



Indo - Asian Journal of Multidisciplinary Research (IAJMR)
ISSN: 2454-1370

**PASSENGERS' SATISFACTION ON SERVICES OFFERED BY THE
SOUTHERN RAILWAYS IN TIRUCHENDUR TALUK**

A. Prathap Singh* and R. Santhi Salomi

*Nazareth Margoschis College, Pillaiyanmanai, Nazareth - 628 617, Thoothkudi District,
Tamil Nadu, India.*

Abstract

The service offered by southern railways is up to the expectations of their passengers. The study observed that clean and hygienic behavior at railway stations and on trains, by proper use of facilities. Dealing courteously with fellow passengers and railway staff with whom they come in contact, availability of power, seating arrangement and infrastructure at the train or station. Hence the present paper deals with the passengers' satisfaction on services offered by the railway system with special reference to Tiruchendur Taluk.

Key words: Passengers' satisfaction, Indian Railway services and Rail transport.

1. Introduction

Rail transport is commonly used mode of long-distance transport in India. Almost all rail operations in India are handled by Indian Railways, a state-owned organization of the Ministry of Railways. The rail network traverses the length and breadth of the country, covering in 2015 a total length of 64,460 kilo meters (40,050 mi). It is the fourth largest railway network in the world, transporting 8.397 billion passengers and over 106 million tones of freight annually, as of 2018. Its operations cover twenty eight states and three union territories and also provides limited service to Nepal, Bangladesh and Pakistan (Gorin, 2009).

Indian Railway provides the most important mode of public transport in India. This is the most commonly used and cost effective long distance transport system of the country. Indian Railway is operating by Ministry of Railways. Indian Railways is touching life of almost every people across India covering 29 states and 7 Union Territories with its over

40,050 miles or 64,460 kilometers railway network as of 2015 (Kerimov, 2018).

Indian Railways is also helping Indian economy in many ways like by providing fast and reliable transport medium for various needy articles across the country. These include Rice, Wheat, Cereals and Vegetable, oils etc. Indian Railways is also transporting various petroleum products like Petrol, Diesel, Cooking Gas, Natural Gas, Kerosene etc. (Stepanova, 2010).

2. Need for the study

Indian Railway provides the most important mode of public transport in India. This is the most commonly used and cost effective long distance transport system of the country. Indian Railway is operating by Ministry of Railways. Indian Railways is touching life of almost every people across India covering 29 states and 7 Union Territories with its over 40,050 miles or 64,460 kilometers railway network as of. Considering its importance, Satisfaction is based on the view of passengers on various services offered by the rail system. To offer passengers' services, it is essential to understand the expectations of the passengers with regard to quality of services offered by the rail system. The study covers between Rail

**Corresponding author: A. Prathap Singh
E.mail: eluvaiprathap1995@gmail.com
Received: 05.04.2020; Revised: 12.04.2020;
Accepted: 20.04.2020.*



services and passengers' satisfaction is also evaluated in Tiruchendur Taluk. The important rail service factors identified by the passengers are reliability, responsive, assurance and empathy factors. The service offered by southern railways is up to the expectations of their passengers. The study observed that clean and hygienic behaviour at railway stations and on trains, by proper use of facilities. Hence the researcher takes up the research work to deal with the passengers' satisfaction on services offered by the railway system with special reference to Tiruchendur Taluk.

3. Review of Literature

Rajeshwari and Tamilchelvi (2018) in their study entitled "Passenger's attitude towards Retention Strategies Adopted By the Railways: A Study in Salem Division of Southern Railways" found that Plato Ranjan Datta (2001) made an attempt to explain the importance of customer retention and the factors by which this may be achieved. The study also suggested eleven links for strengthening CRM. The link indicates that there is direct relationship between customer value and trust, customer satisfaction and commitment. These are the preconditions to create positive relationship between buyers and sellers. Without the long term buyer – seller relationship it is difficult to create customer retention. The fundamental point is that a retained customer will inevitably (and free of charge), generate additional customers.

Gandhimathi and Saravanan (2017) in their study entitled "A study on passenger's satisfaction towards railway services in Coimbatore junction", found that the consumer during the service production process. Another study by Gleave (2000) on railway passenger service quality valuation carried was out between December 1999 to June 2000, by the organization named Steer Gleave of London. The report was prepared for Shadow Strategic Rail Authority to study the importance of the range and quality of facilities and service on stations and in trains.

4. Objectives of the study

- To study various services rendered by Southern Railway

- To measure the level of satisfaction of passengers on services
- To identify the factors considered for passenger's satisfaction in railway system.
- To offer suggestions to improve the satisfaction of passengers of the railway system.

5. Hypothesis

- There is no relationship between the gender of the respondents and level of satisfaction towards railway system in Tiruchendur Taluk.
- There is no relationship between age of the respondents and level of satisfaction towards railway system in Tiruchendur Taluk.
- There is no relationship between the educational qualification of the respondents and level of satisfaction towards railway system in Tiruchendur Taluk.
- There is no relationship between occupation, monthly income of the respondents and level of satisfaction towards railway system in Tiruchendur Taluk.

6. Methodology

This is an descriptive research . The present study is confined to Tiruchendur Taluk of Southern Railway Zone. The study is based on primary data collected through structured interview schedule from 120 passengers in Tiruchendur Taluk of Southern Railway.

7. Sampling design and Sample size

The primary data are collected by the researcher from different categories of passengers'. It is very difficult to apply sampling method to collect the data. Hence, convenient sampling technique has been adopted. The primary data collected from 120 passenger's in the study area.

8. Period of the study

The research has been undertaken in Tiruchendur Taluk only. The study period of this project is 5 months i.e., December 2019 – April 2020.



9. Limitations of the study

- The study is based upon small sample respondents in Tiruchendur Taluk only.
- The time duration of the study is only five months.

10. Data analysis

It was found that majority (30.80 per cent) of the respondents have travelled by

railway for the purpose of personal work (Table – 1). It was found that majority (39.20 per cent) have influenced the factors of schedule of time (Table – 2). It was found that majority (35.80 per cent) have travelled by daily basis (Table – 3). It was found that majority (48.30 per cent) of the respondents are highly satisfied (Table – 4).

Table – 1: Purpose of Travelled in Train

S.No	Purpose	No. of Respondents	Percentage
1.	Official/business	7	5.80
2.	Education	21	17.50
3.	Personal	37	30.80
4.	Tour/pilgrimage	23	19.20
5.	Vocation	21	17.50
6.	Sports	1	0.80
7.	Festivals	10	8.30
Total		120	100.00

Source: Primary Data

Table – 2: Passenger's satisfaction level of the respondents

S.No	Level of Satisfaction	No. of Respondents	Percentage
1.	Employees behavior	2	1.70
2.	Travel time	47	39.20
3.	Service monitor	7	5.80
4.	Maintenance and construction	3	2.50
5.	Safe and security	40	33.30
6.	Information system	9	7.50
7.	Basic facility	12	10.00
Total		120	100.00

Source: Primary Data

Table – 3: Frequency of Travel in Train

S.No	Frequency of Travel in Train	No. of Respondents	Percentage
1.	Daily	43	35.80
2.	Weekly	12	10.00
3.	Monthly	25	20.80
4.	Half yearly	7	5.80
5.	Occasion	33	27.50
Total		120	100.00

Source: Primary Data



Table – 4: Opinion about Railway services

S.No	Passenger's satisfaction	No. of Respondents	Percentage
1.	Highly satisfied	58	48.30
2.	Satisfied	28	23.30
3.	Not satisfied	27	22.50
4.	Dissatisfied	4	3.30
5.	Highly dissatisfied	3	2.50
Total		120	100.00

Source: Primary Data

Table – 5: Services dimension by the Railway for the Passengers'

S.No	Services	1	2	3	4	5	Total
1.	Tangible	23	29	27	22	19	120
2.	Assurance	23	36	21	25	15	120
3.	Frequency	19	25	29	26	21	120
4.	Speed	37	15	16	20	32	120
5.	Empathy	18	15	27	27	33	120
Total		120	120	120	120	120	1200

Source: Primary Source

Garrett Scores

The Garrett ranks are calculated by using appropriate Garrett ranking formula. Then based on the Garrett ranks, the Garrett table value is

ascertained. The Garrett table values and score of each rank in a Table are multiplied to record scores in table. Finally by adding each row, the total Garrett score is obtained.

Table – 6: Per cent Position and Garrett Value

S.No	$100(R_{ij}-0.5)/N_j$	Calculated value	Garrett value
1.	$100(1-0.5)/5$	10	75
2.	$100(2-0.5)/5$	30	60
3.	$100(3-0.5)/5$	50	50
4.	$100(4-0.5)/5$	70	39
5.	$100(5-0.5)/5$	90	24

Table – 7: Calculation of Garrett Score

S.No	Services	1	2	3	4	5	Total
1.	Tangible	1725	1740	1350	858	456	6129
2.	Assurance	1725	2160	1050	975	360	6270
3.	Frequency	1425	1500	1450	1014	504	5893
4.	Speed	2775	900	800	780	768	6023
5.	Empathy	1350	900	1350	1053	792	5445

The table shows the Garrett scores. First the Garrett ranks are calculated by using appropriate Garrett ranking formula. Then based on Garrett ranks, the Garrett table is

ascertained. The Garrett table and scores in the table which are then multiplied to record scores. Finally by adding each row, the Garrett scores have been obtained.



**Table – 8: Services provided by the Railway for the Passengers
- Garrett Ranking**

S.No	Services	Garrett Score	Garrett Rank	Average Score
1.	Assurance	6270	I	52.25
2.	Tangible	6129	II	51.08
3.	Speed	6023	III	50.19
4.	Frequency	5893	IV	49.11
5.	Empathy	5445	V	45.38

The table shows that the Garrett scores and the average scores of parameters. The average score are ranked according to their values. The first rank is given to “Assurance”, second rank to “Tangible”, third rank to “Speed”, fourth rank to “Frequency” and the last rank is given to “Empathy”. It is evident that majority (52.25 per cent) of the respondents are mentioned that the assurance such as trust

worthiness, courtesy, performance, staff knowledge in the study area.

Testing Hypothesis

Hypothesis

There is no significant association between the age of the respondents and passengers’ satisfaction level of railway services. To test this hypothesis Pearson chi-square test is applied and the result is presented in the following table.

Cross table

		Age* Passenger Satisfaction					Total	
		Highly satisfied	Satisfied	Not Satisfied	Dissatisfied	Highly Dissatisfied		
Age	Below 25 years	Count	52	25	26	4	1	108
		Expected Count	52.2	25.2	24.3	3.6	2.7	108.0
	25 years to 35 years	Count	5	3	0	0	2	10
		Expected Count	4.8	2.3	2.3	.3	.3	10.0
	35 years to 45 years	Count	1	0	1	0	0	2
		Expected Count	1.0	.5	.5	.1	.1	2.0
Total		Count	58	28	27	4	3	120
		Expected Count	58.0	28.0	27.0	4.0	3.0	120.0

Difference between age and passengers’ Satisfaction Level - Result of Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.522 ^a	8	.025
Likelihood Ratio	13.404	8	.099
Linear-by-Linear Association	.399	1	.528
N of Valid Cases	120		

a. 12 cells (80.0%) have expected count less than 5. The minimum expected count is .05.

From the above results it is found that the significance value for chi-square value of 17.522 is less than the acceptance level of 0.05 ($p=0.025$). Hence, the null hypothesis is accepted and it is concluded that there is no significant difference between the age and

passengers’ satisfaction level of railway services.

Testing Hypothesis Hypothesis

There is no significant association between the marital status of the respondents and passengers’ satisfaction level of railway



services. To test this hypothesis Pearson chi-square test is applied and the result is presented

in the following table.

Cross table

Marital status * Passenger Satisfaction								
			Passenger Satisfaction				Total	
			Highly satisfied	Satisfied	Not Satisfied	Dissatisfied		Highly Dissatisfied
Marital status	Married	Count	7	2	1	0	0	10
		Expected Count	4.8	2.3	2.3	.3	.3	10.0
	Unmarried	Count	51	26	26	4	3	110
		Expected Count	53.2	25.7	24.8	3.7	2.8	110.0
Total		Count	58	28	27	4	3	120
		Expected Count	58.0	28.0	27.0	4.0	3.0	120.0

Difference between marital status and passengers' Satisfaction Level - Result of Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.505 ^a	4	.644
Likelihood Ratio	3.154	4	.532
Linear-by-Linear Association	2.400	1	.121
N of Valid Cases	120		

a. 7 cells (70.0%) have expected count less than 5. The minimum expected count is .25.

From the above results it is found that the significance value for chi-square value of 2.505 is less than the acceptance level of 0.05 ($p=0.644$). Hence the null hypothesis is accepted and it is concluded that there is no significant difference between the marital status and passengers' satisfaction level of railway services.

Testing Hypothesis Hypothesis

There is no significant association between the monthly income of the respondents and passengers' satisfaction level of railway services. To test this hypothesis Pearson chi-square test is applied and the result is presented in the following table.

Cross table

Monthly Income * Passenger Satisfaction									
			Passenger Satisfaction				Total		
			Highly satisfied	Satisfied	Not Satisfied	Dissatisfied		Highly Dissatisfied	
Monthly Income	Below Rs. 5000	Count	25	7	19	1	1	53	
		Expected Count	25.6	12.4	11.9	1.8	1.3	53.0	
	Rs.5001-10000	Count	17	8	3	0	2	30	
		Expected Count	14.5	7.0	6.8	1.0	.8	30.0	
	Rs.10001-15000	Count	13	11	4	3	0	31	
		Expected Count	15.0	7.2	7.0	1.0	.8	31.0	
	Above Rs.15000	Count	3	2	1	0	0	6	
		Expected Count	2.9	1.4	1.4	.2	.2	6.0	
	Total		Count	58	28	27	4		120
			Expected Count	58.0	28.0	27.0	4.0	3.0	120.0

Difference between monthly income and passengers' Satisfaction Level - Result of Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.407 ^a	12	.045
Likelihood Ratio	21.923	12	.038
Linear-by-Linear Association	.071	1	.789
N of Valid Cases	120		

a. 11 cells (50.0%) have expected count less than 5. The minimum expected count is .15.



From the above results it is found that the significance value for chi-square value of 21.407 is less than the acceptance level of 0.05 ($p=0.045$). Hence the null hypothesis is accepted and it is concluded that there is no significant difference between the monthly income and passengers' satisfaction level of railway services.

Testing Hypothesis

Hypothesis

There is no significant association between the occupation of the respondents and passengers' satisfaction level of railway services. To test this hypothesis Pearson chi-square test is applied and the result is presented in the following table.

Cross table

		Occupation * Passenger Satisfaction					Total		
		Passenger Satisfaction							
		Highly satisfied	Satisfied	Not Satisfied	Dissatisfied	Highly Dissatisfied			
Occupation	Agriculturalist	Count	5	0	1	0	0	6	
		Expected Count	2.9	1.4	1.4	.2	.2	6.0	
	Business man	Count	5	3	2	0	0	10	
		Expected Count	4.8	2.3	2.3	.3	.3	10.0	
	Profession	Count	3	2	1	0	0	6	
		Expected Count	2.9	1.4	1.4	.2	.2	6.0	
	Entrepreneur	Count	0	0	0	0	2	2	
		Expected Count	1.0	.5	.5	.1	.1	2.0	
	Students	Count	43	22	23	4	1	93	
		Expected Count	45.0	21.7	20.9	3.1	2.3	93.0	
	Private Employee	Count	2	1	0	0	0	3	
		Expected Count	1.5	.7	.7	.1	.1	3.0	
	Total		Count	58	28	27	4	3	120
			Expected Count	58.0	28.0	27.0	4.0	3.0	120.0

Difference between occupation and passengers' Satisfaction Level - Result of Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.368 ^a	20	.000
Likelihood Ratio	25.499	20	.183
Linear-by-Linear Association	.943	1	.332
N of Valid Cases	120		

a. 27 cells (90.0%) have expected count less than 5. The minimum expected count is .05.

From the above results it is found that the significance value for chi-square value of 85.368 is less than the acceptance level of 0.05 ($p=0.000$). Hence the null hypothesis is rejected and it is concluded that there is a significant difference between the occupation and passengers' satisfaction level of railway services.

11. Findings and Recommendations

- It is found that majority (54.17 per cent) of the respondents are female.
- It is apparent that majority (91.70 per cent) of the respondents are in unmarried category.
- It is found that majority (90.00 per cent) of the respondents are in the age group of below 25 years.



- It is found that majority (63.30 per cent) of the respondents have completed post graduate level.
- It is found that majority (77.00 per cent) of the respondents are students.
- It is found that majority (44.20 per cent) of the respondent's income level is Rs. 5001-10000.
- It is found that most (30.80 per cent) of the respondents have travelled by railway for the purpose of personal work.
- It is found that most (39.20 per cent) have influenced the factors of scheduled time.
- It is found that most (35.80 per cent) have travelled by daily basis.
- It is found that majority (45.00 per cent) of the respondents are travelled with friends and relatives.
- It is found that majority (58.30 per cent) of the respondents are highly satisfied.
- It is evident that majority (52.25 per cent) of the respondents felt that the assurance in the study area.
- It is found that the significance value for chi-square value of 17.522 is less than the acceptance level of 0.05 ($p=0.025$). Hence the null hypothesis is accepted.
- It is found that the significance value for chi-square value of 21.407 is less than the acceptance level of 0.05 ($p=0.045$). Hence the null hypothesis is accepted.
- It is found that the significance value for chi-square value of 85.368 is less than the acceptance level of 0.05 ($p=0.000$). Hence the null hypothesis is rejected.
- It is found that the significance value for chi-square value of 2.505 is less than the acceptance level of 0.05 ($p=0.644$). Hence the null hypothesis is accepted
- .

12. Suggestions

- It is found that 120 of the sample passengers highly satisfied about the services offered by the Indian Railways. Hence, it is suggested that the Ministry of Railways should take all possible steps to transmit the various services provided to the passengers by keeping adequate time schedule, index boards and bulletin

boards in all possible places like rest room, at the entrance, ticket counter, passengers' lounge and platform. It may enable the passengers to know about the facilities provided by the Indian Railways.

- It is suggested that announcements could be made quite often regarding the services provided by the Indian Railways. By doing so, the level of awareness of the passengers about the services can be improved to the fullest extent.
- The public may be created awareness through rallies by voluntary organisations or by issuing pamphlets and through placards regarding the safety measures and security measures staff knowledge to be adopted while travelling in train as well as in the railway track. This will enable to avoid unnecessary accidents in future.

13. Conclusion

It is well known that offering better services is essential for the growth of the Southern Indian Railways. It is also equally important to make the passengers are highly satisfied of the services. Still, Indian Railways has to take more possible steps to enhance the level of satisfaction of the passengers. On the basis of the findings of the present study, some constructive and viable suggestions have been made.

14. References

- 1) Gandhimathi, K and P. Saravanan (2017). Evaluation of textile and clothing industry clustering capabilities in Uzbekistan: based on model of M. Porter. *International Journal of Economics and Management Sciences*, 7(439): 225 - 233.
- 2) Gleave, P. (2000). Priority areas of investment of food industry enterprises. *Bulletin of Kazan Technological University*, 5: 109 - 115.
- 3) Gorin, V. V. (2009). Methods for improving the quality of products and services in the baking industry. *V.V. Gorin Standards and Quality*, 3:13 - 16.
- 4) Kerimov, S. A. (2018). Quality and safety of manufactured food products to



- industrial enterprises, problems and development prospects. S. A. Kerimov, Russian Entrepreneurship, 8: 173 - 177.
- 5) Plato Ranjan Datta, L. (2001). Enhancement the mechanism of analyzing of the methodological principles for the development and improvement of methods of assessment. *Aydum*, 4: 11 - 13.
- 6) Rajeshwari, S and D. Tamilchelvi. (2018). Role of Managing Industrial Stocks in Increasing of Textile Enterprises Capacity. *Journal of Applied Management and Investments*, 6(4): 260 - 266.
- 7) Stepanova, N. G. (2010). Food security in the process of social reproduction. *Canadian Economic Sciences*, 32.

Access this Article in Online

Quick Response Code



Website	www.jpsscientificpublications.com
DOI Number	DOI: 10.22192/iajmr.2020.6.2.4
Thomson Reuters Researcher ID	K-4194-2016
ISI Impact Factor	3.652

How to Cite this Article:

A. Prathap Singh and R. Santhi Salomi. 2020. Passengers' Satisfaction On Services Offered By The Southern Railways In Tiruchendur Taluk. *Indo - Asian Journal of Multidisciplinary Research*, 6(2): 2020 – 2028.

[DOI: 10.22192/iajmr.2020.6.2.4](https://doi.org/10.22192/iajmr.2020.6.2.4)

