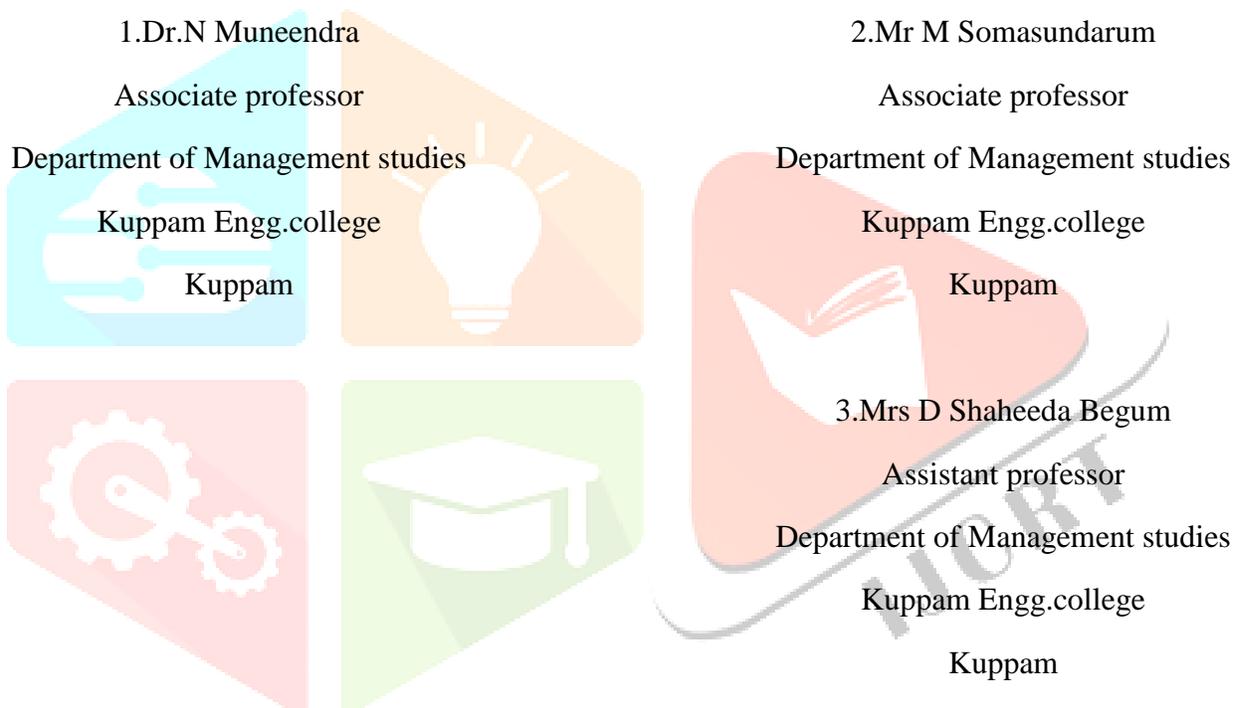




# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

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## Application Of SERVQUAL Scale To Measure The Service Quality At A Higher Educational Institution -With Reference To Kuppam Town.



Service quality is the ability of the organization to meet or exceed customer expectations. The SERVQUAL scale developed by Parasuraman, Zeithaml and Berry has been widely accepted throughout the world to measure the gaps in service quality. Globalization, liberalization and privatization of Indian economy has given rise the scope for the service industry to grow at a rapid pace. Indian consumers become more conscious in terms of quality. Higher education in India has become more competitive after private players' entry in to the market and competition from global players. Existing players, especially private institutions, need to concentrate more on quality aspects to satisfy the present customer requirements. The present study has been conducted to find the gap between student expectations from a higher education institution, their perception of the present institution and their satisfaction levels. The study has been conducted at one of the top engineering colleges in Chittoor district. SERVQUAL Questionnaire was used as a data collection tool. The sample size used for the study is 100. The study supports Hasan et al. (2008) work that empathy and assurance are the more

critical factors that determine the student satisfaction, and there is a relationship between service quality and student satisfaction.

### **Introduction:**

The quality has gained significant relevance in service industry, which was the subject of operational managers in manufacturing industries in olden days. The service quality is significant to customer needs and expectations. It is compulsory to look into the service quality dimensions to develop, design, produce and deliver good service. Garvin has given different approaches to define quality in products. Viz. Transcendent approach, Product based approach, Manufacturing based approach, Value based approach and user based approach (Rampal, Gupta). Though in marketing of services, quality is one of the critical factors that leads to success of the organization. Service quality is difficult to define, measure, control and communicate. The two attributes of service quality must be understood by the service provider are

- i) Quality is defined by the customer, not by the producer/seller
- ii) Customer assess service quality by comparing their expectations to their perceptions of how service is performed

Therefore human side of service is the key to deliver quality. Parasuraman, Zeithaml and Berry proposed 10 dimensions to service quality. They include

*Reliability:* Consistency of performance and dependability getting it right first time keeping promises.

*Responsiveness:* Willingness and readiness of employees to provide service and timeliness of service.

*Competence:* The existence of required skills and knowledge especially in contact personnel.

*Access:* ease of contacting the service and service provider

*Courtesy:* Respect and consideration from the service provider, and friendly environment

*Communication:* Informing customers in language they can understand; explanation of service offered.

*Credibility:* Trustworthiness, believability and honesty in communicating and performing the service.

*Security:* freedom from danger, risk or doubt.

*Understanding the customer:* Making the effort to understand customer's needs

*Tangibles:* Physical evidence, facilities and appearances.

Later they converted these 10 dimensions into 5 dimensions (1988, 1991 and 1994). They are Reliability, Assurance, Tangibles, Empathy, and Responsiveness. (RATER)

*Reliability:* Ability to perform service dependably and accurately.

*Assurance:* Knowledge and accuracy of employees and their ability to convey trust and confidence.

*Tangibles:* Appearance of physical facilities, equipments, personnel and communication material

*Empathy:* Caring, individualized attention the firm provides its customers.

*Responsiveness:* Willingness to help customers and provide prompt service.

Service quality refers to the expected and perceived quality of a service offering and it has a huge effect on the competitiveness of a company. (Kurtz, Boone). Service quality is a key concept in today's fiercely competitive

marketplace. This has been a pervasive force sweeping across firms and industries and a significant influence permeating health, education and other government and public services. The 1990s was the era in which service quality predominates within the service sector.

### **Need and Importance of the study:**

SERVQUAL has been used widely in measuring service quality in different service sectors. The present study uses the application of such scale in educational sector. The major service dimensions and their relative importance in education sector and the relative satisfaction of students are measured through the study. The major objective of the study is to know the service quality of a higher education institute in kuppam.

### **Methodology:**

The study was conducted at a reputed Engineering college at Kuppam.. The college has more than 1400 students in different disciplines of engineering and other streams. The study used a sample of 100 which constitutes students selected randomly from engineering final year (B. Tech.) students and M. B.A. students. The students were given a pre-structured questionnaire that consists of 19 SERVQUAL questions in the format developed by Parasuraman et.al. and adopted from the study conducted by Oliveria and Ferreira (2009) who conducted a study Brazil. The secondary data was collected from various journals, text books and Internet. The data was analyzed using the methodology developed by Parasuraman et.al.

### **Limitations:**

This study exclusively examined responses by final year engineering students and Post graduate students at an engineering college, kuppam. The ability to draw similar conclusions to other students in other years of education, types of education, or geographic locations may not be appropriate. In addition, the study has not considered the evaluations of educational quality by other significant stakeholders such as educators, employers, and the public

### **Quality and Education:**

Internationally some countries developed a perception of treating higher education as commodity which could be marketed and exported to generating new sources of funding for higher education. This forced higher education to become very competitive and market oriented within the countries and globally. These developments lead many people in higher education to believe that well tried and successful techniques of management, its quality principles of corporate sector could be successfully applied for better management of higher education. National policy of higher education (NPHE) 1986, identified the following goals are primary for higher education. They are

1. Great access
2. Equity in access
3. Quality and excellence
4. Relevance, and

## 5. Promotion of social values

At the beginning of 21<sup>st</sup> century, the growth of Indian economy and globalization has increased the consciousness of importance of technical education in India. The Government of India encouraged the spread of technical education. In the past decade, there has been a sharp increase in the number of private colleges as well as universities in India with the status of either deemed to be universities or state universities; higher education is continuing to expand, mostly in an unplanned manner, without even minimum levels of checks and balances (Umashankar and Dutta, 2007). It is imperative to look critically into the present continuing trends in technical education to ensure its quality and utility to face the challenges that the exciting 21st century will provide in the wake of globalization (Sakthivel and Raju, 2006). What should guide the higher education in order to achieve excellence? Higher Education should be guided through Service Quality concepts to achieve excellence (Kanji and Tambi, 1999). Service Quality concept is considered as an integrated system of principles, methods and best practices that will provide a framework for organizations to strive for excellence in everything they do (Srdoc, A., Sluga, A, and Bratko, I. 2005). The concepts and principles of Quality Management, which are effectively used in today's competitive production and business environments, have become indispensable in today's business of higher education (Hwarng and Teo, 2001). Higher education plays a vital role in socio economic development of the nation. Indian education system has made a significant progress in higher education from past two decades. Governments at the state and central levels with various regulatory and accreditation bodies, monitor the higher educational institutions with a vision to ensure quality in educational services, yet, quality of higher education is struggling to attain the global level excellence in India. In addition, the expansion of institutions with lack of proper infrastructure and funds from government caused the mushrooming of private institutions in India. Therefore, quality has become an important drive for socio economic development and also, it becomes a competitive weapon for the institutions to attract and serve the student as primary customer. Students are the primary customers in an educational setup and it is strongly supported by many researchers. Students involve in different roles: they are the product of the process, the internal customer for campus facilities, the laborers of the learning process and the internal customer of the delivery of the course material. However, it is generally accepted that students are the primary customers and other prospective customers are such as alumni, parents, employers, employee, government, industry and society may be considered secondary customers. Different studies examined the view points of different professionals and experts on the quality in higher education and concluded that customer-orientation in higher education is a generally acceptable principle Hence, among all the stakeholders, students are to be considered as the primary stakeholder and their opinion plays an important role in evaluation of service quality in higher education. Consequently, it becomes necessary to identify the determinants of service quality from the stand point of students being the primary customer, but in spite of this, very few studies have been done in this area, particularly on exploring the dimensions to measure service quality in higher education in the perspective of students in the Indian context. Parasuraman, Zeithamal, and Berry developed an instrument called

“SERVQUAL” for quantifying customers’ assessment of service quality performance. The SERVQUAL instrument has evolved to become the most commonly used service quality measurement instrument in education. It contains 22 items for measuring service quality along five dimensions, namely, reliability, accessibility, tangibility, assurance and responsiveness. Since its introduction, SERVQUAL has been widely acclaimed as a major contribution to academic and particularly marketing research literature. SERVQUAL was originally used to assess customer perceptions of service quality in service and retailing organizations (Parasuraman et al, 1988). It was presented as a synthetic scale with a correct level of reliability and validity useful in many service situations. SERVQUAL is comprised of two matched scales of 22 items, each describing expectations for a particular service category and then perceptions of a particular service provider (Bearden and Netemeyer, 1999). The expectations are not viewed as predictions (what is likely to happen), but as desires or wants of consumers (what should happen). Both sets of items are operationalised using a 7-point bi-polar scale labeled, *Strongly Agree* (7) to *Strongly Disagree* (1). Nearly half of the items are worded negatively with negative wording indicated by (-). The scale produced scores, for the total scale and each factor, ranging between minus 6 and plus 7, where the positive scores are reflected as perceptions exceeding expectations. The quality of service is assessed through this SERVQUAL score, called the gap score computed by taking the difference for 1 to -7 scales and then averaged over the number of items either in the total scale or for each subscale (Bearden and Netemeyer, 1999).

Although globally accepted and adapted in various service organizations, the SERVQUAL instrument is not without criticism. Satisfaction is a function of relative level of expectations and perceives performance. The expectation may go as far as before the students even enter the higher education, suggesting that it is important to the researchers to determine first what the students expect before entering the university (Palacio, Meneses and Perez, 2002). In contrary, Carey, Cambiano and De Vore (2002), believe that satisfaction actually covers issues of students’ perception and experiences during the college years. While most student satisfaction study focus on the perspective of customer, researchers is facing a problem of creating a standard definition for student satisfaction thus providing a need of customer satisfaction theory to be selected and modified so that it can explain the meaning of student satisfaction (Hom, 2002). Even though it is risky to view students as customer, but given the current atmosphere of higher education marketplace, there is a new moral prerogative that student have become “customer” and therefore can, as fee payers, reasonably demand that their views be heard and acted upon (William, 2002).

**Proposal for Adaptation:**

An adapted version of SERVQUAL was taken from the study of Olivera and Ferreira in the following format. The students were asked to give their relative priority to each of these five dimensions and were asked give their overall satisfaction level with the institution.

**Table 1:**

S. No.	Expectation	Perceptions / Performance
<b>Tangibility</b>		
1	Excellent higher education institutions must have modern equipment such as laboratories.	Your Higher education institution has modern equipment such as laboratories
2	Higher education institution installations must be well conserved	Your higher education institution installations are well conserved
3	Employees and teachers at excellent institutions of higher education must present themselves (clothes, cleanliness etc.) in an appropriate manner for their position	Employees and teachers at your institutions of higher education present themselves (clothes, cleanliness etc.) in an appropriate manner for their position
4	The material associated with the service provided in excellent institutions of higher education such as journals, printed matter, must have a good visible appearance and be up to date	The material associated with the service provider in your institution of higher education such as journals, printed matter has a good visual appearance and is up to date
<b>Reliability</b>		
5	When excellent institutions of higher education promise to do something in a certain time they must do so	When your institution of higher education promises to do something in a certain time it does so.
6	When a student has a problem, Excellent institutions of higher education demonstrate sincere interest in solving it	When you have a problem, your institution of higher education demonstrates sincere interest in solving it
7	Excellent of institutions of higher education will do the job right the first time and will persist in doing it without error	Your institution of Higher education will do the job right the first time and will persist in doing it without error.
<b>Responsibility</b>		
8	Employees and teachers at Excellent institutions of higher education promise their clients the services within deadlines they are able to meet	Employees and professors at your institution of higher education promise you the services within deadlines they are able to meet
9	The employees and teachers at excellent institutions of higher education are willing and available during service providing	The employees and teachers at your institution of higher education are willing and available during service providing
10	The employees and teachers at Excellent institutions of higher education will always show goodwill in helping their students	The employees and teachers at your institution of higher education always show goodwill in helping students.
11	The employees and teachers at excellent institutions of higher education are always willing to explain doubts their students may have	The employees and teachers at your institution of higher education are always willing to explain your doubts.

<b>Assurance</b>		
12	The behavior of employees and teachers at excellent institutions of higher education must inspire confidence in the students	The behavior of employees and teachers at your institution of higher education inspire confidence in the students
13	Students at Excellent institutions of higher education feel safe in their transactions with the institution.	You feel safe in your transactions with your institution of higher education
14	The employees and teachers at Excellent institutions of higher education must be polite to the students	The employees and teachers at your institution of higher education are polite
15	The employees and teachers at excellent institutions of higher education must have the knowledge needed to answer student questions	The employees and teachers at your institution of higher education have the knowledge needed to answer your questions
<b>Empathy</b>		
16	Excellent institutions of higher education must have convenient business hours for all students	Your institution of higher education has convenient business hours for all students
17	Excellent institutions of higher education must have employees and teachers who provide individual attention to each student	Your institution of higher education has employees and teachers who provide individual attention to each student
18	Excellent institutions of higher education must be focused on the best service for their students	Your institution of higher education is focused on the best service for their students
19	Excellent institutions of higher education must understand the specific needs of their students	Your institution of higher education understands the specific needs of its students

**Results and discussion:**

The results of the study are presented in a tabular form in Table 2:

**Table 2:**

		EXPECTATIONS (E)								PERCEPTION(P)								P-E
		Frequency of Responses							Average								Average	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7		
Tangibles	1	0	2	8	18	35	22	15	5.12	0	5	1 4	2 0	3 0	21	10	4.78	-0.34
	2	0	1	10	17	38	24	10	5.04	1	5	1 0	2 2	2 6	21	15	4.9	-0.14
	3	0	0	5	12	25	37	21	5.57	4	6	1 2	3 0	3 1	9	9	4.44	-1.13
	4	0	0	9	25	30	20	16	5.09	1	6	1 1	2 3	3 1	17	11	4.72	-0.37
Reliability	5	0	0	4	16	28	31	21	5.49	0	6	3 1	2 1	1 8	17	7	4.3	-1.19
	6	0	0	2	15	21	34	28	5.71	0	0	1 6	2 1	2 0	25	18	5.08	-0.63
	7	0	6	8	21	31	24	10	4.89	0	6	1 2	2 0	2 4	20	18	4.94	0.05
Responsiveness	8	0	0	17	16	21	26	20	5.16	0	5	1 0	2 2	2 8	23	12	4.9	-0.26
	9	0	0	2	15	22	30	31	5.73	0	0	6	1 8	2 4	24	28	5.5	-0.23
	10	0	1	12	33	24	20	10	4.8	0	0	2 2	2 4	2 2	20	12	4.76	-0.04
	11	0	8	16	28	24	18	6	4.46	0	4	3 1	2 6	2 0	9	10	4.29	-0.17
Assurance	12	0	0	12	18	24	28	18	5.22	0	0	1 4	3 2	2 8	18	8	4.74	-0.48
	13	0	0	2	6	22	34	36	5.96	0	0	0	1 3	2 4	31	32	5.82	-0.14
	14	0	1	7	29	35	20	8	4.9	0	0	1 1	2 0	2 0	22	26	5.27	0.37
	15	0	0	0	9	17	34	40	6.05	0	0	0	1 1	1 1	20	48	5.55	-0.5
Empathy	16	0	0	0	14	25	32	29	5.76	0	0	0	2 0	2 0	22	38	5.78	0.02
	17	0	0	17	24	31	18	10	4.8	0	0	1 0	3 0	3 1	10	19	4.98	0.18
	18	0	0	5	2	21	31	41	6.01	0	0	6	1 2	1 3	26	43	5.88	-0.13

	19	0	0	7	14	22	29	28	5.57	0	2	5	$\frac{1}{6}$	$\frac{1}{8}$	28	31	5.58	0.01
																		0.015

*Overall average score of 5 dimensions is -0.262*

The results of the two sections are compared for each parameter and for each dimension and the final score is generated by difference between perceptions and expectations of the respondents. The negative results from the calculated SERVQUAL scale show that there is scope for improvement for the organization. The results of tangibility dimension show (-0.49) that there is a need for the institution to improve the facilities a little bit and invest in quality equipment. The reliability dimension results (-0.59) are indicating that the organization needs to invest on training of employees so that they can do right things and solve the student problems. The score of responsiveness (-0.017) dimension shows that the institution needs to implement more programs to motivate the employees so that they meet deadlines and show good will. The score of the assurance shows (-0.075) that there is requirement of change in the teachers and other employees attitude towards students. The last dimension Empathy's score (0.015) shows that the institutions is performing good on students' requirements and need to focus for better results. The differences between perceptions and expectations is (-0.786), which implies that the Institution has much scope to increase. The institution needs to concentrate more on following aspects.

1. The teachers and staff need to present themselves in a better manner.
2. The institution needs to demonstrate more interest in solving the students' problems
3. It needs to fulfill the promises that it made to students in the specified time.
4. The institution needs to concentrate on training the employees so that they are ready to answer the students' questions.
5. It needs to be more focused on providing best service to students.

The study has also shown that Empathy is the most critical factor followed by assurance and responsiveness. The study supports Hasan et al. (2008) work that empathy and assurance are the more critical factors that determine the student satisfaction. Most of the students (65%) of the students are fully satisfied with the present institution where as 23% said they are satisfied with their institution. It shows that there is relationship between service quality and students' satisfaction. The study has given suggestions to the institution where it has an opportunity to improve. Though SERVQUAL scale is accepted as one of the best method to measure customer satisfaction there are many improved versions like SERVPREF, HiEdQUAL (Subramaniaym et.al. 2012) are also used in education sector. There is a need to compare the results with that scales to know the appropriateness of service quality.

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