

# Student Satisfaction with Service Quality in Tirumala Tirupathi Devasthanams Higher Education Institutions

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## ABSTRACT

**Purpose** – The study aims to investigate how students perceive the services they are offered at a Tirumala Tirupati Devasthanams (TTD) Higher education institutions and how satisfied they are with them. For this purpose, an evaluation study using a new tool to measure fifteen dimensions of student satisfaction at an institutional level will be presented that covers most aspects of student life. 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.

**Design/Methodology/Approach** – Questionnaires with 5 dimensions with Five-point Likert scale was used to measure the student satisfaction levels of perceived quality were distributed. We received a total of 134 completed surveys from students of TTD educational institutions filled in the newly developed questionnaires using Likert scales.

**Findings** – 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. Our results show that students' satisfaction with their TTD educational institutions 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 campus placements and the atmosphere among students. Students were mostly dissatisfied with the TTD college buildings and the quality of the lecture theatres.

**Research limitations**– As the study involved only two samples of students from TTD educational college, the results cannot be generalized to the TTD student population as a whole.

**Originality/value** – The study was the first to successfully apply a measurement tool, which has previously not been used. 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.

**Keywords:** Service quality, Student satisfaction, TTD Higher educational institutions

## Introduction

Quality in higher education is a complex and multifaceted concept and a single correct definition of quality is lacking (Harvey and Green, 1993). As a consequence, consensus concerning “the best way to define and measure service quality” (Clewes, 2003) does not exist yet. Every stakeholder in higher education (e.g. students, government, professional bodies) has its own view of quality due to particular needs. Students receive and use the training offered by the university, which makes them priority customers of educational activities (Marzo-Navarro et al., 2005). Authors such as Sander et al. (2000), Gremler and McCollough (2002), and Hill (1995) also regard students as primary consumers of higher education service. This view, however, does not mean that other perspectives may not be valid and important as well. In this connection, Guolla (1999) rightly points out that students could also take the role as clients, producers, and products. Based on findings in the service quality literature, O’Neill and Palmer (2004, p. 42) define service quality in higher education as “the difference between what a student expects to receive and his/her perceptions of actual delivery”.

The overriding value in measuring service quality in higher education lies in the identification of critical aspects of the service delivery (Abdullah, 2006). However, this presumes a customer –led strategy, whereby the student, as the buyer of the service exchange, is regarded as the customer (Owlia and Aspinwall, 1996). It has been argued that a “customer” metaphor for describing the university service exchange from the perspective of students is unsuitable.

It appears that refuting the idea of the student as a TTD educational institutions on such grounds is narrow, and ignores the fact that the institutions experience is wider than just the contact between students and academics. It has been found that when making the uncertain and high -risk decision of choosing a TTD institutions, “the student will look for evidence of service quality”, Confirming its importance in the TTD institutions.

Therefore, ignorance of the competitive nature of attracting students, alongside the importance of measuring the service quality, will ultimately be at the disadvantage of the institution. The importance of this has been claimed by Sines and Duckworth (1994) who summarized this position by saying that:

“it’s time for educational institutions to face two facts: they are in a competitive battle for students, and students are customers”.

Student expectations are a valuable source of information (Sander et al., 2000; Hill, 1995). Especially new undergraduate students may have idealistic expectations, and if higher education institutions know about their (new) students’ expectations, they may be able to respond to them to a more realistic level. At least, TTD institutions could inform students of what is realistic to expect from lecturers (Hill, 1995).

The knowledge of student expectations may also help lecturers to design their teaching programmes (Sander et al., 2000). Hill (1995) found that student expectations in general, and in particular, in relation to academic aspects of higher education services such as teaching quality, teaching methods, and course content have been quite stable over time.

### **Service quality and satisfaction (Literature review)**

In the services literature, the focus is on perceived quality, which results from the comparison of customer service expectations with their perceptions of actual performance (Zeithaml et al., 1990, p. 23). The students are greatly influenced by the educational activities their teacher or instructor coordinates for them. Shevlin, Banyard, Davies and Griffith (2000) stated that the teachers who teach with punctuality, accuracy, reasonability and logical approach in a student friendly manner are more popular.

Winsted (2000) and Zeithaml *et al.* (1990) maintain that service providers will only be able to deliver service encounters that will satisfy customers if they know what their customers want. If Trust educational institutes 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.

Oldfield and Baron (2000, p. 86) maintain that “there is an inclination to view service quality in higher education from an organizational perspective”. They suggest that institutions should better pay attention to what their students want instead of collecting “data based upon what the institution perceives its students find important”. Similarly, Joseph *et al.* (2005) point out that research on service quality in higher education has relied too strongly on the input from academic insiders while excluding the input from the students themselves. They believe that traditional approaches leave “decisions about what constitutes quality of service (e.g. such as deciding what is ‘most important’ to students) exclusively in the hands of administrators and/or academics” (p. 67). The authors, therefore, suggest that academic administrators should focus on understanding the needs of their students, who are the specific and primary target audience. Similarly, Douglas and Douglas (2006, p. 6) suggest that the student experience and its improvement “should be at the forefront of any monitoring of higher education quality”.

### **Perceived Service Quality**

The perceived quality is defined as the ones’ justification about the excellence of a product or service (Zammuto et al. 1996). According to Dyson et al., 1996 the service quality is so called the better and standardized output delivered by a service. The service quality in the educational sector particularly in the higher educational institutions is the fundamental aspect of educational excellence. According to (Aldridge and Rowley, 2001) when students perceive the institution’s quality and standardized learning environment facilitated with intellectual faculty, appropriate facilities of learning and infrastructure, their interest in their organization will explicitly be retained. The students are motivated from the academic as well as the administrative efficiency of their institution. Spoooren, et. al (2007) posited a view that the organizational harmony, teachers’ intellectual ability, professional development, transparency in students’ evaluation, feedback and training are the important features that mentally develop the students. The maintenance of other essentials of quality service in education i.e. well managed and updated libraries, security systems, medical facilities, class decoration and facilitation with multimedia and sitting arrangements along with administrative staff’s cooperation play a vital role in educational support and development.

The instrument was designed specifically for measuring student’s satisfaction with the services offered by a TTD. The following 15 quality dimensions, covering most aspects of student life, were developed based on an extensive literature review (e.g. Elliott and Healy, 2001; Wiers-Jenssen *et al.*, 2002) and discussions with current students following recommendations by Harvey (2003):

- (1) Administrative and student services
- (2) Atmosphere among students
- (3) Computer equipment /Lab
- (4) Knowledgeable faculty
- (5) Courses offered by institution
- (6) Rooms and Mess Halls
- (7) Reputation of the University
- (8) Safe and secure campus
- (9) Clear and reasonable requirements for major
- (10) Availability of advisor
- (11) Buildings
- (12) sufficient infrastructure

- (13) Access to information
- (14) Library
- (15) Support from lecturers

Where the students also get motivated from the reliability of the facilities they are provided with, as higher the quality they perceive the higher will be their attraction and affiliation (Keller, 1993).

The availability of other academic facilities like intellectual faculty, NSS campus, NCC, various programmes of skill development of the students are the features that an institution needs for its students' better performance and satisfaction (Bolton and Drew 1991). The services quality is mostly recognized by the cooperation of the administrative staff well as the faculty staff with the students. Majority of the students get de-motivated if they found that the staff is not compassionate and kind. According to Hasan et. al (2008) for quality assurance an institution must train its staff members in a way that it may create a sense of facilitation by means of coordination, cooperation, compassion and empathy (Jacoby and Chestnut 1978).

From the literature following hypotheses can be postulated.

*H1: Increase in quality of services increases the students' satisfaction.*

*H2: Increase in quality of tangible services increase the students' satisfaction.*

*H3: Increase in quality of assured services increase the students' satisfaction.*

*H4: Increase in quality of reliable services increase the students' satisfaction.*

*H5: Increase in quality of responsive services increase the students' satisfaction.*

*H6: Increase in quality of empathy services increase the students' satisfaction.*

## Methodology

The present study aims at exploring the impact of service quality on students' satisfaction in higher educational institutes in TTD. All these institutes are chartered and regulated by the Tirumala Tirupati Devasthanams (TTD). These educational institutions have similar functionality and code of conduct governed by the SV University (SVU). All these institutes have proper departmentalization and appropriate curriculum approved by the SVU. The similarity of working condition, educational courses and work climate thus constitutes the homogenous population and by selecting the sample of students of these institutes can be considered as the sample representing the entire population of the TTD college students. For the purpose of the study, a convenience sampling technique was used to record the responses of 134 students at a response rate of 96%.

## Student Satisfaction

It explains the satisfaction and contentment of students from the service quality of their institution. It is measured by the questionnaire developed by **Atheeyaman (1997)**. All the responses are recorded on a five point likert type scale.

### Perceived service quality

The perceived service quality is defined as the quality of a service that a student experience's after getting exposed of a certain service offered by his institute. It is comprised of five dimensions i.e.

#### Tangible services

The services which can be tangible like furniture, Free meals, Hostel infrastructure class room layout etc.

#### Reliability services

The services of the administration, examination department to make the results reliable and correct address etc.

#### Assurance services

The services provided by the institution for which they assured the students about their academic courses.

#### Empathy services

The services of the institution which empathized the students are called the empathy services. Empathy reflects how much the college /Institutions feels and cares the needs of students.

#### Responsiveness

It is defined as the immediate and efficient responsiveness of an institution's system. It explains how much the system is responsive towards the quality service providing.

Perceived Quality is measured by the questionnaire developed by Parasuraman et al. (1990) in which some items are taken from the questionnaire developed by LeBlanc and Nguyen (1997). All the responses are recorded on a five point likert type scale.

## Results and discussion

The analysis of the data was done with the help of SPSS and AMOS. The overall reliability of the data i.e. Cronbach's Alpha was recorded at 0.792. The descriptive analysis shows the demographic characteristics of respondents with their institutes. There were no missing values in response. Overall males are 50 percent, while 50 percent are females. About 85 percent students are in graduation and 15 percent are in masters. About 30.8 percent students are 19-21 years old, 53.8 percent are between 22-24 years old, 10 percent are between 25-27 years old and 5.4 percent are more than 27 years old.

Table : 1 (annexure –I)

The mean values and standard deviation of the variables are given in the table 1. The mean value of the Reliability is the highest.  $M = 3.791$  which means that the students satisfactory level is based on how much they trust on the quality of the infrastructure, education, knowledge and support of faculty and other essentials of academic development like computer labs and quality of the staff in library. They also seek the reliability and persistency of other services like Free meals, play grounds class set up, and decoration. This reliability can only inspire them to be retained in their institution and develop them academically as well as professionally.

Table : 2 (annexure –I)

The table 2 shows Pearson's Product Moment Coefficient Correlation. The highest correlation is found between responsiveness and total quality service i.e.  $r = .646$   $p < 0.01$ . This shows that the compassion, coordination and kindness are the values that greatly add the quality to the service of an educational institution. Those institutions whose staff, faculty members and administration possess high level of human skills are assuring the quality education and are more satisfactory to the students. These polite, noble, caring, cooperative and motivating people working in an educational institution can raise the quality of educational service to its fullest extent. Like wise, the total service quality is also associated with the assurance of the services provided i.e.  $r = 0.618$   $p < 0.01$ . This shows that the assurance of the services will enhance the trust of the students on their institution as their institution is very much active in providing the quality education and learning environment for their academic development.

The analysis of the data is also done with AMOS, through structural equation modelling technique (SEM). The indicators were identified for the purpose of modeling. The indicators were identified on the basis of their factor loadings. These indicators are associated to their respective latent or unobserved variables to calculate the estimate. The values of SEM are given in the table 3 Structural equation modeling .

In table 3, the Goodness of Fit CFI = 1.951 Adjusted goodness of Fit ACFI=0.184 comparative fit index CFI= .967 and IFI=.971, NFI= .943 RMR=.216 RMESA=.089 and Chi square = 7.804 with  $p=0.099$ . Since the GFI is affected by the sample size so in order to avoid this we can consider the CFI, RMESA and chi square which are not affected by the sample size. The overall analysis of the mode indicates that the model is a reasonable fit.

## Conclusions

The present study aims at exploring the impact of service quality on students' satisfaction in TTD educational institutes. The results show that the service quality greatly influences the students' satisfaction in multiple dimensions. The essence of students'

satisfaction lies in the quality of teaching and learning environment of institution as students

demand the well qualified, learned and experienced faculty for their academic and professional development. The students want to be taught by those teachers whose knowledge, expertise, liberality and reasonability up to the mark. The teaching methodologies and understanding with course and tasks with a friendly attitude of teaching are the key factors affecting the academic environment of an institution. The tangible facilities like class setup, computer labs and libraries, quality and reliability of the infrastructure and other assured facilities do contribute in creating the image of excellence.

We posited five hypotheses all of which are accepted. The structural equation modeling results have shown that the dimensions of service quality have a significant impact on the students' satisfactory level. The overall model is a reasonable fit showing that the tangibility, assurance, reliability, responsiveness and empathy have a strong and significant impact on the students' satisfaction from an institution. The results also showed that the cooperation, kindness of administrative staff and the responsiveness of the educational system play a vital role in retaining the students' interest as the administration should be responsible in providing all the essentials and necessities required progressive learning environment. The students seek the feelings of empathy, nobleness and kindness in their institute's administrative staff. Therefore the administration should be careful in training the employees in order to come up to the expectations of the students. In addition to the learning environment there are certain other essential facilities which are also important for the students i.e. the well managed cafeteria, parking facilities, play grounds and other arrangements of physical and mental health e.g. clubs, gymnasiums etc. Assuring all the facilities and quality of services with excellence and reliability, an institution can attract a lot of students by having its name in the leading educational institutions of learning.

## Recommendations

The Devasthanams educational officers should pay attention in developing their educational institutes in the light of various dimensions of students' quality perception. They should comply with all the necessities, standards and requirements of quality education needed by their students. Especially the reliability of facilities being offered and most importantly the empathy of the administrative staff is a significant factor in quality perception. The nobleness of the staff i.e. their communication with students and their actions should be empathetic. Further the reliability of the infrastructure is also a very important preference of students of an institute. Thus in order to achieve maximum students' satisfaction, the facilitation with following dimensions of perceived quality should be the top priority of an institute.

## Limitations

The size of sample is small. We think the research would have been more reliable if a greater size of sample will be used. Limitations also included Time and cost constraints, the difficulty we faced in gathering all the members of our focus group together at one venue, non serious attitude of people towards questionnaire filling. Geographical area is limited. It includes three degree colleges. We select only degree and PG students out of all educational institutions for student satisfaction.

## Future Guidelines

In future the other sources of students motivation and development should be specifically investigated i.e. the role of libraries in students learning, role of seminars and research

conferences in grooming and learning development of students etc. The demographic impact of student satisfaction should also be investigated i.e. ethnicity, gender and religion do impact on the satisfaction from the perceived quality of the services delivered to

the students. Further the data collection should be done with longitudinal data collection process in which qualitative data should be collected in order to gain the wide applicability of the research findings.

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Annexure –I

Table –1 Mean and Standard Deviation of Variables (N = 134)

S.No	Attributes	Mean	SD
1	Satisfaction Level	3.224	1.038
2	Tangible services	3.679	1.094
3	Assurance	3.299	1.041
4	Reliability	3.791	.786
5	Empathy	3.530	.811
6	Responsiveness	3.634	.938
7	Total Quality service	3.526	.566

Table :2 Pearson’s Correlation among Variables

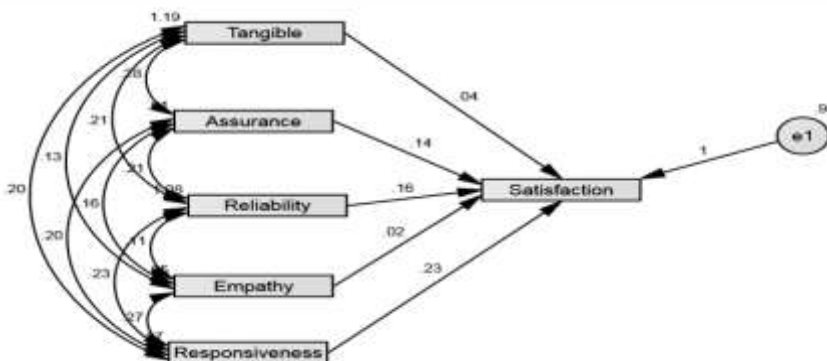
		Correlations						
		Satisfaction	Tangible	Assurance	Relia bility	Empathy	Respon siveness	Total quality
Satisfaction	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	134						
Tangible	Pearson Correlation	.150	1					
	Sig. (2-tailed)	.084						
	N	134	134					
Assurance	Pearson Correlation	.224**	.324**	1				
	Sig. (2-tailed)	.009	.000					
	N	134	134	134				
Reliability	Pearson Correlation	.244**	.184*	.261**	1			
	Sig. (2-tailed)	.005	.034	.002				
	N	134	134	134	134			
Empathy	Pearson Correlation	.144	.142	.246**	.132	1		
	Sig. (2-tailed)	.097	.101	.004	.129			
	N	134	134	134	134	134		
Respon siveness	Pearson Correlation	.285**	.192*	.273**	.236**	.356**	1	
	Sig. (2-tailed)	.001	.026	.001	.006	.000		
	N	134	134	134	134	134	134	
Total quality	Pearson Correlation	.593**	.587**	.618**	.597**	.525**	.646**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	134	134	134	134	134	134	134

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

Table No: 3 Structural Equation Modeling Values

UnStandardized Model



Default Model