

Service Quality in Higher Education - A Critical Review

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ABSTRACT

The paper aims to explore the research on service quality in higher education. Literature reviews acknowledging the leading theoretical, conceptual models and scales developed subsequently in service quality of higher education. The changes in the socio economic conditions across the world attain greater importance to the education and particularly to higher education. This paper focuses on existing literature and to put forth a holistic view of the factors that affect service quality in higher education.

Key words: Higher Education, Service Quality.

I. INTRODUCTION

Quality is not a new but an exceedingly challenging concept in which we cannot define it with exactness. Even today, there is little consistency on what defines quality. McConville (1999) stated that there is no definition of quality but we will be acquainted with it when we come across it. Quality, as a concept, is generally easier to define in a manufacturing setting. However, the concept of quality is much more difficult and complex to define in the service sector, which is generally referred to as Service Quality. In the current socioeconomic context, the service sector has become progressively more important. Continuous improvement of customer service is essential to successful development of business in today's competitive, dynamic and complex business environment.

From the past three decades measuring service quality in higher education attained greater concentration due to high competition among the institutes evolved globally. Here, the education sector is treated as service sector and students are treated as the customers. And the government, entrepreneurs, parents, students, industry and society are considered as the secondary customers of education Mohammad S. Owlia & Elaine M. Aspinwall (1996). Hill (1995) stated that students play a key role in the higher education service and they should be regarded as primary customers of higher education services. The institutions also strive to give quality of education and recognition for the institutional contributions to attract more number of students. Higher education institutions are competing uncompromisingly to attain competitive advantage through service quality. Service Quality plays a vital role in the success of higher education sector Farooq Alani, Yasir Yaqoub & Mahani Hamdan(2015). Today quality management and assessment of service quality is very important for an organization to sustain in this cut throat competition world. In this scenario there are number of studies took place, various models and scales have been developed extensively to measure service quality to maximum extent in higher education.

II. LITERATURE SEARCH

An extensive review of literature carried out from databases like Springer, Taylor and Francis Online, Elsevier, SAGE Journals Online and Wiley Online Library. The search was carried out using keywords such as service quality, service quality in higher education.

III. RESEARCH METHODOLOGY

The prevalent challenge faced by any researcher while working in the area of service quality is the vast literature. A Systematic review of literature was done through electronic and library search. The online databases were used to identify the articles and research papers in various journals, magazines, periodicals, newspapers and sought advices from experts in this field. The search approach concentrates on the service sector, particularly education sector. The

searches yielded number of articles. Each one of the articles was examined thoroughly to ensure that they are relevant to higher education service quality measurement.

IV. CONCEPT OF SERVICE QUALITY

Research efforts of different researchers regarding service quality from the past three decades have developed enormous literature. Service quality concept is defined by many authors in different perspectives and difficult to consensus the definition. Lewis & Booms (1983) defined service quality as a measure of how well the service matches customer expectations. Gronroos (1984) identified two service quality dimensions namely functional quality and technical quality. The functional quality involves performance in which service delivered and technical quality the actual outcome of delivered service. Parasuraman, Zeithaml and Berry (1985) conceptualized service quality by disconfirmation model that assesses customer expectations and perceptions, further refinement developed Gap model of service quality. Parasuraman, Zeithaml, and Berry (1988) developed SERVQUAL scale comprised of ten dimensions namely tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/ knowing the customer, and access. Finally reduced to five dimensions with 22 items, the five dimension of service quality are of reliability, responsiveness, assurance, empathy and tangibility.

J. Joseph Cronin, Jr. & Steven A. Taylor (1992) criticized the Parasuraman Zeithaml and Berry (1985), SERVQUAL Model as an inadequate tool to measure service quality and investigated the conceptualization and measurement of service quality and the relationship between service quality, consumer satisfaction, and purchase intention the result was 1) a performance based measure of service quality may be improved by means of measuring service quality construct 2) service quality is an antecedent of consumer satisfaction 3) service quality has a significant effect on purchase intentions 4) service quality has less effect on purchase intentions than does consumer satisfaction. In retaliation to SERVQUAL, Cronin and Taylor came with new scale to assess perceived service quality SERVPERF scale (Cronin & Taylor, 1992, 1994).

Two of the best known scales for measuring service quality are the SERVQUAL scale (Parasuraman et al., 1985; Parasuraman, Zeithaml, & Berry, 1988) and the, SERVPERF scale (Cronin & Taylor, 1992, 1994) a reaction to, and criticism of, the former.

The service quality has developed as an important strategic variable to achieve efficiency and effectiveness in business operations. Service quality is a critical determinant of competitiveness and lasting source of competitive advantage (Moore 1987, Lewis 1989). Firm's success in general depends on service quality and it differentiates from its competitors. Rendering quality service leads to attract new customers and retention of existing customers, decrease costs, enhanced profitability, corporate image and positive word of mouth recommendation, customer loyalty, product differentiation. Buttle (1996) service quality is the driving force of financial performance and corporate marketing. Alexandria Brysland and Curry (2001) service quality is providing something intangible to consumers. The concept service quality is mainly based on the perception of the customers. When service provider came to an understanding how the customer evaluation and assessing the service, it become easy to manage the expectations and to influence them in an effective manner (Seth, Deshmukh and Virat 2005). Previous studies suggest that in understanding the individual consumer behavior, service quality plays a significant effect on consumer purchase intention through the mediating role of value perceptions attached to products and services (Bolton and Drew, 1988; Zeithaml, 1988). Some researchers came to conclusion that service quality should be measured from the customer perspective, by the assessment process where customers compare their perceptions of service received (Haywood Farmer 1988, Zeithaml and Bitner 1996).

V. SERVICE QUALITY DIMENSIONS

Researcher	Dimensions
Gronroos(1984)	Functional quality and Technical quality
Parasuraman, Zeithamal and Bery (1985)	Tangibility, Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding/Knowing the Customer
Gronroos (1988)	Professionalism and skill, Attitudes and behavior, Access and flexibility, Reliability and trustworthiness, Recovery, Reputation and credibility
Parasuraman et al. (1988)	Tangibility, Reliability, Responsiveness, Assurance and Empathy
Gronroos (1990)	Technical Quality, Functional Quality, Corporate Image
Lehtinen (1991)	Physical Quality, Interactive Quality, Corporate Quality
Parasuraman, Berry, Zeithaml et al, (1991)	Tangibles, Reliability, Responsiveness, Assurance, Empathy
Cronin and Taylor, 1992 (SERVPERF)	Tangibles, Reliability, Responsiveness, Assurance, Empathy
Owlia and Aspinwall(1996)	Tangibles, Competence, Attitude, Content, Delivery, Reliability

Voon B.H.(2006); Service driven market orientation model; (SERVMO)	Customer Orientation, Competitor Orientation, Inter-Functional Orientation, Performance Orientation, Employee Orientation, Long term Orientation
Landrum et. al (2008);(SERVCESS)	Service Quality, Information Quality, System Quality, Users Involvement
Brochado (2009)	Responsiveness, Assurance, Empathy

VI. SERVICE QUALITY IN HIGHER EDUCATION

The management of quality needs a different approach when it comes to the services sector. Among all the service sectors, higher education needs a special emphasis on evaluating the issues related to quality of services and its measurement. Quality in higher education is a complex and multifaceted concept and a single correct definition of quality is lacking (Harvey & Green, 1993). As researchers recognized the importance of measuring service quality in higher education, they still stressed to define in common words. Significant conceptual contribution has been made by a number of researchers from different academic disciplines on issues of service quality measurement in higher education. The theoretical paradigms in conceptualizing service quality have always been revived by numerous forms of theoretical reasoning, supported by a variety of research studies. The changes in social and cultural framework have pushed the higher education into a new environment in which quality plays an important role. Service quality in the educational sector is considered by various researchers because of its importance and outcomes. Harvey and Knight(1996) defined service quality in higher education as quality reflects exponential, value for money, consistency, fitness for purpose and transformative.

VII. MEASUREMENT OF SERVICE QUALITY IN HIGHER EDUCATION

Service quality is the most popular terminologies among the community of researchers. Numerous studies have been conducted on service quality in different areas like healthcare, retailing, banking, transport and communications services etc. The present study attempts to conceptualize service quality in higher education. Various studies have been conducted on service quality representing different factors affecting service quality in higher education. In the present competitive environment, quality improvement is identified as a key strategy for organizations to succeed Cronin and Taylor (1992), Parasuraman et.al (1988). The measurement of student satisfaction in higher education is not a new concept Berdie (1944) investigated relationships within engineering students curricular satisfaction. A number of well-developed instruments are available for the study of such variables as the college environment (Astin, 1963), and student-environment congruence (Pervin, 1967 a,b).

Viraiyan Teeroovengadam T.J. Kamalanabhan Ashley Keshwar Seebaluck, (2016) conducted a study in University of Mauritius for measuring service quality in higher education with a sample of 207 students through a questionnaire consisting of 53 items relating to service quality in higher education and Exploratory factor analysis was performed to verify for unidimensionality of the constructs and reliability analysis was also done. The findings of study resulted in developing the HESQUAL hierarchical model with primarily five dimensions namely physical environment quality, administrative quality, core educational quality, transformative quality and support facilities quality and nine sub dimensions with 48 items. R. A. Chanaka Ushantha & P. A. P. Samantha Kumara (2016) conducted a study at one of the state universities in Sri Lanka. Collected data using HEdPERF scale from 250 randomly selected full-time students. The students who are studying in the third year of their degree programs were selected as the sample of the study. They found that only access and nonacademic dimensions have significant contribution to the service quality perception in higher education context. Umar Usman & Sany Sanuri Mohd Mokhtar (2016) conducted a study to identify the relationship among the service quality, university image and student satisfaction and student loyalty in higher education in Nigeria. A structured questionnaire was used to collect the data from fist six generation universities in Nigeria. A sample of 446 students was taken and analysis was conducted using Structural Equation Modeling. They found that service quality and student satisfaction were the strongest predictors of the student loyalty. The university image is less significant in predicting the student loyalty in Nigerian higher education institutions. Muhammad Kashif, T. Ramayah & Syamsulang Sarifuddin (2016) measured service quality in higher education from three major universities in Pakistan. Using PAKSERV scale developed (Raajpoot, 2004) with a sample of 236 students and finds that sincerity, Formality and Personalization were found more significant than the traditional dimensions Tangibility and Assurance. Sangeeta Angom (2015) conducted a study on “ Private Higher Education in India: A Study of Two Private Universities” and concluded that private universities in India are in the expansion period, they are more concentrate on getting quality students, to raise the enrolment, to obtain qualified and experienced faculty and funding agencies to promote research. Koushiki Choudhury (2015) Evaluated the customer perceived service quality in business management education in India with a sample of 1,152 customers from six institutions major institutes in management and find that competence, tangibles, responsiveness and connivance are important factors in the context of the business management education in Indian context. Among these competence and tangibles are most important. V.S. Sheeja, R. Krishnaraj & R.M. Harindranath (2014) evaluated the HEdPERF scale in pharmaceutical education. Data was collected

with a sample of 410 students of both public and private universities in Chennai. The scale has been empirically tested for unidimensionality, reliability and validity using together exploratory and confirmatory factor analysis (CFA). The findings of the study resulted in identifying four factors those are of Non-Teaching Staff, Teaching staff, Access and Reputation serve as factors for service quality in pharmaceutical education. G.E. Icli and N.K. Anil (2014) conducted a study in five state-owned universities and six foundation universities located in Istanbul-the biggest city in Turkey with a sample of 317 MBA students. The questionnaire consist of 36 items was developed and tested unidimensionality, reliability and validated together using exploratory and confirmatory factor analyses. The finding of the study resulted in developing HEDQUAL to measure service quality in higher education specifically for MBA program with six dimensions namely Academic quality, Administrative services quality, Library services quality, Supportive services quality, Quality of providing career opportunities.

Rajani Jain, Sangeeta Sahney & Gautam Sinha (2013) measured service quality in higher education in the Indian context. It was observed that service quality in higher education setting comprises seven dimensions viz., input quality, curriculum, academic facilities, industry interaction, interaction quality, support facilities and non academic processes. Clemes, Cohen & Wang, (2013) examined the relationships between students behavioral intentions, satisfaction, service quality, perceived value, and university image using multilevel modeling approach in the Chinese context. The study found that service quality is the main determinant of satisfaction and has a significant influence on university image and perceived value. Perceived value has a significant moderating effect on the relationship between service quality and satisfaction. Jasmina et al, (2013) developed a conceptual model incorporating perceived service quality, perceived value and repurchase intention in higher education context among undergraduates and find that perceived service quality and perceived value have positive influence on repurchase intention in the higher education context.

Chahal and Devi, (2013) stated that service failure in education sector refers the extent of gap in the service delivery. In education sector, the types of service failure occurs in teaching, examination, library, laboratories, administration, infrastructure and miscellaneous such as canteen or hostel facility. Parves Sultan and Ho Yin Wong (2013) conducted a study at Australian university with 19 students by focused group discussions to identify the antecedents to perceived service quality in a higher education context. They found that academic, administration and facilities are the three aspects of service quality. Student satisfaction and student trust are found to have direct positive relationship with perceived service quality as consequence and brand performance and behavioral intention are found to have indirect relationships. Khanchitpol Yousapronpaiboon (2014) measured higher education service quality in Thailand with a sample of 350 undergraduate students from a private University using SERVQUAL. Find that the students did not meet the perceptions and expectations and he observed a gap as follows: Reliability: -2.25, assurance: -2.48, responsiveness: -2.72, Tangible: -2.88, Empathy: -2.48 and in all the scores the perceptions were lower than the expectations.

Cristina Calvo, Jean Pierre & Isabel (2013) Conducted a study on perceived quality in higher education: an empirical study by using a modified SERVQUAL instrument in a private and public universities. They found that the private universities got a better assessment than the public. The service quality dimensions tangibility and empathy are the most important determinants of perceived quality in higher education having direct positive impact on perceived quality. Among these two dimensions, tangibility has the greatest contribution to the development of perceived quality. Roland & Jessica (2012) explore the competitive forces of higher education beyond SERVQUAL are identified that students perceived will have direct influence on learning dynamics that occurs both outside and inside the classroom. Romadhani et al, (2012) investigated the relationships among quality dimensions in higher education context and find that student satisfaction was positively influenced by faculty commitment, course delivery, courtesy, department commitment, course delivery and customer feedback and improvement.

Madeline Melchor Cardona & Y Juan Jose Bravo (2012) measured the service quality in higher education institutions in Colombian university by testing the quality frame work 5Q's model proposed by Zineldin (2006) and concluded that Zineldin's framework was similar to the research findings Mason (2012) examined the roles that innate psychological needs and student satisfaction have on doctoral student motivation. The author measured the relationships between relatedness, competence, autonomy, satisfaction, and motivation which help to continue graduate school. Results found that all of these variables have positive relationship. Further, results indicate that graduate student program satisfaction is the critical factor for motivation to continue. Subrahmanyam.A., & Raja Shekhar .B.,(2012) Measured Service Quality in Indian Higher Education Sector. The study identified five determinants to evaluate the service quality in the higher education sector those are administrative services, academic facilities, teaching & course content, campus infrastructure and support services. N. Senthilkumar & A.Arulraj (2011) measured service quality of higher education in India, and found that the quality of education is based on the best faculty (TM), the excellent physical resources (ECSF), a wide range of disciplines (DA) which paved the diverse student body and to improve the employability of the graduates coming out of the higher educational institutions in India.

Aditya Chatterjee, Chiranjib Ghosh and Souvik Bandyopadhyay (2009) conducted a study to prove that the students' feedback reports are valid measures for measuring teaching effectiveness and improvement of teaching quality. It has been argued successfully that ratings can be used as an aid for teaching improvement.

Stodnick and Rogers (2008) measured the quality of classroom experience by using SERVQUAL at Southwestern University in USA and find tangibility, reliability, assurance, empathy, and responsiveness are the important dimensions for the students. Jacqueline Douglas, Robert McClelland & John Davies (2008) developed a conceptual model of student satisfaction with their experience in higher education. The study identified critical satisfiers and

dissatisfies with teaching, assessment, learning and ancillary provision. The students are dissatisfied with attitude, tangibles, team work, responsiveness, communication, and access. Abdullah (2006a) compared three instruments of service quality HEDPERF (Higher Education Performance) SERVPERF and HEDPERF-SERVPERF in Malaysian tertiary institutions with a sample of 381 students and concluded that a modified five-factor structure of HEDPERF is most appropriate scale for the higher education sector. Abdullah (2006b) reported that the six dimensions, namely, academic aspects, non-academic aspects, reputation, access, program issues and understanding are distinct and important issues in the higher education context. Sangeeta Sahney et al., (2004) conducted a study in engineering and management institutions with a sample of 219 students to identify the customer requirement and constructs of service quality improvement from student perspective. They Identified Competence, Attitude, Content, Delivery and Reliability are the customer requirements of service quality. The Management system, Technical system and social system are the constructs for improving Service quality as perceived by the customers.

Ahmed et al., (2000) examined the relationship between service quality, satisfaction and motivation in higher education institutions using SERVQUAL model. The findings show that service quality has a significant effect on satisfaction and motivation of students. Further studies also proved that student satisfaction and motivation are important for better performance. Winsted (2000) recommended that service providers will only be able to deliver service encounters that will satisfy customers if they know what their customers want. If universities know how their students perceive the offered services, they may be able to adapt their services to a certain degree, which should have a positive impact on students perceived service quality and their levels of satisfaction. Ford, Joseph & Joseph, (1999) developed an instrument to assess service quality perceptions of business students in New Zealand and the USA. The appropriate attributes were identified by focus group discussions which were used to develop the New Zealand questionnaire. Based on the similarity those 20 attributes were grouped into seven factors: Program issues, Academic reputation, Physical aspects, Career opportunities, Location, Time and others. For the US survey, the same attributes were grouped into six different factors: Program issue, Physical aspects, Academic reputation, time issues, Choice influencers and others. Since there were only insignificant differences between the survey instruments except wording and spelling differences the same New Zealand attributes were used for US survey. The attributes identified in the New Zealand study were deemed appropriate for use in the USA. Finally, the authors suggested that the necessary models for examining service quality in cross-cultural educational institutions would contain the same attributes, but these attributes would group differently into underlying dimensions and it is important from a strategic perspective. Hill (1995) discussed aspects of current service quality theory in the context of British higher education, focused on the role of the student as a primary consumer of higher education services.

Gerald M. Hampton (1993) measured the student satisfaction with a sample of 473 and identified the attributes in the quality education. They found that Efforts to pass and campus facilities were relatively important for student evaluation of service quality. Wolfgang & Dowling (1981) stressed that higher education institutions must assess student needs and motivations, and make appropriate adjustment in support services, administrative procedures, programming and the teaching-learning process. (Betz et al, 1969) developed an instrument called College Student Satisfaction Questionnaire (CSSQ) for measuring student satisfaction. The Questionnaire comprises of 92 items. The survey was conducted at Iowa state university with a sample of 463 students and identified that the type of residence, social life, years in the college are affecting student's satisfaction.

The review of literature revealed that the higher education sector can be considered a marketplace and university education a marketable service. From the past studies it is observed that the factors influencing the education are teaching process, learning environment, industry income from innovations, research influence, research volume, reputation, international outlook, university industry collaboration, accreditation standards. And different cultural and social context the dimensions for measuring service quality in higher education is varied from country to country.

VIII. SERVICE QUALITY DIMENSIONS IN HIGHER EDUCATION

Researcher	Country/ University	Items	Dimensions
Viraiyan Teeroovengadam T.J. Kamalanabhan Ashley Keshwar Seebaluck , (2016)	University of Mauritius	48	administrative quality, physical environment quality, core educational quality, support facilities quality and transformative quality
Farooq Alani, Yasir Yaqoub & Mahani Hamdan(2015)	Universiti Brunei Darussalam	25	Academic staffs ,Curriculum Structure, Library Services, Environment
G.E. Icli and N.K. Anil (2014)	Turkey	36	Academic quality, Administrative services quality, Library services quality, Supportive services quality, Quality of providing career opportunities
Kwek, Lau and Tan (2010)	Malaysia		Curriculum, quality of librarians, amount of recreational activities and staff responsiveness from the division of

			examinations and awards
Sultan and Wong (2010)	Japan	67	Efficiency, Effectiveness, dependability, capability, competencies, assurance, unusual situation management, semester and syllabus
Rojas-Mendez et al. (2009)	Chilean university	18	Program director, instructors, secretaries, competence development and service attitude
De Jager and Gbadamosi (2010)	South Africa	52	Academic reputation, academic quality, student focus, access and approachableness of service, international students and staff, internationalization, location and logistics, safety and security, accommodation and scholarship, marketing and support, intention to leave university, trust in management and support, parking
Stodnick and Rogers (2008)	USA, one university	18	Reliability, responsiveness, assurance, empathy, and tangibles
Angell, Heffernan and Megicks (2008)	UK, one university	18	Academic factor, cost/value for money, leisure factor, industry link factor
Smith et al. (2007)	UK, one university	22	Reliability, responsiveness, assurance, empathy, and tangibles
Abdullah (2006c)	Malaysia	41	Academic, Non-academic, program, access, reputation and understanding
Abdullah (2005)	Malaysia	35	Academic, Non-academic, empathy and reliability
Chen, Sok and Sok (2005)	Taiwan and Cambodia		School facilities and interactive network, teachers qualification, funding and tuition, academic curriculum and extracurricular activities
Lagrosen, Seyyed-Hashemi, & Leitner, (2004)	Australia and Sweden	32	Campus facilities, teaching practices, courses offered, information and responsiveness, internal evaluations, external evaluations, corporate collaboration, collaboration and comparisons, computer facilities, library resources and post-study factors
Joseph, Stone and Joseph (2003)	Australia	20	Physical aspects, value of education, Cost, facilities and resources, General, Degree content and structure,
Kwan and Ng (1999)	China and Hong Kong	31	Facilities, Course content, assessment, concern for students, social activities, medium of instruction and people.
Li and Kaye (1998)	UK, one university	27	Reliability, responsiveness, assurance, empathy, tangibles
Ford, Joseph and Joseph (1997)	New Zealand	20	Programme issues, physical aspects/cost, career opportunities, academic reputation, location, time and other
LeBlanc and Nguyen (1997)	Canada, one University, one Business School	38	Faculty, Administration personnel, reputation, responsiveness, physical evidence, curriculum and access to facilities
Soutar and McNeil (1996)	Australia	52	Non-academic, Academic

IX. CONCLUSION

Higher education is one of the top priorities to many nations. The study attempts to review of various models and measures of service quality and application of those models and scales in higher education sector. Several researchers have attempted to define and measure the quality of services on scale but it is not possible to arrive at clear conclusion and still it is a debatable issue because of certain attributes of services. Out of many instruments designed and validated by different researcher and scholars are available to measure service quality, a few instruments achieved desirable validity. It is imperative for higher education institutions to understand the various dimensions of service quality and the need of continuous improvement in service quality for achieving sustainable development along with a competitive advantage. Higher education institutions instead of imparting moral education skill and knowledge, they help the students to pass exams and earn their degree. Thus institution must itself hold high morals and import moral education among students. From the literature it is consider that universities education is a marketable service and students as the customers of the service. It is evident from the studies that the service quality dimensions vary across industries, county and culture.

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