

**“A Study of Service Quality Dimensions Vis-a-Vis Satisfaction
of Stakeholders of Selected Universities of Gujarat”**

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Chapter – 1

Introduction

1.0 Introduction

Education is the essential for the better life of humans. Education provides perfect social life, meaningful guidance, a valuable person to society as well happiness and well being society. Educational organizations are answerable for the creation and production of knowledgeable and proficient specialists, which requires the moral understanding that all undertakings should concentrate on giving only the best to the society. (Mandaliya, 2017)

Education has different values for example, morale values, cultural values, intellectual values and aesthetic values. It opens new skylines of information & knowledge and is continuously adding to the new social information, new explorations and new thoughts. Other than is fulfilling the intellectual curiosity and interest of human endeavours on brains of man.

My enthusiasm for this area of research emerges from the point that I am working as an assistant professor and as an academician and a stakeholder of university, it is my moral duty to know the satisfaction level of the students and other stakeholders as well as understand various factors that affecting to satisfying students' and staffs' need and expectations from the educational institutions. This experience has empowered me to perceive the importance of quality in higher education and universities at this particular time.

1.1 Service

Services are deeds, performances and processes provided or coproduced by one entity or person for and with another entity or person. (Zeithaml, Bitner, & Gremler, Services Marketing Strategy, 2010) This definition of service includes core service as well as physical goods too. Vargo and Lusch (2004) gave an increasingly comprehensive meaning of service with the inferred service perspective, proposing that all products and physical goods are valued for the innate service they give and that the value derived from physical goods is really the service provided by the goods not the good itself. (Vargo & Lusch, 2004) Services differ from products because of their intangibility,

heterogeneity, simultaneous production and consumption and perishability. (Definition of Service, 2016)

1.2 Quality

Quality refers the basic standards of something which is helpful to measure the satisfaction of the person. The standard of anything which is measures other things of the similar kinds. Dictionary of Cambridge University defines quality as how good or bad something is. Quality means a degree of excellence of something, a features or characteristics of something that makes it different from others. (Cambridge Dictionary) Quality is much more complex term than it appears. Every quality experts have their different meaning of quality. Ultimately quality refers some characteristics of something that makes the things different.

1.3 Service Quality

The economy of many countries is significantly depends on Service sector. In this days and age of worldwide rivalry, rendering quality service is a key for progress, and numerous specialists agree that the most remarkable competitive trend at present shaping marketing and business strategy is service quality. (Abdullah, Measuring service quality in higher education: HEdPERF versus SERVPERF, 2006)

The meaning of service quality can be given from the point of view of how the buyers or consumers of the service judge the service dependent on what they may have experienced. The service quality build in the services literature is depends on perceived quality. Zeithaml (1987) and Zammuto *et al* (1996) characterize perceived quality ass the shopper's judgment about an element's overall experience or superiority. (Onditi & Wechuli, 2017) Service quality is progressively perceived as being of key strategic value by associations or organizations.

1.4 Service Quality Dimensions

Now a day, almost all the nations are majority depending on service sector. If we take an example of the India, 53.66% of total GDP is contributed by service sector. (Singh, 2020) So, it is obvious to take a care of this sector. As discussed earlier, services are intangible, so it is difficult to check the quality

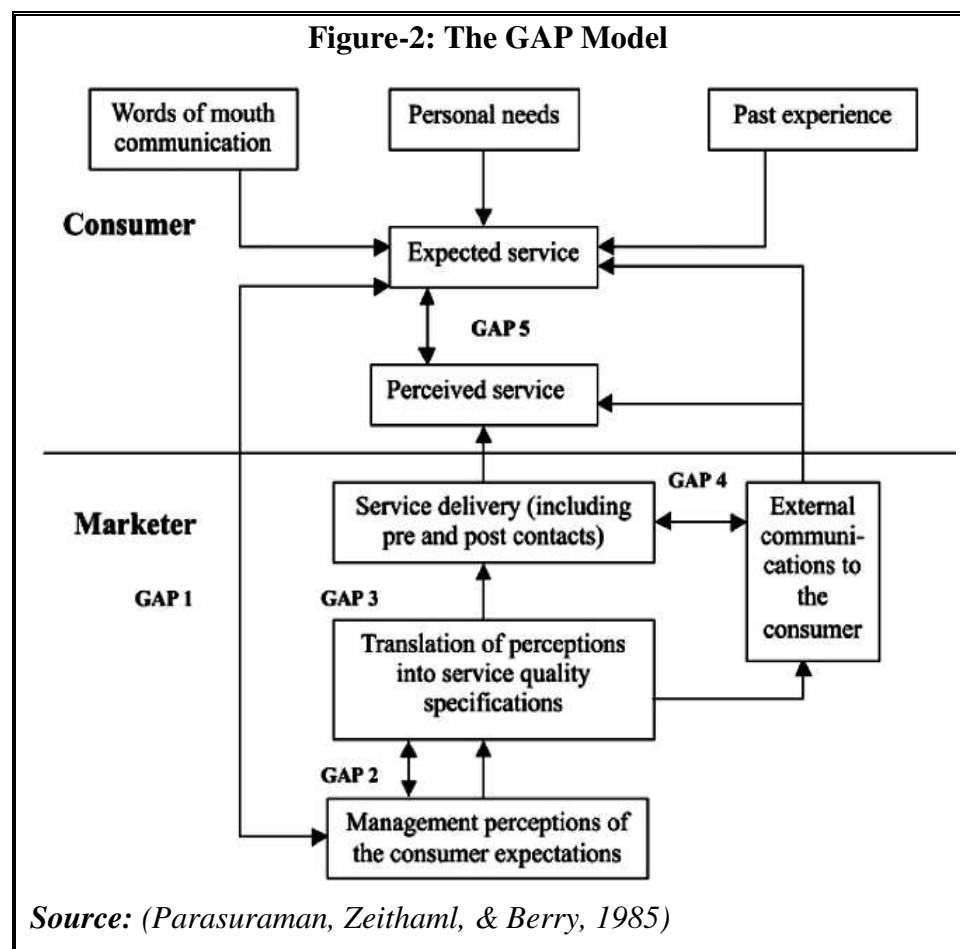
of services as compared to physical products. Hence, to check the quality of services, authors have developed various dimensions. It is known as service quality dimensions. Some popular dimensions are discussed below:

- Sasser *et al* (1978) characterized the elements that raise the degree of service quality such as *security, consistency, attitude, completeness, condition, availability, and training of service providers*. Other than this, *physical quality, intuitive quality, and corporate quality* additionally influenced the service quality level. (Lehtinen & Lehtinen, 1982)
- Grönroos (1984) built up the first service quality model and measured perceived service quality dependent on the test of qualitative techniques. *Specialized quality, practical quality, and corporate picture* were utilized in the model as the elements of service quality. (Grönroos, 1984)
- To measure the quality of the services, Parasuraman, Zeithaml and Berry developed the SERVQUAL Model in 1988. This model contains five dimensions to study the service quality; (i) Reliability, (ii) Responsiveness, (iii) Tangibility, (iv) security and (v) empathy. (Parasuraman, Zeithaml, & Berry, 1988)
- The SERVPERF process was developed in 1992 by Cronin and Taylor due to criticism of the satisfaction-oriented SERVQUAL model. The attitudinal SERVPERF approach assumes that subjects using the service quality evaluate a provider automatically make a comparison between perceived and expected service quality. (Cronin & Taylor, 1992)
- Another model for service quality was developed by Dabholkar *et al* in 1996. They also identified five dimensions to measure the service quality called (i) Physical aspects, (ii) Reliability, (iii) Personal interactions, (iv) Problem solving and (v) policy. (Dabholkar, Thorpe, & Rentz, 1996)
- Another model in study of service quality dimensions is HEDPERF model. This model is very useful in specially higher education. The aim of this model is to capture a context-specific view of service

quality in higher education, enabling the whole student experience to be measured. Research findings confirm those students' perceptions of service quality can determine by evaluating six dimensions specifically; (i) Non-academic aspects, (ii) Academic aspects, (iii) Reputation, (iv) Access (v) Program issue and (vi) Understanding. Evaluating service quality and understanding how these dimensions impact service quality can enable higher institutions to design efficiently the service delivery process. (Abdullah, Measuring service quality in higher education: HEdPERF versus SERVPERF, 2006)

1.5 The GAP Model (Parasuraman, Zeithaml, & Berry, 1985)

In 1985, Parasuraman, Zeithaml and Berry have created this GAP model. This model is based on expectation and confirmation theory. (Onditi & Wechuli, 2017) This model shows a comparison between expected service quality and perceived service quality of customers. The customer's perspective should be used to identify the service gaps. The below figure-1 illustrates the GAP model:



The above GAP Model portrays the five service quality gaps. These gaps are enunciated as follows:

GAP 1: This is first gap in service quality. When the management is failed to understand or management has identified wrong expectations of customers, this gap occurs. This is also known as knowledge gap because management has no knowledge about the expectations of customers.

GAP 2: This gap measures the management's perception of customer expectations. This is a design gap; management translates their perception into service quality specifications. It represents a difference between what management thinks customer wants and what expectations customers have. The quality standards are not set by the management or they might be clear but unrealistic

GAP 3: This gap shows the variation between service design and service delivery. It is also known as performance gap. As we know the characteristics of services, Heterogeneity is playing one of the most important role in this gap. This gap is between service quality specification and actual delivery and the delivery is based on employees' performance.

GAP 4: This gap shows the variation between service delivery and external communication. It is refereed as communication gap. It is a difference between what management has promised to customers and what management actually deliver. The reason of this type of gap is that the service standards are not met adequately.

GAP 5: This is the gap between the customer expectations and the perceived service. While customers are purchasing the service, they have some kind of expectations and after the consumption of the particular service; customers compare their expectation and perceived service. This gap can be the combination of the one or more of the previous gaps and provides a clear indication of the degree to which service quality exists in the service organization.

1.6 SERVQUAL Model

Parasuraman *et al* (1985) embraced a Qualitative Research to explore the idea of Service Quality. They organised an in-depth interview with the executives and Focus Group interviews with customers to build up a model of Service Quality. Parasuraman *et al* (1985) distinguished ten key determinants of Service Quality. They are: Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding, Tangibles. (Parasuraman, Zeithaml, & Berry, 1985)

In 1988, Parasuraman *et al* organised a quantitative Research. They uncovered an instrument for estimating buyers' view of Service Quality, after that it got known as SERVQUAL. They crumbled their dimensions from ten to five. (Parasuraman, Zeithaml, & Berry, 1988)

These dimensions are (Alam, 2012):

1. **Tangibles** – physical facilities, appearance of personnel and equipment.
2. **Reliability** – ability to perform the promised service dependably and accurately.
3. **Responsiveness** – willingness to help customers and provide prompt service.
4. **Assurance** – Assurance (combination of items designed originally to assess. Competence, Courtesy, Credibility, and Security) – 198 ability of the organization's employees to inspire trust and confidence in the organization through their knowledge and courtesy.
5. **Empathy** – Empathy (combination of items designed originally to assess Access, Communication, and Understanding the customer) – personalized attention given to customer.

Organizations can utilize SERVQUAL in different manners. Parasuraman *et al* (1988) referenced that SERVQUAL can support the Service and Retailing Organizations in surveying the expectations of the customers and Service Quality perceptions. It can concentrate on the core zones where directors of the organizations need to make consideration and move to improve Service Quality. (Alam, 2012)

1.7 Quality in Higher Education

Quality in higher education implies the education methods and techniques are such that it ensures student achieve their goal and development. The nature of higher education bestowed to choose the improvement of the general public and society. The facts may demonstrate that the standard of education in our nation is low as compared with advanced nations. So it is a submerging need for quality education. (Mandaliya, 2017)

During the most recent decade, the higher education in India has developed quickly. In higher education quality of the education is matter. Quality is the heart of the education. It impacts what students learn, how well they realize and what repayment they draw from their education. The mission is to verify that students accomplish inclining results and increase esteems and abilities that help them to assume a positive job in their social orders are an issue on the strategy plan of almost every nation. (Mandaliya, 2017)

1.8 Service Quality in Higher Education

Education is a service sector. It likewise needs to execute different methods and strategies that help to measure the quality of services and satisfaction of different stakeholders. Characterizing service quality in higher education has end up being a difficult task. Cheng and Tam (1997, p. 23) recommend that "education quality is a rather vague and controversial concept" and Pounder (1999, p. 156) contends that quality is a "notoriously ambiguous term". (Khodayari & Khodayari, 2011)

The improvement of higher education service quality lies in institution's capacity to give a general atmosphere and culture for change through its different dynamic decision-making systems, operating systems, and human resource practices. (Mosadeghard, 2006) Estimating the quality of service in higher education is progressively significant, especially as fees introduce a more consumerist ethic among students. (Abdullah, Measuring service quality in higher education: three instruments compared, 2007) In a competitive higher education marketplace, the quality of services delivered separates an organization from its competitors. This shows the significance of service quality in increasing a competitive advantage, while additionally featuring the

need to better understand the job that service quality plays in the higher education sector. (Menon, 2015)

1.9 Service Quality Dimensions in Higher Education

The quality in higher education can be measure in various manners. Two important and very used approaches to measure service quality are SERVQUAL and SERVPERF.

The underneath Table – 1 gives highlights of different authors and measurement scales produced for measuring service quality and the dimensions secured by each scale.

Table – 1: Selected Service Quality Dimensions in Higher Education

Authors	Service Quality Dimensions
Zeithaml et al (1990) Parasuraman and Berry (1991) Service Quality Model (SERVQUAL)	<ul style="list-style-type: none"> • Tangibility • Reliability • Responsiveness • Assurance • Empathy
Cronin and Taylor (1992) Performance only; Service Quality Performance Model (SERVPERF)	<ul style="list-style-type: none"> • Reliability • Assurance • Tangibles • Empathy • Responsiveness
Owlia and Aspinwall (1996)	<ul style="list-style-type: none"> • Tangibles • Competence • Attitude • Content • Delivery • Reliability
Ho and Wearn (1996) Higher Education TQM model of Excellent (HETQMEX)	<ul style="list-style-type: none"> • Leadership • Commitment • Total customer satisfaction • Total involvement • Training education • Ownership of problem • Reward and recognition • Error prevention • Teamwork
Athiyaman (1997)	<ul style="list-style-type: none"> • Teaching students well • Availability of staff for student consultation • Library services. • Computing facilities

	<ul style="list-style-type: none"> • Recreational facilities • Class size • Level and difficulty of subject content • Student workload
Firdaus (2006) Higher Education Performance (HedPERF)	<ul style="list-style-type: none"> • Non – Academic aspects. • Academic aspects • Reputation • Access • Programme issues • Understanding.
Sultan and Wong (2010) Performance Based Higher education service Quality Model (PHed)	<ul style="list-style-type: none"> • Dependability • Effectiveness • Capability • Efficiency • Competencies • Assurance • Unusual situation management • Semester and syllabus
Annamderula and Bellamkonda (2012) Higher Education Service Quality (HiEdQUAL)	<ul style="list-style-type: none"> • Teaching and course content • Administrative services • Academic facilities • Camus infrastructure • Support services

Source: Service Quality and Student Satisfaction in Higher Education Institutions: A Review of Literature (Onditi & Wechuli, 2017)

1.10 Satisfaction

Satisfaction is a feeling of joy and happiness that people get when they have fulfilled their human needs, wants and desire. (Saif, 2014) According to Kotler *et al* (2007) Satisfaction shows up most normally concerning the customer stakeholder where the satisfaction with service is being evaluated. The output of Cronin and Taylor's (1992) research confirm that the quality of service is closely bound with consumer satisfaction. (Schuller, Chlebovsky, Doubravsky, & Chalupsky, 2014)

Satisfaction is a gap of expectations and perceptions about the performance of a products or services. Customers are the soul of any organization, regardless of whether private or public enterprise sectors. (Asaduzzaman, Hossain, & Rahman, 2013)

1.11 Satisfaction of Stakeholders

In academics, customer is known as stakeholder and with regards to higher education; stakeholders are those groups that have different interests in university. (Moraru, 2012) As indicated by Sallis, (Sallis, 2002) stakeholders in academics comprise of various internal and external groups. The primary or external stakeholder is students / learners. They are directly receiving the services from university. The internal stakeholder is teachers and supportive staff. They are the employees of the university. In this situation, consumer satisfaction can be called as stakeholder satisfaction, and can be characterized as stakeholders' feelings about education services. (Abidin, Higher Education Quality: Perception Differences among Internal and External Stakeholders, 2015)

Satisfaction of Students is affected by expectations and perception of students about services and quality of services provided. Satisfaction of Students can be easily accomplished by creating extraordinary service standards and norms. This will help HEIs to achieve a sustainable competitive edge in the present higher educational environment. The satisfied students are generating optimistic views about the HEI and university and endorse the same HEI and university to other students. (Saleem, Moosa, Imam, & Khan, 2017)

The key of success for educational setting is Academic Staff. They are the foundation of good learning results. Their job satisfaction builds inspiration and increases motivation and morale to contribute to the system. (Amazt & Idris, 2011) Tai and Chuang (2014) said in their research paper that the relationship between employee job satisfaction and employee organizational commitment is direct and significant. They compare the levels of job satisfaction of staff of public and private universities and how they differ in their satisfaction levels regarding salary welfare, work environment, work characteristics, organizational decision-making, leadership care, interpersonal relationship, self-worth, and the overall job satisfaction. (Tai & Chuang, 2014)

Parents of the students, who are enrolled with the university, are one of the stakeholders in the HEIs and academics. As a true academician, it is a duty to study the satisfaction of the parents.

University offered services and facilities, which parents found satisfied later after communicating with them. Satisfaction of Parents is influenced by their expectation and what the university is offering and providing to the student.

Corporate houses and organization is providing the jobs and employment to the students after completing the particular course. Organizations really have some expectations from universities and HEIs. It is a responsibility of universities and HEIs to satisfy the expectations of organizations and corporate houses. But, in this field, rarely any research has done.

Funding agencies like UGC and AICTE are the pioneer of state universities. In case of private university, they are self financed. Funding agencies provides the fund and grants to run a particular university. Hence, it is a responsibility of the university to satisfy the expectations of funding agencies. It is a depress thing that there is no any research has been done on this area. Hence, researcher has not found any past literature on that.

Chapter – 2

Profile of Selected Universities

2.0 Higher Education

Higher education gives detailed and in-depth information and understanding so as to advance the students to the new development of knowledge. Higher education additionally gives chances and opportunities for constant learning, permitting individuals towards improving their skills, insight and aptitudes from time to time based on the cultural and societal needs.

In India, different kinds of colleges and universities are incorporated viz. Central Universities, State Universities, Open Universities and Deemed Universities. Each and every university gives academic and professional courses. Colleges are affiliated with certain universities. These colleges organise various academic courses and programs run and govern under the supervision of university that they are affiliated. Colleges don't provide a degree, but University provides a degree.

2.1 Types of Education Institutions (HRD, 2016-17)

According to AISHE, there are three broad categories of education institutions, mentioned below:

2.1.1 University / University Level Institutions:

As per the University Grants Commission (UGC) Act, 1956, *“University” means a University established or incorporated by or under a Central Act, a Provincial Act or a State Act, and includes any such institution as may, in consultation with the University concerned, be recognized by the Commission in accordance with the regulations made in this behalf under this Act.*

Thus the followings degree awarding institutions are covered under this category:

2.1.1.1 Central University: A University established or incorporated by a Central Act.

2.1.1.2 State University: A University established or incorporated by a State Act or Provincial Act.

2.1.1.3 Open University: A University which provide education exclusive through distance education in any branch of knowledge.

2.1.1.4 Private University: A University established through state or central act by sponsoring body viz. a Society registered under the Societies Registration Act 1860 or any other corresponding law for the time being in force in a State or a Public Trust or a Company registered under Section 25 of the Companies Act, 1956.

2.1.1.5 Deemed University: An Institution Deemed to be University commonly known as Deemed University refers to a high-performing institute, which has been so declared by Central Government under Section 3 of the University Grants Commission (UGC) Act, 1956.

2.1.1.6 Institute of National Importance: An Institution established by Act of Parliament and declared as Institution of National Importance such as All Indian Institute of Technology (IIT), National Institute of Technology (NIT).

2.1.1.7 Institute under State Legislature Act: An institution established or incorporated by a State Legislature Act. There are 5 such Universities, Nizam's Institute of Medical Sciences, Hyderabad; Sri Venkateswara Institute of Medical Sciences, Tirupati; Shere-e-Kashmir Institute of Medical Sciences, Srinagar; Indira Gandhi Institute of Medical Sciences, Patna; Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow.

2.1.1.8 Other Institute: An institution not falling in any of the above category but established through State/ Central Act and are empowered to award degrees e.g. National Institute of Fashion Technology established through an Act of Parliament.

2.1.2 Colleges / Institutions – affiliated / recognised with University

These are institutions which can run degree programmes but are not empowered to provide degree on their own and are necessarily have to be attached with a University/University level institution for the

purpose of awarding degree. For the purpose of the survey these institutions have been classified as under:

2.1.2.1 Colleges Affiliated with University/ University level

Institutions: Under Section 12A(1)(b), College means any Institution, whether known as such or by any other name which provides for a course of study for obtaining any qualification from a university and which, in accordance with the rules and regulations of such university, is recognised as competent to provide for such course of study and present students undergoing such course of study for the examination for the award of such qualification. These are the institutions established or maintained by or admitted to the privileges of the University.

2.1.2.2 Institutions Recognised by the University: These are the institutions attached with the University for the purpose of awarding degree in respect of programmes being run in these institutions. *e.g. Army Cadet College Wing, Indian Military Academy, Dehradun is not affiliated with any University but the degree in respect of Programmes run in the institute are awarded by Jawaharlal Nehru University.*

2.1.2.3 Off-Campus Centre/ PG Centre: A centre of the University established by it, outside the main campus (within or outside the state) operated and maintained as its constituent unit, having the University's complement of facilities, faculty and staff. Teaching departments of the University, where Post Graduation level courses are offered should not be treated as PG Centre.

2.1.2.4 Off-shore Campus: A campus of the Private University or Deemed to be University established by it outside the country, operated and maintained as its constituent unit, having the University's complement of facilities, faculty and staff.

2.1.2.5 Regional Centre: A centre established and maintained or recognized by the University for the purpose of the coordination of the functioning of the Study Centres in the

region, advising, counselling or for rendering any other assistance required by the students used in the context of regular/ distance education.

2.1.2.6 Study Centre: A centre established and maintained or recognized by the university for the purpose of advising, counselling or for rendering any other assistance required by the students.

2.1.2.7 Evening College: The College in which education is imparted in the evening. It may be noted that in a few colleges, using the same infrastructure, education is imparted in two sessions- morning or day and evening. Generally, for all practical purposes these are treated as two colleges.

2.1.3 Stand-alone Institutions – not affiliated / recognised with University

There are several institutions which are outside the purview of the University & College. These Institutions generally run Diploma/PG Diploma level programmes for which they require recognition from one or other Statutory Bodies. For the purpose of this survey, such Institutions will be referred as Stand-alone Institutions. Such Institutions mainly fall under the following categories:

- i. Indian Institute of Management (IIM) awarding mainly PG Diploma in Management of two years duration whose entry qualification is Graduate.
- ii. Diploma awarding Institutions under the control of All India Council for Technical Education (AICTE) e.g. Lal Bahadur Shastri Management Institute awarding PG diplomas in Management of two years duration whose entry qualification is Graduate.
- iii. Diploma awarding Institutions under the control of Indian Nursing Council (INC).
- iv. Government or Government recognised Institutions to conduct Teachers Training courses whose entry qualification is 10+2 e.g. District Institute of Educational and Training (DIET) or similar institutes.

- v. Polytechnics.
- vi. Company Secretary, Chartered Accountancy, Actuarial Science etc.
- vii. Institution for Women: An Institution which enrolls only female students in all its programmes is categorised as Institution for Women. Such institutes may or may not have male teaching and non-teaching staff.

Chapter – 3

Review of Related Literatures

3.0 Introduction

A literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work. In depth literature review helps in identifying the research gap which in turn is very useful to determine focused problem on which the research is to be carried out.

3.1 Reviews of Related Literatures

Hwang, Y., & Choi, Y. (2019) aimed in their study that to propose an integrated model to examine the structural relationships among a higher education institution's service quality, student satisfaction, institutional image, and behavioural intention at a private university located in South Korea. They have conducted a survey of students majoring in business to analyze these relationships. Structural equation modelling showed that students were satisfied with various aspects (tangibles, reliabilities, responsiveness, empathy, and assurance) of service quality. Also, service quality directly affected both student satisfaction and perceived institutional image. In addition, the results indicated that students' perceived institutional image and satisfaction directly influenced behavioural intention. Although perceived service quality was not a significant construct to predict behavioural intention of students, our results showed a mediating effect of perceived institutional image and student satisfaction on the relationship between service quality and behavioural intention.

Abu Rashed Osman, Ruswiati Surya Saputra, (2019) investigated the relationship between service quality, program quality, institutional image and student satisfaction in the context of higher education. Additionally, their study attempts to describe the mediating impact of institutional image between service quality, program quality and student satisfaction. The structural

equation modelling was used to analyze the influence of mediating variable and hypotheses testing. The population of this study was fourth-year business students of nine “grade one” private universities in Bangladesh. Sample size was 310 students for the study. The findings of this study revealed that image occupied full mediation role between service quality and student satisfaction. Furthermore, it also disclosed that the direct path of service quality and student satisfaction was not statistically significant as per the study.

Arnold Moyo, Sothini Natalia Ngwenya, (2018) aimed to identify specific dimensions of service quality at Zimbabwean State Universities. The study also sought to measure the ‘university-wide’ overall service quality at National University of Science and Technology (NUST) and to explore differences in service quality perception based on selected students’ demographic characteristics. Focus group discussions were used to qualitatively identify service quality variables and questionnaires filled on a sample of 294 students. Exploratory Factor Analysis was used to reduce the service quality variables into service quality dimensions. Five dimensions of service quality were identified, namely: General Attitude, Facilitating Elements, Access, Lecture Rooms and Health Services. Results also showed that most students (48.3%) perceived overall service quality at NUST to be average while 28.6% and 23.1% had a negative and positive perception of overall service quality respectively.

Farah Khattab (2018) aimed and identified most appropriate and suitable dimensions for service quality for university service quality. With this competitive academic environment, almost all the higher education institutions are forced to develop their own dimensions of service quality and offer higher quality services than their competitors. This paper aimed to investigate the most effective service quality assessment tool for Lebanese universities. This study is based on comprehensive review of recent studies dealing with different aspects of service quality models and the corresponding service quality dimensions are presented and discussed. Considering the proved and established qualities and capabilities of the SERVQUAL model, a modified SERVQUAL model with seven dimensions is proposed and highlighted as a potential model for assessing service quality in the higher education sector. A

modified SERVQUAL model included physical quality (physical campus facilities), interactive quality (interaction with administrative staff, faculty and other students) and corporative quality (university image and reputation). The findings of the paper is based on the comprehensive literature review carried out by author, it was noted that the SERVQUAL instrument is the most prominent model used in recent investigations to assess service quality in the higher education sector.

Dr. S. P. Singh and Savita Malik (2017) studied in their research paper entitled “Service Quality Gap between Perceptions and Expectations of Management Studies”, all the management students are dissatisfied in respect of all dimensions of the SERVEQUAL models i.e. tangibility, reliability, responsiveness, assurance and empathy. Therefore, the institutions should focus on the service quality for increasing the level of satisfaction of the students.

Evans Ojiambo Onditi and Thaddeus Wafula Wechuli (2017) in their research paper, they used SERVEQUAL model and various other models too. This literature on service quality construct in higher education identified may dimensions such as competence of staff, reputation of the institution, delivery style by tutor and lecturer, reliability, tangibility, responsiveness, sufficiency of resources, administration services and attitude support services. The existing literature shows that service quality in higher education has a significant influence on students’ satisfaction. The students are the primary recipients of the services provided by the education institutions; hence students have to determine the service quality dimensions.

Ali Yassin Sheikh and Mr. Ismail Sheikh Yusuf Ahmed (2016) in their research article “Contribution of Service Quality Dimensions towards Students’ Satisfaction: A Higher Education Context”, examined students satisfaction as dependent variable they measured service quality with SERVEQUAL model. Students were asked to answer questions about their expectations and their perceptions together. The study found all dimensions is statistically significant and positively correlated with students’ satisfaction. All the hypotheses of the study were supported. This study confirms the

relationship between five dimensions of SERVEQUAL model and students' satisfaction.

Harpreet Kaur and Dr. G. S. Bhalla (2015) in their research paper studied satisfaction of students under various selected variables like, infrastructure facilities, placement services, education environment, extra-curricular activities, knowledge up gradation, academic facilities, student support services and academic staffs. Students were neutral for statements related to infrastructure facilities, disagree with statements related to placement services, students were positive towards education environment, students responses also were positively in extra-curricular activities, students were also agreed in knowledge up gradation statements. Students responded disagreed for statements related to academic facilities. For student support services, positive respond was found for all the statements. Academic staffs were helpful and supportive to students, researchers found positive respond in all the statements related to academic staffs.

Munirul Abidin (2015) conducted the qualitative study to know and analyse the perception among internal and external stakeholders in higher education. He used satisfaction dimensions viz. curriculum, Lecturer (Teaching and Learning), administration and Facilities & Library for the study and found that there are different perception between students and lecturers in the quality of education offered by the university. Students are the primary stakeholder of the university and they have lower satisfaction then lecturers as internal stakeholder in University. In the Lecturer dimension, students perceived just moderate satisfaction while lecturers perceived very high satisfaction.

Piotr Grudowski and Jan Pawel Szeffler (2015) in their research article entitled "Stakeholders Satisfaction Index as an Important Factor of Improving Quality Management System (QMS) of Universities in Poland" aimed to define the role of various groups of stakeholders in quality management system of universities and measuring the satisfaction level of higher education institutions (HEI) stakeholders group. For the purpose of the study, 7 sample groups of stakeholders, such as students, alumni, parents, employees and entrepreneurs, representative authorities, teaching staff and administrative

staff, is measured. The biggest benefits of stakeholder satisfaction survey it to gain current knowledge about the needs and perception towards the university services. Such knowledge can be used in many processes to improve quality management systems, such as verification of mission and vision, quality policy and for development of organization appropriate goals.

Costel Iliu Negricea, Tudor Edu and Emanuela Maria Avram (2014) stated that the continuous academic competition forces all universities to make a lot of efforts in order to attract and retain students. By investigating students' satisfaction, considered the main higher education consumers, becomes a major premise for their intention to stay and learn in the same institution. In trying to understand the factors that exert a significant impact on student satisfaction in college years, they have developed a model to determine the influence of specific academic quality on student satisfaction recorded in economic faculties from Romania. The study highlights the causal relationship between specific academic quality and student satisfaction. The model was validated based on regression coefficients for a significance level below 5%. Findings reveal that the tangible elements of the university, the compliance with university's values and the reliability are variables with a significant impact on student satisfaction. In this respect, offering a modern material base, many classrooms, campus cleaning, meeting all the taken commitments, communicating the right information, the trust in the university programs and also the utility of the acquired knowledge are elements with a visible contribution in achieving Romanian students' satisfaction.

Khanchitpol Yousapronpaiboon (2014) has a purpose of this paper is to investigate service quality in higher education in Thailand. Specifically, this study has investigated the five dimensions of SERVQUAL model i.e. reliability, assurance, tangibles, empathy, and responsiveness. The study also examines the validity and reliability of SERVQUAL in assessing higher education in Thailand. A total number of 350 undergraduate students from a private university participated in this paper as a respondents. The study found that the higher education in Thailand did not meet the expectations of undergraduate students. In all five dimensions of service quality, a gap was

observed between undergraduate students' perceptions and expectations. The gap analysis between service perceptions and expectations showed that all scores for perceptions were lower than their expectations scores, indicating that there are a lot of service improvements efforts need to be fulfilled to enhance the service quality.

Scheller David, Vit, Karel and Chalupsky (2014) in their research paper, aimed to design conceptual scheme for managing the stake holders' satisfaction with three stages. First stage was the identification of the stake holders via interview. Second stage of the study was identification of various activities like education, science and research, premises and technology via focus group. The last stage of the study was identification of importance of particular stake holders mentioned in stage two. To gain necessary information interview technique was choose by the authors. Native students were identified as the most important stake holder for the field of education while academic staffs as the most important for the field of research and development, and enterprises as the most important stake holder for the field of premises and equipments.

Chopra, Chavla and Sharma (2014) in their research paper concluded that the students' perceptions of service quality in the present educational environment, using the SERVQUAL model with some modification. They explained that different field has different requirements. Compare to student management expectations and perceived service quality is greater than their counterparts in the education colleges. Most of the students perceive that their institution is lacking the empathy and reliability dimensions of service.

Emel Yarimoglu (2014) focused on various service quality models. Critical review is done by the author to examine the dimensions of the models associated with service marketing mix such as people, process and physical environment. It was advised by the author that practitioners should pay attention the service marketing tools and 7Ps to increase the quality of their services offered. According to the findings of the study, tangible, physical aspects and physical service environment is related to physical environment. Responsiveness, assurance, empathy, personal interaction and policy is

associated to people element and reliability, problem solving and outcome quality is related to process element of 7Ps of service marketing.

Ivana Maric (2013) in his research paper researched that the organizations in the field of higher education need to build a quality management system that respects the philosophy of the knowledge management, education institutes have to deal with deal with problems of HRM in relation to appearance and development of knowledge workers. A list of stakeholders including, administration, Government entities, clientele (parents, students, employees, service partners etc.), employees, competitors, donors, suppliers, government and non-government regulators are selected for the study. The perspective of stakeholders' analysis in HEI, that needs to fulfil the three key dimensions: (i) teaching and education, (ii) research & innovation and (iii) knowledge transfer and community service. The first step is attempting to identify the stakeholders and their goals and expectations. The second step is trying to fulfil their goals and utmost satisfaction continuously accomplishing the organizational mission.

Asaduzzaman, Hossain and Rahman (2013) attempted to examine the relationship between service quality dimensions and overall service quality and student satisfaction. The critical factors in service quality dimensions viz. tangibility, reliability, responsiveness, assurance and empathy contribute most to the satisfaction of students. The study was based on 550 under graduate students in private universities in Bangladesh. Dependable variable in this study is overall student satisfaction that is measured by the overall satisfaction with the HEIs. Authors found the significant correlation among all the constructs with student satisfaction.

Taranesh Enayati et al. (2013) indentified a significant difference between the students' expectations and perceptions in five dimensions of service quality and in all dimensions, students' expectations has higher level than the students' perceptions. So, the highest and lowest service quality is given to tangibility and empathy.

Ehsan Akhlaghi, Shahnaz Amini and Hossein Akhlaghi (2012) attempted to assess the quality of educational services offered in technical and vocational colleges with the help of SERVQUAL model, from students' perspective. The research is based upon a case study of the "Ahvaz technical and vocational college of girls" in Iran. SERVQUAL model is proven to be a powerful tool to analyze the quality of services in different sections of management and service sectors. The results show that in the current educational center, there are quality gaps in all the service quality dimensions; the most outstanding gap is for responsiveness dimension and the least one is for reliability.

Dr. Nguyen Minh Tuan (2012) stated that the higher education institutions in Vietnam have put much effort to attract students to enrol in programs using English as a means of teaching because these programs have newly been introduced in Vietnam and tuition fees are usually about five/six times higher than those in Vietnamese. Hence, student satisfaction plays a very important role in these institutions. This research aimed to examine the effect of students' perceived service quality and the students' perceived price fairness on student satisfaction. The results have shown that various dimensions in perceived service quality and perceived price fairness have positive impacts on student satisfaction. It also shows that when perceived price fairness is taken into account, the variation in student satisfaction is better explained by comparison with the original Parasuraman's SERVQUAL model.

Khodayar Abili, Fatemeh Narenji Thani, Maryam Afarinandehbin, (2012) have determined university service quality in the International branch of Amirkabir University. In this study, a total of 102 students in five courses i.e. Electronic Engineering, Civil Engineering, Mechanical Engineering, Chemical Engineering and MBA in the international branch of Amirkabir University, were asked to complete a SERVQUAL questionnaire. This questionnaire measured students' perceptions and expectations in five dimensions of service that consists of assurance, responsiveness, empathy, reliability and tangibles. The quality gap of university services was determined based on differences between students' perceptions and expectations. The results demonstrated that in all of the five SERVQUAL dimensions there was

a negative quality gap. Also responsiveness is the most important dimension for the students but had the largest gap.

Shpetim Cerri (2012) assessed the service quality in high public education in Albania, using the SERVQUAL approach. The paper reports on a modified SERVQUAL survey of students from five public universities in Albania. The survey aims to capture the perceptions and expectations students have about the service they receive in respective universities, leading to an evaluation of overall perceived service quality based on gap analysis. The data analysis reveals interesting findings on students' perceptions of service quality in high education. An improved service quality will also help them to face the competition from other high education institutions. The study confirms the SERVQUAL scale as a suitable tool in assessing service quality in public sector, holding the same strengths as in private sector. The continuous measurement of service quality in universities will help in engaging in a continuous improvement of this quality, creating a good basis for achieving higher objectives. Service quality measurement will also help in creating a market orientation for public universities, focusing more on the student as a customer.

Jalal R. M. Hanaysha, Haim Hilman Abdullah and Ari Warokka (2011) have main purpose of this paper is to evaluate students' satisfaction on services provided by higher education institutions. Specifically, the study found significant relationship between the five dimensions of service quality i.e. tangibility, reliability, responsiveness, assurance, and empathy and students' satisfaction. From 1000 questionnaires being sent out to respondents, 360 responded. The findings generally indicate that the majority of students are satisfied with the facilities provided by universities. Such findings should help universities make better strategic plan as to enhance students' satisfaction in particular and its overall performance in general. In general, the results indicated that all the five dimensions of service quality were correlated with student satisfaction.

Chuah Chin Wei (2011) has examined the relationship between service quality and the level of student's satisfaction using a field study of 100 undergraduate students in one of the university in Malaysia. The findings of this study reveal that service quality is a vital factor that determines the level of student's satisfaction. Specifically, the result of this study reveals that the better the service quality provided by the university, the higher the level of student's satisfaction. Responsiveness, assurance, and empathy are the three dimensions of service quality that is significantly related to the level of student's satisfaction. The findings of this study have made significant contribution to the body of knowledge in student's satisfaction management in higher education institutions. The findings of this study also made practical implication to management of higher education especially in the area where service quality improvement is needed.

Ahmad Ali Foroughi Abaria, Mohammad Hossein Yarmohammadian and Mina Esteki (2011) evaluated the quality of services of postgraduate school in a non-governmental university "Islamic Azad University-Khorasgan Branch", to measure students' views toward current level and expected level of quality. The standard questionnaire was made with SERVQUAL model and it was emphasizing on measuring the gap between level of current and expected quality of the service provided by the university. The results showed significant difference between students' expectations and current level of quality of services in responsiveness dimension of quality. The other variables were ranked in this order, Empathy, Assurance, Tangibility and the confidence in service quality.

Khodayari and Khodayari (2011) in their research article, found the service quality factors with the help of strong literature review. Harvey and Knight (1996) argued that quality can be broken down into five different but related dimensions like quality as exceptional, quality as consistency, quality as fitness for purpose, quality as value for money and quality as transformative. Harvey further argued that the emphasis on quality in industry lies predominantly with the customers, whereas in higher education there is a continued debate regarding who the customer actually is.

Sultan. Parves and Wong, Ho Yin (2010) the purpose of this study is to explore the critical research issues in terms of service quality in higher education. This study critically examines a number of leading studies in satisfaction, service quality, and higher education. The study finds five critical research agenda in the field of service quality in higher education sector. This study shows the research gaps of service quality in higher education through a review of literature. Future research should empirically address those gaps in the growth of service quality literature starting with commercial enterprises. Later, it is expanded in the management and marketing of higher education sector. Measuring and modelling service quality in higher education is new. It shows the nature and future directions of service quality research in higher education.

Gruber, Thorsten and others (2010) this paper aims to investigate how students perceive the services they are offered at a German university and how satisfied they are with them. An evaluation study using a new tool to measure 15 dimensions of student satisfaction at an institutional level that covers most aspects of student life was used. It was decided to develop a new measurement tool as many existing surveys are poorly designed, lack standardization and give no evidence concerning reliability or validity. Questionnaires were handed out in eight lectures for the pilot study and 18 lectures for the main study. The response rate was 99 percent. A total of 374 students (pilot study) and 544 students (main study) filled in the newly developed questionnaires using Likert scales. The study gave a valuable insight into how students perceive the quality of the services offered at a university and how satisfied they are with these offerings. The results show that students' satisfaction with their university is based on a relatively stable person-environment relationship. Thus, the satisfaction of students seems to reflect quite well perceived quality differences of offered services and of the wider environment. Students were particularly satisfied with the college placements and the atmosphere among students. Students were mostly dissatisfied with the university buildings and the quality of the lecture theatres. The study has hopefully opened up an area of research and methodology that could provide considerable further benefits

for researchers interested in this topic. It also shows how the concept of student satisfaction could be assessed in future studies

Babar Zaheer Butt and Kashif ur Rehman (2010) examined the students' satisfaction in higher education in Pakistan. The study focuses on the factors like teachers' expertise, courses offered, learning environment and classroom facilities. Students' response measured through an adapted questionnaire on a 5-point likert scale. The sample size of the study consisted of 350 students belong to different private and public sector universities. The results of regression analysis reveal that all attributes have significant and positive impact on students' satisfaction in higher education though with varying degree of strength. However, teachers' expertise is the most influential factor among all the variables, therefore it requires special attention of the policymakers and institutes.

Malik, Danish and Usman (2010) in their research article analysed the impact of different quality services on students' satisfaction in higher education. The study is based on primary data collected from 240 business courses students of bachelors and masters. They found that the students are overall satisfied with service of tangibility, assurance, reliability and empathy but not much satisfied with parking facilities, computer labs, cafeteria services and complaint handling system. Based on the six hypothesis framed, they have concluded that the service quality greatly influences the students' satisfaction in multiple dimensions. Quality of teaching, learning environment of the institution, learned and experienced faculty members are the major factors to satisfy. The tangible factors like class setup, digital labs, library and quality and reliability of the infrastructure and other assured facilities do contribute in creating the image of excellence.

Corneliu Munteanu, Ciprian Ceobanu, Claudia Bobalca and Oana Anton (2010) investigated differences in student satisfaction across different programs of the same business college, and identified dimensions underlying overall perceived quality. Research was conducted in two stages. First, a focus group method was employed in order to identify critical incident specificities for the population under study. Then, a survey based on Likert-type items was

used for data collection. Data processing involved both univariate and multivariate analysis. Three major findings can be pointed out. First, in comparison with similar studies developed in western universities, the list of critical incidents contains noticeable differences. Secondly, it was found that students with different academic performances are concerned with different critical incidents. Thirdly, differences in overall satisfaction with educational experience were found among different lines of specialisation.

Brochado, Ana (2009) the purpose of this work is to examine the performance of five alternatives in erasures of service quality in the higher education sector - SERVQUAL (Service Quality), Importance-weighted SERVQUAL, SERVPERF (Service Performance), Importance-weighted SERVPERF and HEdPERF (Higher Education Performance). Data were collected by means of a structured questionnaire containing perception items enhanced from the SERVPERF and HEdPERF scales and expectation items from the SERVQUAL scale, modified to fit into the higher education sector. The first draft of the questionnaire was subject to a pilot testing through a focus group and an expert evaluation. Data were gathered from a 360 students' sample of a Portuguese university in Lisbon. Scales were compared in terms of unidimensionality, reliability validity and explained variance. Findings - we can conclude that SERVPERF and HEdPERF present the best measurement capability, but it is not possible to identify which one is the best. The current results do make available some important insights into how the five alternative instruments of service quality in a higher education context compare with one another and attempts to develop insights into comparative evaluations of five measuring instruments of service quality in a higher education setting.

Anita Quinn et al. (2009) in their research paper they have focused on identification and evaluation techniques used to take on the challenges of quality improvement in higher education. This study aimed two primary difficulties: first is definition of the customer and second is measuring customer quality perceptions. They have found commonly eight customers in higher education viz. students, parents, research sponsors, state and central

government, society, future employers of students, academic communities and staff and faculty members.

Douglas, Jacqueline and others (2008) the purpose of this paper is to introduce a conceptual model of student satisfaction with their higher education (HE) experience, based on the identification of the variable determinants of student perceived quality and the impact of those variables on student satisfaction and/or dissatisfaction with the overall student experience. The paper will also identify those determinants most likely to have either a positive or negative impact on subsequent student loyalty behaviours. This paper reports the results of a study of 163 undergraduate students at Liverpool John Moores University in the UK, which utilized Critical Incident Technique (CIT) as the method that encouraged the recording of situations that the students themselves perceive as critical incidents. It is envisaged that these situations have occurred in their experience of higher education teaching, learning and assessment and their experience of other university ancillary service aspects, i.e. within and beyond the classroom experience: Findings the results of this study indicate that responsiveness, communication and access are the critical areas that education managers need to focus upon. The study is based on the respondents' recollections of past events and it is assumed that these were accurate. Practical implications - The implications for university managers are that creating and maintaining a responsive, communicative and useful environment is necessary across the teaching, learning and assessment areas, whilst within the Ancillary areas responsiveness, access and socializing are the important factors. Reducing the number of dissatisfying experiences may not be an easy task, but if successful, then improved student recruitment, retention and ultimately financial stability for the institution should ensue. The wider implication is that CIT should be considered by HEIs as a means of collecting student intelligence. Critical Incident Technique is a method that is already attractive to many researchers. However, within higher education, the norm is to use traditional student feedback questionnaires which restrict the student to questions that have been predetermined. CIT allows respondents to freely describe their experiences and unreservedly express their feelings without being constrained to specific areas.

Hasan, Hishamuddin Fitri Abu and others (2008) this study attempts to examine the relationship between service quality dimensions and overall service quality and students satisfaction. Furthermore, this study is also examining critical factors in service quality dimensions (tangibility, responsiveness, reliability, assurance and empathy) that contribute most to the satisfaction of the students. This study was conducted using a set of questionnaires and used to 200 bachelor degree students from two private higher education institutions. The study will provide results from empirical test of these relationships. The empirical results of this study can provide support for the Parasuraman's SERVQUAL which related to the factors contributing to students' satisfaction.

Angell, Robert Jand others (2008) Measuring service quality in higher education is increasingly important for attracting and retaining tuition-based revenues. Nonetheless, whilst under graduates have received substantial academic exposure, postgraduate-based research has been scant. Consequently, the objectives of this paper are threefold: first, to identify the service factors used by postgraduates in their quality evaluations. Convergent interviews were used to elicit attributes of service that were deemed important by taught postgraduate students. These findings were then tested using an online survey. Exploratory factor analysis was used to group the service attributes into latent "service factors". Each service factor was then tested for service quality using Martilla and James's IPA technique. Findings - about 20 service attributes were reduced from the qualitative stage. From these, four service factors emerged; being, academic, leisure, industry links and cost. Using IPA in a UK university, the findings suggest that the "academic" and "industry links" aspects of service quality are the most critical to postgraduates.

Ilias. Arleen Ilias and others (2008) this study attempts to examine the effects of selected demographic factors (gender, races and semester of studies) on the students' satisfaction and service quality. Furthermore, this study is also to examine any relationship between age and students' satisfaction and service quality. This study was conducted using a set of questionnaires to 200

Bachelor degree students from two private higher education institutions. The study will provide results from empirical test of these differences and relationship. The empirical results of this study can provide any differences, which related to students' satisfaction with regard to service quality.

Clemcs, Michael D and others (2008) Statistical support is found for the use of a hierarchical model, three primary dimensions, and ten sub-dimensions. In addition, the results support a relationship between service quality and price; service quality, image, and satisfaction; and satisfaction and favourable future behavioural intentions. The purpose of this research is to gain an empirical understanding of students' overall satisfaction with their academic university experiences. A hierarchal model is used as a framework for this analysis. Fifteen hypotheses are formulated and tested, in order to identify the dimensions of service quality as perceived by university students' to examine students' overall satisfaction with influential factors such as tuition fees and university image, and to determine the impact of students' overall satisfaction on favourable future behavioural intentions. Students' perceptions of these constructs are compared using demographic factors such as gender, age and ethnicity. The results also suggest that students' perceptions of the constructs are primarily influenced by their ethnicity and year of study. The results of this analysis contribute to the service marketing theory by providing empirically-based insight into satisfaction and service quality constructs in the higher education sector. This study will assist higher education management in developing and implementing a market-oriented service strategy, in order to achieve a high quality of service, enhance students' level of satisfaction and create favourable future behavioural intentions.

Michael D. Clemes , Christopher E.C. Gan & Tzu-Hui Kao (2008) in their research a hierarchal model was used as a framework for this research analysis. Fifteen hypotheses were formulated and tested, in order to identify the dimensions of service quality as perceived by university students, to examine students' overall satisfaction with influential factors such as tuition fees (price) and university image, and to determine the impact of students' overall satisfaction on favourable future behavioural intentions. Students'

perceptions of these constructs are compared using demographic factors such as gender, age, and ethnicity. Statistical support is found for the use of a hierarchical model, three primary dimensions, and ten sub-dimensions were used. However, there is no statistical support for a relationship between price and satisfaction. The results of this analysis contributed to the service marketing theory by providing empirically-based insight into satisfaction and service quality constructs in the higher education sector. This study assisted higher education management developing and implementing a market-oriented service strategy, in order to achieve a high quality of service, enhance students' level of satisfaction and create favourable future behavioural intentions.

Simic, Mirna Leko and Cavapic, Helena (2008) the aim of this research is to identify the model for education service quality evaluation applicable in Croatian circumstances and to apply the model and evaluate the education service quality at faculty of economics in Osijek. Dramatic changes in the area of higher education are mainly due to market and institutional changes. One of the solutions to fight the market changes and challenges for institutions of higher education is the implementation of marketing concept in order to create a competitive, marketsensitive institution and satisfied customers. Quality is the key word in this process.

Costas Zafiropoulos & Vasiliki Vrana (2008) stated in their paper, they analyzed how students and staff shape opinion about quality of education in a Higher Education institute in Greece. The study uses the SERVQUAL instrument, and it adjusted in the educational context. It finds the gaps within students' and staff's attitudes and reveals possible differences between students' and staff's views. Gaps exist among some students' attitudes regarding perceived and expected quality. Staffs present greater gaps than students in every SERVQUAL dimension. The SERVQUAL instrument presents high reliability indices, however its validity is questioned. The issue has important strategic and managerial implications because it relates to the ability of the institution to bridge staff's and student's attitudes. Although SERVQUAL presents some limitations regarding applicability it still may be

used as a complementary research instrument for assessing service quality. In the educational context SERVQUAL can be used to reveal differentiation among views of the key stakeholders, such as students and staff. Management should take steps to ensure that both parts form a realistic view of the educational process.

Abu Hasan and Azleen Ilias (2008) attempted to examine the relationship between service quality dimensions and overall service quality and students satisfaction. Primary data collected from 200 bachelor degree students from private higher education institutions. From the results, it is clear that service quality has significant positive relationship with student satisfaction. It is also suggested by the authors, whatever done to increase empathy and assurance in service quality therefore will help students to give better evaluation to their satisfaction.

Bradley R. Barnes (2007) stated that the competitive state of the Chinese higher education industry is set to intensify over the forthcoming years. In response, an ‘action research’ process is adopted initially using a modified SERVQUAL instrument to investigate expectations and perceptions of service quality among a sample of post-graduate Chinese students at a leading business and management school in the UK. Research into service quality in a higher educational context is somewhat scant, and where investigations have been undertaken, very little has been concluded among post-graduates—particularly regarding the significant number of Chinese post-graduate students. The research findings suggest that the instrument is suitable for use in a Chinese and post-graduate context, and the statements load on the five original SERVQUAL dimensions. In an attempt to raise service quality, several managerial recommendations are extracted, and some direction for future research is suggested.

Parves Sultan and Tasmiha Tarafder (2007) aimed to develop the performance based higher education service quality model (PHed-model). The model is a combination of 13 items of HEdPERF, which is also consist with SERVPERF and SERVQUAL scales, 54 items are developed from pilot study among 64 students by focused group interview, experts’ opinion and review of

literature of the relevant field. Study also showed the guidelines that are important for measuring and ensuring the quality of education in open and distance learning universities. Although, the results of the PHEd-model are significant and can produce relative strengths of HEdPERF and SERVQUAL models.

Chapter – 4

Research Methodology

4.0 Introduction

Research methodology is to be considered as a path maker, torch viewer and provide concrete guidelines to the researcher in any field and any kind of research. Without research methodology a research work would look like a building without pillar, an effort without planning. Significance of research lies in its quality and not in quantity. The need, therefore, is for those concerned with research to pay due attention to designing and adhering to the appropriate methodology throughout for improving the quality of research. The methodology may differ from problem to problem, yet the basic approach towards research remains the same.

Keeping in mind all these things this chapter deals in details the research methodology and its various components to be used in this research.

4.1 Rationale of the Study

Stakeholders (particularly students and employees) are the backbone of any educational institute, play a vital role to make any Institute superior, renowned and eminent by achieving good position in Corporate World as well as in the society. It is the duty of every educational institute to provide good educational and allied services. Hence, it is necessary to study the services provided by the Educational Institutes to the students. This research study focuses on various dimensions of the service quality to measure the services vis-à-vis satisfaction of various stakeholders (particularly Students, Teaching staffs and parents) of Educational Institutes.

4.2 Statement of the Problem

One of the most researched topics in marketing management is satisfaction of customers. In today's times of global competition, almost all organization seeks the opportunity to increase the level of satisfaction of their customers. Here, customers in higher education institutions are students, parents, teaching as well as non teaching staff, society at large and government bodies associated with HEIs.

Thus it becomes important to know the level of satisfaction among the students and other stakeholders in the HEIs. One of the popular model is to know the level of expectations and satisfaction is SERVQUAL. Hence, the study was undertaken to identify the factors that affecting to satisfy the stakeholders of the HEIs and Universities. The statement of problem is as under:

“A Study of Service Quality Dimensions vis-a-vis Satisfaction of Stakeholders of selected Universities of Gujarat”

4.3 Research Objectives

- ⇒ The primary objective of the study is about an assessment of the quality work of the selected Universities of the Gujarat.
- ⇒ To examine the relationship between service quality dimensions and satisfaction of stakeholders (particularly students, parents and teaching staffs).
- ⇒ To examine critical factors in service quality that contributes most to satisfaction of stakeholders (particularly students, parents and teaching staffs).
- ⇒ To know the important factors satisfying stakeholders (particularly students, parents and teaching staffs) with various service quality dimensions.
- ⇒ To measure the gap between expectation and performance of services provided by the universities among the stakeholders (particularly students, parents and teaching staffs).
- ⇒ To measure the impact of service quality dimensions on satisfaction of Stakeholders (particularly students, parents and teaching staffs).
- ⇒ To suggest appropriate measures for improving the quality and efficiency of service quality in selected universities of Gujarat to enhance level of satisfaction of stake holders (particularly students, parents and teaching staffs).

4.4 Benefits of the study

- ⇒ This study will be helpful to understand and improve the services provided by the Universities of Gujarat.
- ⇒ Selected Universities will be able to identify the major area of improvement which is needed to increase the satisfaction level of the Stakeholders.
- ⇒ The recommendations and suggestions will be beneficial for the Universities and HEIs to improve service quality and thereby enhance satisfaction.
- ⇒ This study will not only provide a sound literature for an academician and the research scholars to pursue further future research but also provide scopes of further research.

4.5 Research Design

Research design for this study is a combination of Descriptive and Analytical in nature. Descriptive is due to the fact of finding characteristics of stakeholders and their satisfaction level. The study is Analytical due to the characteristic of its Analysis. It involves a sound and scientific analysis of data with the help of measures of central tendency, measures of variation, hypothesis testing, correlation and the regression analysis.

4.6 Data Collection

4.6.1 Primary Data

The primary data were collected from selected stakeholders of selected universities through structured non-disguised questionnaire. The questionnaire was framed on the basis of objectives of the study.

4.6.2 Secondary Data

The secondary data were collected from reliable and authentic sources like, published research papers, news papers, and various authentic websites, published and non-published Ph.D. thesis, annual report of the Universities and other authentic sources. The relevant data which has been used for the purpose of the study has been taken from books, journals and electronic media.

4.7 Sample Design

In this research, the sample design on the basis of suitability and availability of the requisite sampling frame has been used. Here, convenience sampling method is

preferred by the researcher to select the respondents of the selected Universities.

4.7.1 Population

All the stakeholders of universities in Gujarat are the population for study. (State as well as private established in the state of Gujarat)

4.7.2 Target Population

All stakeholders of selected universities of Gujarat constitute the population for study. Target population for this study is the students, teaching and non-teaching staff, parents, society and corporate houses and funding agencies of selected universities of Gujarat.

4.7.3 Sampling Techniques

Convenience sampling method is used for this study due to the data requirement and its diversity. No other sampling techniques are found to be more appropriate than the Convenience sampling. The researcher has selected four universities of Gujarat viz. Two out of four is state university and rest two is private university.

The sampling process is drawn as under:



4.7.4 Sampling Frame

A list of enrolled students, teaching and non-teaching staffs, parents of students and related funding agencies, corporate houses having interface with the universities, concern department of the government constitutes a sampling frame.

4.7.5 Sampling Unit

Student, teaching and non teaching staff, parents, related funding agencies, corporate houses concern department of government is considered to be a sampling unit for the purpose of this study.

4.7.6 Sample Size

Calculation of sample size for this study is quite difficult, reason being the large number of target population (in numerically). But still in consultation with experts in this area and with the help of research

guide, researcher has just tried to find out the reasonable number which is considered as true representative of that particular university. To find out the appropriate number of sample, researcher has used the Sample Size formula for the standard error of the proportion as below:

$$\text{Sample Size (n)} = \frac{\pi (1 - \pi) z^2}{D^2}$$

Where,

n = Sample Size

π = The estimated population proportion (based on the literature review and researcher's judgement) estimate that 70% (0.70) of the target population is satisfied with the services of Universities.

Z = Level of confidence is 95% than associated z value is 1.96

D = The level of precision and desired precision is such that the allowable interval is set as $D = P$ (Sample Proportion) – π (population Proportion) = ± 0.05

This formula is taken from the book *“Marketing Research – An Applied Orientation”* by Naresh K. Malhotra (Sixth Edition) Pearson Publication, pp. 377-379

Calculation of Sample Size:

$$n = \frac{\pi (1 - \pi) z^2}{D^2}$$

$$n = \frac{0.70 (1 - 0.70) (1.96)^2}{(0.05)^2}$$

$$n = \frac{0.70 (0.30)(3.8416)}{0.0025}$$

$$n = \frac{0.806736}{0.0025}$$

$$n = 322.6944 \quad \text{So, sample size round off to 323}$$

Based on calculated sample size 323, also determine the total sample size. Considering the 4 Universities as strata, total sample size for this research is (323×4) **1292** i.e. Students, Teaching Staff and Parents of the students of selected State and Private Universities. The below mentioned Table shows the total population of the study:

Table – 2: Total Population of the Study

Name of University	Total Students Enrolled	Total Teaching Staff	Total Parents (Assumed to same as no. of students)
State Universities			
M. S. University	37295	1112	37295
S. P. University	39542	1294	39542
Private Universities			
Parul University	29200	2000	29200
GLS University	25000	1800	25000

(Reference: Official Websites of Universities, AQAR Reports & University Profile) (Academic Year: 2018-19)

The below table shows distribution of sample size for this study:

Table – 3: Selected Sample Size

Name of University	Total Students Enrolled	Total Teaching Staff	Total Parents	Total
State Universities				
M. S. University	154	82	77	313
S. P. University	164	87	82	333
Total	318	169	159	646
Private Universities				
Parul University	168	95	84	347
GLS University	144	83	72	299
Total	312	178	313	646

4.8 Reliability and Validity of the Questionnaire

Cronbach's Alpha Reliability Index was used to evaluate the consistency of each variable. Hair et al. (1998) suggests that the acceptable level of reliability index should be maintained at a minimum of 0.5 in order to satisfy for the early stages of research; and over 0.7 is considered to be a good level.

Table – 4: Summary of Variables and Reliability Alpha Score

Sr. No.	Variables	Cronbach Alpha Reliability Coefficient
1	Reliability	0.807
2	Responsiveness	0.730
3	Assurance	0.762
4	Empathy	0.648
5	Tangibility	0.890
6	Overall	0.949

4.9 Variables under Study

Independent Variables	Dependent Variables
<ul style="list-style-type: none">• Stake Holders' Expectations• Facilities• Tangibility• Reliability• Responsiveness• Assurance• Empathy	<ul style="list-style-type: none">• Stake Holders' Satisfaction

4.10 Hypothesis

- H01:** There is no significant relationship between Tangibility variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H02:** There is no significant relationship between Reliability variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H03:** There is no significant relationship between Responsiveness variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H04:** There is no significant relationship between Assurance variable and satisfaction of stake holders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H05:** There is no significant relationship between Empathy variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H06:** There is no significant relationship between University Facilities and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H07:** There is no significant relationship between Demographic variables and satisfaction of Stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.
- H08:** There is no significant difference in satisfaction level of various stakeholders.

4.11 Limitations of the Study

- ⇒ As the data is collected from the respondents through the structured non-disguised questionnaire, there may be possibility that respondents might be in hurried and given incorrect answers, even they may not be fully loyal in answering the questions might be distorted the analysis and findings.
- ⇒ The researcher had collected the primary data from selected four universities in Gujarat. Hence, it would not be appropriate to generalise the results as representation of all the universities in Gujarat and fit for the entire population.
- ⇒ The time factor in collecting the responses might be limiting factor. The Cost Constraint is limiting factor as the increased sample size increases the cost of data collection.

4.12 Delimitations of the Study

- ⇒ The study is delimited to only four selected universities it does focus on covering all the universities in Gujarat.
- ⇒ Sampling technique considered for the study purpose is also the delimitation. Some other sampling techniques might be used to conduct the same study for selected universities.

4.13 Further Scope of the Study

- ⇒ This study is limited to only four selected universities, other universities of Gujarat may be studied in future.
- ⇒ The researcher has consider only three major stakeholder i.e. students, parents and teaching staff. Further research may conduct by taking other stakeholders.

Chapter – 5

Data Analysis and Interpretation

The researcher had collected the primary data with the help of structured non-disguised questionnaire. The collected primary data is edited, encoded, classified and tabulated. Therefore the data had presented in the form of Tables, charts, graphs and diagrams as required. The collected data had analyzed with the help of statistical tools and techniques viz. Frequency Analysis, Computation of Mean, Standard Deviation, Correlation and Regression Analysis, ANOVA and Testing of Hypothesis techniques are also used by the researcher for the purpose of analysis of data. Analysed data had interpreted to established meaningful relationship among the variables under study.

Chapter – 6

Findings, Recommendations and Conclusion

The correlation and regression have revealed the relationship between the variables viz. Reliability, responsiveness, empathy, assurance, tangibility, stakeholders' expectation and satisfaction of selected students, parents and teaching staff. The researcher has also used various tests of Hypotheses to evaluate the association of various variables of SERVQUAL model and expectation versus satisfaction level of stakeholders. After the analysis of collected data, researcher has drawn the findings and on the basis of the findings, recommendations are made.

Chapterization Scheme Of The Ph.D. Thesis

Chapter – 1: Introduction & Conceptual Framework of Service Quality

The first chapter of the research study is titled “Introduction & Conceptual Framework of Service Quality”. This chapter gives the idea and conceptual framework of service, service quality, measurement of service quality and satisfaction.

Chapter – 2: Profiles of Selected Universities

Chapter – 2 entitled “Profiles of Selected Universities” indicates the profile of the selected universities functioning in Gujarat. The researcher has selected three state universities and three private universities. The researcher as also incorporated the origin and history of selected universities. This chapter also includes the structure of Universities given by UGC.

Chapter – 3: Review of Literature

In the “Review of Literature” chapter, the researcher reviewed various research articles and papers published in journals and written in simple language. This chapter focuses on the expectation, perception and satisfaction of students and other stakeholders in India and other countries like Malaysia, Bangladesh, Bhutan and so on.

Chapter – 4: Research Methodology

The chapter of “Research Methodology” describe the key terms of research study viz. Rationale of the Research Study, Scope, Research Design and Research Methodology. This chapter also shows the calculation of sample size and reliability of the data with Cronbach’s Reliability Alpha Coefficient and other tools viz. Normality, Reliability and Validity of the Structured Non-Disguised Questionnaire. The objectives and hypotheses are also incorporated in this chapter. The Limitations and Delimitations of the research study are discussed in the chapter of Research Methodology.

Chapter – 5: Data Analysis & Interpretations

In the chapter of “Data Analysis and Interpretations”, the researcher has organized and categorized the primary data. These data has converted into a tabular form and charts. Further the data has analyzed, interpreted and reported the results by using SPSS 20.0. This chapter represents the data analysis and interpretations of the research study.

Chapter – 6: Findings, Recommendations, Suggestions & Conclusion

The chapter “Findings, Recommendations, Suggestions & Conclusion” of research study focuses on the findings of the research and discusses the Analysis to test various formulated hypotheses for this research study. On the basis of findings, researcher has drawn the recommendations and suggestions. Finally the researcher has come to the conclusions of the research study on the basis of findings and data analysis.

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