

# A Study on Passengers' Satisfaction Level for the Western Indian Railways Services in Surat City

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## Abstract:

Indian railway is the backbone of the Indian economy, Indian railway is the maximum passenger and cargo carrying transport system in India. Daily cores of passengers travel through different trains. This study intended to determine satisfaction level of western railways' passengers using SERVQUAL model dimensions. Total 110 respondents were contacted and results are presented using SERVQUAL analysis techniques, apart from this Chi square test of association has been used to determine relation between one of the demographic variables.

**Keywords:** Indian Railways, Passenger Satisfaction, Satisfaction, SERVQUAL Model, Western Railways.

## Introduction

India's first railway suggestions were made in Madras during later months of 1832. The Red-Hill Railway was the country's first train, it ran from Red-Hills to Chintadripetbridge in Madras in 1837. It was pulled by a rotary steam-engine locomotive manufactured by "William Avery". From that date to till date we witnessed major changes as well as upgradation in all spheres of railway system, whether it is engine, coaches, compartments, reservation and so on. Today our nation is approaching towards fast trains and bullet trains. The present government has also initiated offers for private companies to run private passenger trains in India.

The Indian countrywide rail network, the 4<sup>th</sup> longest in the world, is owned and operated by state-owned Indian Railways and includes an operating route length of more than 65,000km. The network carried about eight billion passengers and more than 1.01 million tons of freight in 2018.

The Indian railway network is divided into 17 zones, and operates more than 19,000 trains per day, including 12,000 passenger trains and 7,000 goods trains. According to news published in one of the leading English newspaper regarding revenue, it was a reply to an RTI query, filed by Madhya Pradesh-based activist Chandra Shekhar Gaur, revealed that in the first quarter (April-June) of financial year 2019-20, the railways earned a revenue of Rs 13,398.92 crore

from passenger fare. This dipped to Rs 13,243.81 crore in the July-September quarter and went down further to Rs 12844.37 crore in the third quarter (October to December)<sup>1</sup>.

As Indian railway enjoys monopoly in the market, they are least bother about customer satisfaction. But still railway offer good facilities to their passengers.

### Research Scope and Problem Identification

Customer satisfaction is often defined as the customers' post-purchase comparison between pre-purchase expectation and performance received (Oliver, 1980; Zeithaml et al., 1993). The relationship between service quality and customer satisfaction has been discussed in numerous previous papers during the past decade.

First of all, many researchers present that service quality has positive related relationship with customer satisfaction. In other words, service quality influence customer satisfaction and vice versa customer satisfaction influence quality. In this study SERVQUAL model was used to study satisfaction of passengers.

So in this research researchers focused on services quality dimensions to assess the level of satisfaction, and therefore researchers were interested to know how many percentage of passengers resides in Surat city, are satisfied with which type of different offers provided by the Indian railways.

### Objectives of the study

- To measure the satisfaction level of passengers' for the services offered by the Western Indian Railwaysbased on SERVQUAL Model

- To study association between gender of the passengers and their satisfaction towards dimensions of SERVQUAL

### Review of Literature

Prof. G. Rajeswari and Dr. D. Elangovan (April 2014) had conducted a study on "Passengers' Satisfaction on the Services Offered by the Rail System.", with objectives of measuring level of satisfaction of passengers on services provided by railways and offering suggestions to improve satisfaction of passengers of rail system. The SERVQUAL method was used for this study. The contribution of this study is the identification of factors that determine passengers' satisfaction with services offered by railway. This study, thus provides a direction for railway administration whereby areas for improving services may be identified and passengers' satisfaction may be enhanced.

Prof. V. Rajeswari and K. Santakumari (May – June, 2014) had conducted "Satisfaction and Service Quality in Indian Railways – A study on Passenger Perspective." with an objective of investigating the customer perceptions about the service quality in Indian Railways. This study has been undertaken considering the major stations of India that are, Delhi, Mumbai, Kolkata, Chennai, Hyderabad. The passenger satisfaction has been measured with SERVQUAL instruments which are Tangibles, Reliability, Assurance, Responsiveness and Empathy. The overall findings conclude that the railway is failing to provide qualitative services to passengers. It is also evident that railways should make efforts in improvising or upgrading the rail transport system. The service quality of railway is regarded as critical indicator that would enhance its customers' satisfaction.

Dr. J Anuradha (Aug. 2014) conducted "A Study on Passengers' Satisfaction towards Railway

Services in Erode Junction.”, with objectives of measuring level of satisfaction of the passengers, measuring the perception and satisfaction towards services and offering suggestions for improvements in the services provided by railways. In this study though the objectives were to measure customer satisfaction but more importance has been given to the customer awareness about the different services provided by railways. It is very important to make the passengers aware of the services provided by the railways. Indian railway has to take more responsible steps to make customers aware about the different services provided by them. The study even suggested that the customers are dissatisfied with the services and there should be corrective actions taken in order to create satisfaction.

Dr. G. Sathiyamoorthy and Prof. B Karthikeyan (July 2016) had conducted “A Study on Passenger Satisfaction Towards Indian Railway Services.”, with objectives of identifying awareness level of passengers, finding out preferences, opinions and ideas of passengers and examining problems faces by passengers towards Indian Railway. The study first focused on which population has been targeted, then the percentage analysis of the population size has been done. From the size analysis, the ranks has been given to the services in accordance to basic facilities provided by the railways. The study reveals that the basic facilities provided by the railways satisfy passengers more. With the increase of passengers, the Indian railway has focused to extend its attention to satisfy the needs of customers and made initiative to improve the quality of services to enrich the satisfaction of customers.

Prof. D. Anubpriya and Dr. S. Subadra had conducted “A Study on Satisfaction of Passengers towards Service Quality of Southern Railway.”, with objectives of identifying the travel factors influencing passengers of southern railway and analyzing the passengers’ level of satisfaction

towards southern railways. The study gave equal importance to both the objectives. ANOVA as an instrument analysis has been used. It concluded that railway provides the most convenient mode of transport for both long distance and suburban traffic. Railway tries to improve the core areas of and deliver good quality of services to the passengers.

### Research Methodology

This was a descriptive research conducted in Surat city. For this study total 710 samples were selected using judgmental sampling method, considered only those who have travelled during last six months. Modified SERVQUAL scale was adapted to collect responses through personal interviewing method.

### Data Analysis

Collected has been analyzed by using SPSS software. This section shows results of it.

Total 71.80% were male respondents while rests were females. Out of total 43.60% passengers were belonging to 20 to 30years of age followed by 26.40% of 40 to 50 years of age group.

Factors	Average
<b>Tangibles:</b>	
Power Supply equipment (Switches/plug)	4.01
Sitting arrangements	3.5
Ventilation facilities	3.59
Sanitation facilities	3.36
Catering facilities	3.15
Information of the platform	3.69
Infrastructure in the train	3.4
Appearance of railway personnel	3.32
<b>AVERAGE OF TANGIBLES</b>	<b>3.50</b>
<b>Responsiveness:</b>	
Willingness of the railway staff to help	3.14
Behavior of the railways staff	3.09

Services by railway doctors	3.1
Responsiveness of railway police	3.12
Approachability of the top management	3.04
Medical facilities	3.36
<b>AVERAGE OF RESPONSIVENESS</b>	<b>3.14</b>
<b>Assurance:</b>	
Trustworthiness of railways	3.35
Safety of passengers in transaction	3.16
Courtesy of the staff	3.1
Performance of services as promised/told	3.21
Digital display	3.35
<b>AVERAGE OF ASSURANCE</b>	<b>3.23</b>
<b>Empathy:</b>	
Individual attention to the passengers	2.79
Railway journey is easy to plan	3.23
Mental and physical support from the staff	2.99
Understand the needs of the passengers	3.04
<b>AVERAGE OF EMPATHY</b>	<b>3.01</b>
<b>Reliability:</b>	
Trains are always on time	2.69
The accurate information is provided if trains are delayed	2.99
The staff keeps luggage safely if lost	3.1
The catering services are always on time	2.97
<b>AVERAGE OF RELIABILITY</b>	<b>2.94</b>
<b>GRAND AVERAGE</b>	<b>3.16</b>

(Table 1: Satisfaction Level on a Likert scale of Five)

From the above table, it can be interpreted that average of tangibles is 3.50, average of responsiveness is 3.14, average of assurance is 3.23, average of Empathy is 3.01 and average of reliability is 2.94. It is said that passengers are more satisfied with tangibles dimension of railway as the average of passengers' satisfaction towards tangibles is the highest that is 3.50. While least satisfied with empathy dimension of the railway.

Factors	Average from Table 2 (A)	Average of weights to each Dimension (B)	Weighted average SERVQUAL score (C = A×B)
<b>Tangibles</b>	<b>3.50</b>	25.89	90.62
<b>Responsiveness</b>	<b>3.14</b>	19.65	61.70
<b>Assurance</b>	<b>3.23</b>	18.25	58.95
<b>Empathy</b>	<b>3.01</b>	16.25	48.91
<b>Reliability</b>	<b>2.94</b>	20.38	59.92

(Table 2: SERVQUAL Analysis- The weighted Average Score)

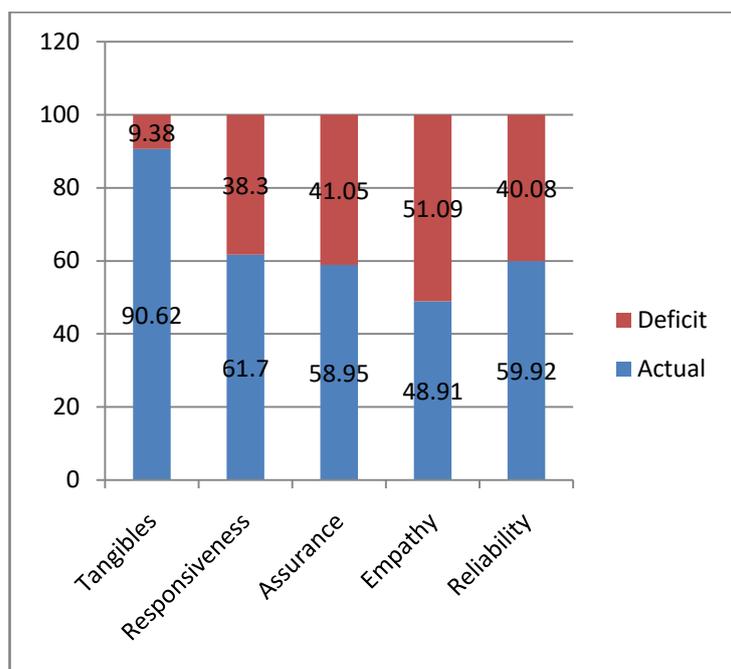


Chart 1: Satisfaction Level of Passengers of Indian Railway.

The weighted average of Tangibles is 90.62, Responsiveness is 61.7, Assurance is 58.95, Empathy is 48.91 and Reliability is 59.92. So it can be interpreted that most of the passengers are more satisfied with Tangibles facility of Indian railways as compared to other facilities and less satisfied with Empathy dimensions of Indian railways.

## Hypothesis

1.  $H_0$ : There is no relationship between gender of the passengers and their satisfaction towards dimensions of SERVQUAL.

$H_1$ : There is a relationship between gender of the passengers and their satisfaction towards dimensions of SERVQUAL.

SERVQUAL Dimensions	Pearson Chi - Square	Asymp. Significance	Result ( $H_0$ )
Tangibles	3.943	0.268	Failed to reject
Responsiveness	4.514	0.314	Failed to reject
Assurance	3.488	0.480	Failed to reject
Empathy	7.432	0.115	Failed to reject
Reliability	8.203	0.042	Rejected

**Table 3: Chi Square Result of passengers' gender and their satisfaction towards SERVQUAL dimensions.**

From this analysis the null hypothesis is accepted for Tangibles, Responsiveness, Assurance and Empathy, since  $p > 0.05$  for so it can be concluded that there is no relationship between passengers' gender and their satisfaction towards various SERVQUAL dimensions excepts for Reliability as  $p < 0.05$ , so it can be concluded that there is a relationship between passengers' gender and their satisfaction for Reliability dimension of western Indian railway services.

## Conclusion

Based on analysis of collected data it can be concluded that passengers are more satisfied with tangibles dimension of railway as the average of passengers' satisfaction towards tangibles is the highest among the SERVQUAL dimensions. While least satisfied with empathy dimension of

the railway. Further though weighted analysis also it can be concluded that the most of the passengers give weight to tangibles and are found more satisfied with Tangibles facility of Indian railways as compared to dimensions related facilities and among them less satisfied with Empathy dimensions of Indian railways. Apart from this study also revealed that there is no relationship between passengers' gender and their satisfaction towards various SERVQUAL dimensions except for Reliability dimension of western Indian railway services.

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