



## **PUBLIC TRANSPORT SERVICE QUALITY- A MEASUREMENT**

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### **Abstract**

*Most of the developing countries, transportation is great significance because of their contribution is more in national and regional, economic, social, cultural development. Transport service quality and satisfaction level have been focused in the paper. SERVQUAL is an analytical approach for evaluating the difference between passenger perception and expectations of service quality. It is expected that the passenger gets better service, lower fares and higher reliability because of the competition of public transport service. For this study, 120 respondents were taken as sample size by using convenience sampling technique and also Servqual instrument was used to identify the gap between expectation and perception of passengers. The major finding of the study reveals that majority of the passengers are satisfied with the service quality provided by the public transport corporation.*

**Key Words: Dimension, Passengers, Satisfaction, Service Quality, Transport.**

### **Introduction**

Transportation plays a vital role in the economic growth of the country. It helps to remove the barrier of the people to move from one place to another place. An effective and efficient transport system is need for increasing the economic development of the country and to promote national and global integration. In India, the present transport system comprises several modes of transport such as rail, road, coastal shipping, air transport etc. Out of these systems, road transport plays a significant role in Indian economy.

Road network of India is the largest networks (3.314 million kilometers) in the world. It consists of national highways, state highways, district roads and village roads which connect different parts of India. In the road transportation, buses are the most common mode of road transportation to carry the people from one place to another place which include both public and private transport. Among the two sectors in Tamilnadu, Public sector plays a vital role to generate the income to the government. The public sector transport service is higher than the private transport in Tamilnadu .Government plays an important role in the process of planning and implementation of public transport policy in various aspects. (Penalosa 2005) .

Most of the researchers have used SERVQUAL model to identify the quality of service in various areas. SERVQUAL is an analytical approach for evaluating the difference between passenger perception and expectations of service quality. It is expected that the passenger gets better service, lower fares and higher reliability because of the competition of transport service. PZB defines service quality as the comparison results of both expected and perceived services. In this study, the researcher adopts service quality scale to evaluate quality concepts and movements of the service of the public transportation.

### **Statement of the Problem**

The research has been developed to identify the level of satisfaction and quality gap of passenger towards the public transport service sector. Most of the developing countries, transportation is great significance because of this contribution is more in national and regional, economic, social, cultural development etc. In spite of many of the developing countries have been facing problems related to traffic, uncomforted seats, lack of physical facilities, speed, lack of reliability etc. Adequate facilities in the public sector prevent the process of socio economic development of the country. Managing of transportation is difficult task especially in heavily populated country like India. The most important problems that the public transportations are not able to fulfill needs of passenger, i.e. expectations of the passenger are higher than the perceived service. Moreover the passengers have



been facing the various problems like time keeping, convinces, bus fare, safety and reliability service towards the public transport sector. Transport sector occupies vital role in Indian economy. Hence, an attempt has been made to study the service quality of the public transport corporation in Salem region.

Passengers' perception and also the level of satisfaction towards service quality of TNSTC Ltd, in Salem region have been focused in the research. Primary data as well as the secondary data were collected from respondents and from the respective public transport corporation (TNSTC Salem) respectively. In order to measure the service quality gap, the SERVQUAL instrument has been adopted as questionnaire which was developed by the **parasuraman et.al (1985)** . It consists five dimensions viz, Tangibility, Reliability, Responsiveness, Assurance and Empathy.

### Objectives of the Study

The following objectives have been framed for the study.

1. To identify the Service Quality gap between expected service and perceived service.
2. To find the level of satisfaction of passenger of the public transport service.

### Research Methodology

The public transport corporation in Salem region, Tamilnadu was taken for study. The study consists of primary as well as secondary data. Primary data were collected through SERVQUAL instrument which consists of five dimensions, Tangibility, Reliability, Responsiveness, Assurance and Empathy. 150 questionnaires were distributed to passenger in Salem region. Out of which, 30 respondents did not fill the questionnaire properly. So finally, 120 respondents were taken as sample size. In this study, the researcher has adopted convenience sampling technique because the population is uncertain. The secondary information was collected from various books, journal, magazine etc.

### Hypotheses of the Study

**Ho:** There is no relationship between passenger perceptions and satisfaction.

**Ho:** There is no significant relationship between age and level of satisfaction.

### Results and Discussions

An attempt is made to measure the Service quality of public transport corporation in Salem region, mean value, chi-square test and ANOVA were applied.

### Mean Score of Perception and Expectation and Their Gap

In order to identify the differences (gap) between expected service and perceived service, Mean scores is used dimension wise. Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

**Table-1 Mean Value of Perception And Expectation and their Gap**

DIMENSION	PERCEPTION	EXPECTATION	GAP
Tangibles	9.80	9.31	0.49
Reliability	12.68	12.71	<b>-0.03</b>
Responsiveness	10.13	10.05	0.08
Assurance	10.35	10.04	0.31
Empathy	12.39	12.52	<b>-0.13</b>

*Note : ( Minus gap indicates that expectations exceed their perception)*



+ Values indicates positive gap  
-Values indicates negative gap

The table shows the means score of expectation and perception and their gap of public transport corporation. Positive gap is found in the dimensions tangibility, responsiveness, and assurance and also negative gap is found in reliability and empathy dimension. It is concluded from the above table the passengers expect more on the reliable and empathy aspects compare to their perception of service.

An attempt is made to measure the Service quality of public transport corporation in Salem region, chi-square test is applied to identify the relationship between perception and satisfaction

### Association between Perception and Satisfaction

In order to study an association between passengers' perception and passengers' satisfaction", Chi-square test was applied dimension wise.

**Table-2 Association between Perception and Satisfaction**

Perception	Chi-square Value	df	'P' value	Remarks
Tangibles	57.217	12	1.293	Not significant
Reliability	65.996	12	1.955	Not significant
Responsiveness	66.947	12	0.968	Not significant
Assurance	38.52	15	2.802	Not significant
Empathy	57.215	12	2.609	Not significant

(Source: primary data)

The above table shows that the relationship between perceptions score and satisfaction dimension wise. The chi-square results are not significant with respect to any dimension. This shows that that perception does not influence satisfaction i.e., the higher the perceptions, the lower the satisfaction level and hence there is no relationship between perception and satisfaction. Therefore null hypothesis does hold good.

Moreover AVOVA was applied to test the significant difference between age and level of satisfaction.

**Ho:** There is no significant difference between the age and level of satisfaction.

**Table 3 Age and Level of Satisfaction**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Highly Satisfied	5	1.20	.447	.200	.64	1.76	1	2
Satisfied	56	1.50	.786	.105	1.29	1.71	1	4
Neutral	49	1.57	.816	.117	1.34	1.81	1	4
Dissatisfied	8	1.38	.518	.183	.94	1.81	1	2
Highly Dissatisfied	2	1.00	.000	.000	1.00	1.00	1	1
Total	120	1.50	.767	.070	1.36	1.64	1	4



**ANOVA for Age and Overall Satisfaction**

	Sum of Squares	df	Mean Square	F	'P' value
Between Groups	1.325	4	.331	.555	<b>.696</b>
Within Groups	68.675	115	.597		
<b>Total</b>	<b>70.000</b>	<b>119</b>			

(Source: primary data)

The above table shows that the variable of age and overall satisfaction do not differ significant with age and overall satisfaction at 5% level of significance. The calculated value is more than the significance level. So, null hypothesis is accepted. Hence, there is no significant relationship between ages with level of satisfaction.

**Conclusion**

The service qualities of public transport corporation were identified by collecting information from the 120 sample of respondents through the interview schedule. The empirical analysis proved that there is a positive relationship between service quality perception and customer satisfaction in the public transport sector. Finally the study indicates that the majority of the passengers of public transport are satisfied with the service quality provided by the public transport corporation.

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