers and threats of substitutes show higher mean of private sector universities.

5.4 Recommendations

This study has made an initial attempt to propose and test a model of service quality and students’ satisfaction relationship and competitive analysis in Higher education institutions of Khyber Pakhtunkhwa. In order to understand the underlying mechanism between the two phenomena and to overcome the limitations of this research, further study is needed for which a few directions are presented below:

First, the findings of this study offer a valuable insight into the way service quality and students’ satisfaction relationship and impact yet more attributes may also effect students’ satisfaction. However, to fully understand the impact of service quality and students’ satisfaction it would be helpful if future research takes objective other then using SERVPERF model. Major impediments to the provision of quality education to the optimum satisfaction level of students and the degree of institutional competitiveness remain outdated and non-market based curriculum, Low standard of students’ intake, evaluation system, teaching aids and methodology, poor culture of research and research support, poor maintenance of research laboratories and Lack of research organizations, lack of coordination and synergy between the academic and administrative staff of the universities, Non-existence of universities-industry linkages and collaboration, Poor access to internet and digital library facilities across the student’s spectrum due to discrimination, low priority to the procurement of books and maintenance of libraries, high tuition and other fees beyond the financial capacity of the students and their parents, Ineffective regulatory and monitoring
system, Insufficient infra-structure and lack of coordination between the a national employment strategy, labour market inefficiencies and education and training systems.

The research offers following recommendations to improve the competitiveness of the universities and enhance the students’ satisfaction level on the higher education system, particularly the higher education institutions of Khyber Pukhtunkhwa.

It has been evident that university competitiveness is directly affected by the service quality of the education being delivered by the university to its students. Therefore, university aiming to improve their competitiveness shall endure to focus improving their education quality they are provided. The improvements in the service quality of education that may eventually affect competitiveness of the education institution, following steps are suggested to be taken at priority:

The research found mark difference in the level of service quality and infra-structure amongst the universities of Khyber Pukhtunkhwa that question’s the quality and fairness of the accreditation process followed during accreditation of these universities. Therefore, Government of Khyber Pakhtunkhwa shall re-visit the existing accreditation process and ensure that it is effective in improving real quality in education and kindles uninterrupted perfection in the quality of teaching and learning.

Considering the teaching faculty as one of the most critical components of the university education, teacher job satisfaction, class room motivation, capacity development and empowerment are key factors to be looked after. Therefore, it is essential to augment professionalization of teaching staff and align their incentives with better education outcomes. The framework would go in a long way in achieving expected target of institutions and programs accreditation and to give other institutions the role they have to play in setting standards and improving quality of education.

There exists significant discrepancy in almost all universities, baring very few private sector universities, with regard to job placement of their graduates. There is no worthwhile activity cum program that could facilitate students in accessing the labour market or arranging any employers-students’ get-togethers. The universities are expected not only to provide market based education rather, arrange employment symposiums and showcase their graduates to the potential employers. that enhances the range and extent of placement for their graduates. Though there is a lot needed to be done in this regard in all of the universities of Khyber Pukhtunkhwa, but the present research revealed that private sector universities offer better placement opportunities than the public sector. Therefore, universities are
expected to provide market based education that enhances the range and extent of placement for their graduates. Though there is a lot needed to be done in this regard in all of the universities of Khyber Pukhtunkhwa, but the present research revealed that private sector universities offer better placement opportunities than the public sector.

Secondly competition is a fact of globalization of market in which universities compete for the quality and quality of enrolment, rankings, funding and market share. Degree of competition is increased as the rivalry amongst the competing players is intensified. The intensity of rivalry amongst the higher education institutions is dependent on the inter-play and tradeoff between the height of the barriers to new entrants, bargaining power of the customers, bargaining power of the suppliers and the threat of substitutes. The t. test results of the responses upon the “degree of rivalry among the higher education institutions of Khyber Pukhtunkhwa” indicated insignificant value. The significant value means that there is no such difference as for as rivalry between these two groups of public and private sector universities are concerned. The public sector universities show higher means so both the private sector universities should emphasize on the following issses:

Private sector universities are competing in few selected departments and have no competitions in most of the disciplines. The competing disciplines fall under the domain of most attractive and market based areas where demand is much more than supply e.g. business education, medicine, engineering, computers, pharmacy etc. The disciplines with less market demand are being taught mostly in public sector universities like a social commodity.

The t test result revealed that there exists a significant difference between public and private sector universities in the variable “height of barriers to new entrants”. The mean of ‘barrier to entry’ in private sector universities has been reported touch higher. These barriers that limit entry of new university in private sector include:

Establishment of new university in private sector needs to meet the following legal requirements which are very difficult to fulfill. The t. test of the responses has shown a significant difference in ‘bargaining power of buyers’ between public and Private sector universities. The mean value for the private sector universities is found much higher than the public sector. Owing to the impression of being public sector / government backed, the public universities policies/ terms and conditions are more strick and rigid. The barraging power of supplier indicated a significant difference between public and private universities. The reported mean value of public universities is higher the private universities. This is mostly observed in the undergraduates’ students seeking admission in graduate or post graduate classes. The results reported significant difference in public and private sector universities.
This implies that private sector universities are more exposed to the threats of substitute as compared to public sector universities.

So far mostly both theory based and empirically base this issue regarding the HEI service quality special focus on the satisfaction of the students has not been tested in regards to HEs in Pakistan.

5.5 Limitations of the Study

The sample was limited to different universities of Khyber Pakhtunkhwa because of time and limited resources.

The study only attempted to understand the relationship between service quality and students’ satisfaction and competitiveness among these universities.

The data collected was limited to internal stake holders like students, faculty and administrative staff, external stake holders were not involved in the study.

5.6 Implications of the Study

- The current research study contributes significantly to the existing literature as the majority of previous studies did not focus Khyber Pakhtunkhwa on the whole. Thus, it expands the body of knowledge in this particular field.
- Contextual approach regarding its investigation in developing country i.e. Pakistan.
- Altogether, the study offers a significant contribution to the body of knowledge regarding service quality and students’ satisfaction of Khyber Pakhtunkhwa. To focus on knowing the competitive position of universities in public as well as private sector universities.
- The policy makers need to develop strategies to get competitive advantage in the current competitive environment.

5.7 Future Directions

- Similar studies can be conducted using the data of professional colleges in both private and public sector set up.
- The study can be widened to other areas of Pakistan as well.
- Service Quality and competitiveness can also be measured using other models as well.
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**Annexure-A**

**QUESTIONNAIRE**

**SERVICE QUALITY**

**Demography**

Age: ______________________  
Gender: ______________________  
Education: ______________________

<table>
<thead>
<tr>
<th>S. No</th>
<th>Tangibility</th>
<th>Strongly Agree(1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Appearance of Lecturers of the university is up to date and eye catching.</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>The Layout of classrooms in university is best suited</td>
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<td>3</td>
<td>The Lighting in classrooms meet the highest standards</td>
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<td>4</td>
<td>The Appearance of building and grounds in university is in appropriate order</td>
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<td>5</td>
<td>The university has excellent Overall cleanliness system</td>
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<tr>
<td>6</td>
<td>Degree to which classrooms and study rooms are comfortable</td>
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<tr>
<td>7</td>
<td>The university has up to the mark Decoration and atmosphere</td>
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<td>8</td>
<td>The Appearance of personnel in university is quite well</td>
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<td>9</td>
<td>The university has enough Availability of parking facility</td>
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<tr>
<td>10</td>
<td>The university has up to date curriculam as per HEC standarads</td>
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<td>11</td>
<td>The university offer adequate Number of courses as per HEC criteria</td>
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<td>12</td>
<td>The university has Computers adequacy in its lab for students</td>
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<tr>
<td>13</td>
<td>The computers in university are updated and advanced</td>
<td></td>
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<tr>
<td>14</td>
<td>The computers are well equipped of softwares</td>
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<tr>
<td>15</td>
<td>The university provide Access to all students to the Internet/e-mail</td>
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<td>16</td>
<td>The university has organizational culture, belief and good value</td>
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<td></td>
<td><strong>Assurance</strong></td>
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<td>17</td>
<td>The university has Friendly and courteous staffs</td>
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<tr>
<td>18</td>
<td>The university has Friendly and courteous lecturers</td>
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<tr>
<td>19</td>
<td>The university Lecturers are research oriented and productive</td>
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<tr>
<td>20</td>
<td>The lecturers have very good Academic credentials</td>
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<tr>
<td>21</td>
<td>The Lecturers are innovative and driven towards change</td>
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<td>22</td>
<td>The university involve with the community</td>
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<td>23</td>
<td>University’s staffs knowledge on rules and procedures are up to the mark</td>
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<td>24</td>
<td>The university has sufficient Security measures</td>
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<td>25</td>
<td>The lecturers using very good communication</td>
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<td></td>
<td><strong>Reliability</strong></td>
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<td>26</td>
<td>The Registration in university is timely and error-free</td>
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<tr>
<td>27</td>
<td>This university keeps its records accurately</td>
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<td>28</td>
<td>The general reliability of lecturers ie. They take classes well in time</td>
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<tr>
<td>29</td>
<td>The Staff members are sincere and take interest in solving student’s problem</td>
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<tr>
<td>30</td>
<td>This university provides its services at a time it promises to do so</td>
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<td></td>
<td>Statement</td>
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<tr>
<td>31</td>
<td>The teaching staff is capable and proficient</td>
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<tr>
<td>32</td>
<td>The staff give extra time for bringing smart change and innovation</td>
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<tr>
<td></td>
<td><strong>Responsiveness</strong></td>
<td></td>
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<tr>
<td>33</td>
<td>The university personnel always available to assist you</td>
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<tr>
<td>34</td>
<td>The lecturers are available to assist you</td>
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<tr>
<td>35</td>
<td>The Lecturers have capacity to solve problems when they arise</td>
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<tr>
<td>36</td>
<td>The Staffs have capacity to solve problems when they arise</td>
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<tr>
<td>37</td>
<td>I seldom get the “run-around” when seeking information on this University</td>
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<tr>
<td>38</td>
<td>The university has Channels for expressing student complaints are readily available</td>
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<tr>
<td>39</td>
<td>The students Queries are dealt with efficiency and promptly</td>
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<tr>
<td></td>
<td><strong>Empathy</strong></td>
<td></td>
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<tr>
<td>40</td>
<td>The university Administration has students’ best interest at heart</td>
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<tr>
<td><strong>41</strong></td>
<td>The university provide Access to computer facilities is accommodate with students’ convenient</td>
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<tr>
<td><strong>42</strong></td>
<td>The Access to study rooms is accommodate with students’ convenient</td>
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<tr>
<td><strong>43</strong></td>
<td>The Staff are willing to give students individual attention</td>
<td></td>
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<tr>
<td><strong>44</strong></td>
<td>The lecturers are sympathetic and supportive to the needs of students</td>
<td></td>
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<tr>
<td><strong>45</strong></td>
<td>The university provide enough Opening hour of computer rooms to the students</td>
<td></td>
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<tr>
<td><strong>46</strong></td>
<td>University are fair and unbiased in their treatment of individuals students</td>
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</tbody>
</table>
**Annexure- B**

**QUESTIONNAIRE**

**Demography**
Age: ______________________
Gender: ______________________
Education: ______________________

<table>
<thead>
<tr>
<th>S.No</th>
<th><strong>Student Satisfaction</strong> (Dependent Variable)</th>
<th>Strongly Agree(1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am satisfied with my decision to attend this University</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>If have a choice to do it all over again, I still will enroll in this University</td>
<td></td>
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<tr>
<td>3</td>
<td>My choice to enroll in this University is a wise one</td>
<td></td>
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<tr>
<td>4</td>
<td>I am happy on my decision to enroll in this University</td>
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<tr>
<td>5</td>
<td>I did the right decision when I decided to enroll in this University</td>
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<tr>
<td>6</td>
<td>I am happy that I enrolled in this University</td>
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</tbody>
</table>
QUESTIONNAIRE
Higher Education Institutions Strategic Management Perspective
(Applying Porter’s Five Forces Industry Analyses Model)

Demography
Age: ______________________  Gender: ______________________
Designation: ______________________

Degree of rivalry among existing universities

<table>
<thead>
<tr>
<th></th>
<th>The degree of current competition due to the number of universities that offer higher education service in Khyber Pakhtunkhwa</th>
<th>Strongly Agree(1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Resources and capabilities available at the University suit the academic institutions only</td>
<td></td>
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<tr>
<td>2</td>
<td>I think that the government would financially support the university if it has a financial deficit to cover its expenditure</td>
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<tr>
<td>3</td>
<td>The university has a strategy to continue in higher education sector, regardless of the size of demand or costs.</td>
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<tr>
<td>4</td>
<td>Other local universities affect on the level of education fees for the academic programs at universities.</td>
<td></td>
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<tr>
<td>5</td>
<td>Quality and type of academic programs rendered to students by other local universities are high.</td>
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<tr>
<td>6</td>
<td>Fixed costs of the universities are high (which must be paid regardless)</td>
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</tbody>
</table>
of the size of the demand)

7. The available capacity at your university is high.

8. There is a variety in the number and type of specializations available at the university

9. There is an increase in the demand level for students who want to enroll at bachelor programs at the university

10. University academic programs are characterized by being outstanding and with a high quality

<table>
<thead>
<tr>
<th>S.No</th>
<th>Universities establishment requires big capitals in the shape of Endowment fund and Working Capital</th>
<th>Strongly Agree(1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>University requires to have classrooms, laboratories and sufficient number of academic staff in different specializations</td>
<td></td>
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<tr>
<td>2.</td>
<td>The university has outstanding academic programs and reputation that attract students to enroll.</td>
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<tr>
<td>3.</td>
<td>According to the experience of the university, it has the economic advantages such as access to technology and human resources of academic and administrative staff with low costs that be difficult for the new universities to get them easily</td>
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</tbody>
</table>
The university will reduce fees for students as marketing penetration strategy in case of new universities entry into higher education sector.

University has multi campuses

University has variety of academic programs

<table>
<thead>
<tr>
<th>Bargaining Power of Buyers (Students)</th>
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<tbody>
<tr>
<td>S.No</td>
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<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
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<tr>
<td>4.</td>
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<tr>
<td>5.</td>
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</tbody>
</table>
6. The students who are enrolled in the bachelor programs at the university. Have motivations encourage them to continue in the university.

7. Students enrolled in the bachelor programs at the university can move to another university easily.

8. The students will face a high risk represented in holding the responsibility of equivalency of courses upon moving to another university.

9. The students who are enrolled in the bachelor programs at the university seek to reduce the cost of obtaining the service of higher education by all the available means.

10. The students who are enrolled in the bachelor programs at the university have the ability to dispense with the service of higher education provided to them.

11. The increasing number of the newly emerged universities at higher education sector has a negative impact on applying for admission in the university

### Bargaining Power of the Suppliers - Input power

<table>
<thead>
<tr>
<th>S.No</th>
<th>The number of suppliers who contribute in providing the university with furniture and technical equipments used in teaching is large.</th>
<th>Strongly Agree(1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The number of publishing houses that provide the university with books and scientific references is large.</td>
<td></td>
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<tr>
<td>2.</td>
<td>The teachers provide curricula, which are easy to understand with high quality from</td>
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</tbody>
</table>
different publishing houses.

3. The university depends on high academic degrees to provide its services concerning higher education for undergraduate students.

4. The university could easily continue without some of the working teachers who have different academic titles.

5. The teachers write high-quality curricula used in teaching.

6. There is a sufficient number of PhD holders available at higher education sector to provide the service of education for undergraduate students

<table>
<thead>
<tr>
<th>Threats off Substitute</th>
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<tbody>
<tr>
<td>S.No</td>
</tr>
<tr>
<td>1. Access to Online degree universities</td>
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<tr>
<td>2. New for-profit offerings</td>
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<tr>
<td>3. Training and seminar companies</td>
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<tr>
<td>4. Corporate universities</td>
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</tbody>
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<thead>
<tr>
<th>Strategic response</th>
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<tbody>
<tr>
<td>S.No</td>
</tr>
<tr>
<td>1. There are many universities offering courses and disciplines similar to ours in the market.</td>
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<tr>
<td>2. Universities in education industry industry are very aggressive in</td>
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<tr>
<td>3.</td>
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<tr>
<td>4.</td>
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<tr>
<td>5.</td>
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<tr>
<td>6.</td>
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</table>