

A STUDY ON PASSENGERS AWARENESS AND SATISFACTION TOWARDS SOUTHERN RAILWAYS SPECIAL REFERENCE TO COIMBATORE CITY

Dr. M. Nithyadevi
Assistant professor
Shri nehru maha vidyalaya college of arts and science, Coimbatore.

ABSTRACT

One of the accessible and affordable modes of land transportation is the railways. The railway holds a long-standing and significant occurrence in transportation infrastructure. They are crucial to the industrialization and advancement of the contemporary world. A lot of people can be transported at a low price by rail as a mass public transportation system. It also saves space, is highly secure, comfort and ecological friendly, promotes adaptive technology development and creates a less congested atmosphere. Railways are a significant mode of public transit because of these features.

One of the Indian Railways 19 zones is Southern Railways (SR), which has its headquarters in Chennai, Tamil Nadu. It is the first of the 19 Indian Railway Zones establishes after Indian gained Independence. The Madras Railways, the South Indian Railways Company and the Mysore State Railways were merged to form one National railroad on April 14, 1951. During the British colonial era, the Great Southern of Indian Railways Company was established; it was formed in London in 1853 and registered in 1859. Its original headquarters were in Tiruchirappalli (Trichy), but it wasn't until 1890 that it was registered as a Corporation in London. After the rearrangement of existing railways zones and the formation of new zones by Indian Railways in 2002-2003, Southern Railway has now become the fourth largest zone. The cleanest and finest kept trains in Indian Railways are those run by Southern Railways.

Key words: Passengers Satisfaction, Southern Railways

A STUDY ON PASSENGERS AWARENESS AND SATISFACTION TOWARDS SOUTHERN RAILWAYS SPECIAL REFERENCE TO COIMBATORE CITY

INTRODUCTION

The National railroad company of India is called the Indian Railways (IR). Up until recently, Indian Railways controlled all train traffic in the Country. With over 6 billion people and almost 750 million tons of freight transported yearly, it is one of the biggest and busiest rail networks in the entire world. With over 1.6 million employees, IR is the largest employer in the trade or utilities industry globally.

The Southern Railway was created on 14 April 1951 in its present form by the merger of the three national railways, the Madras and Southern Mahratta Railways, the South Indian Railways and the Mysore State Railways. The current Southern Railway Network covers a large area of the Southern Peninsula of India, including Tamil Nadu, Kerala, Pondicherry and a small portion of Andhra Pradesh. It is headquartered at Chennai and operates across the states of Tamil Nadu, Kerala, Andhra Pradesh and the union territory of Pondicherry. The origin of the southern railways can be tracked back to the madras railways formed in 1845. Southern railways was created on 14 April 1951 by merging three state railways, namely, the madras and southern Mahratta railway, the southern railway company, and the Mysore state railway. Southern railway maintains about 5,081 km (3,157 million) of railway lines and operates 727 railway stations.

Southern Railway zone covers the states of Tamil Nadu, Kerala, Pondicherry and a small portion of Andhra Pradesh. Andaman and Nicobar will form part of the zone once the proposed new railway line between Port Blair and Diglipur becomes operational.

STATEMENT OF THE PROBLEM

Due to its affordability, rail travel is preferred by majority of Indians. Train passengers can take use of numerous services provided by Southern railways. The passenger's view of the various train system offerings will determine how satisfied they are. Understanding passenger expectations and opinions of the level of service offered by the rail system is crucial for providing services. Train passengers face many problems. Most issues are the unavailability of tickets through online booking, punctuality, handling of complaints, quality of travel and facilities on board trains. It is our responsible to prove visually the services provided to the passengers by the Southern Railways.

SCOPE OF THE STUDY

The survey's main focus is on how satisfied Southern Railway's passengers are with its services. The quality and the maintenance of trains, availability of tickets and train schedules are been examined at various levels of research. The survey also emphasizes the difficulties that passengers of Southern Railway encounter.

OBJECTIVES OF THE STUDY

1. Awareness about southern railways in Coimbatore city.
2. To find out why respondents choose to travel by train.
3. To comprehend the problems experienced by train passengers.
4. To measure the customer satisfaction level of southern railways in Coimbatore city.

RESEARCH METHODOLOGY

200 respondents have been selected randomly from the Southern Railway passengers. Simple random sampling method is adopted to collect data from the passengers.

- Descriptive Analysis
- Chi-Square
- Friedman rank test
- Garret Rank
- Anova
- One-way anova

LIMITATION OF THE STUDY

- The study is based on the information given by the sample respondents.
- The sample size of the study is also limited.
- The study mainly covered the Southern Railway- Coimbatore junction, so it may vary in other junctions.

REVIEW OF LITERATURE

Mahima Johnson (2022) ¹ “A Study on Passenger's Satisfaction towards Railway Services in Chennai”, in their study, The Southern Railway headquarters at Chennai, Tamil Nadu is one of the earliest zones of Indian Railways. The objective of their study is to explore the problem faced by the daily railway passengers. They found that various qualitative factors like time and cost factors;

Dr K. Vanitheeswari, etal., (2019)³ “A Study on Customers (Passengers) Satisfaction in Transportation Industry- Case of Southern Railways”, the main purpose of the study is to know the satisfaction level of the passengers on the services provided by the Southern Railways. The six factors out of twenty were extracted viz technological development, passenger amenities, comfort, safety, minimum fare and better infrastructure facilities. The factors that are found had high associations. The researchers found out the factors that influences the train travel of the passengers.

Descriptive Analysis Gender Wise Classification of Respondents

SNo	Gender	Number of respondents	Percentage
1.	Male	90	45
2.	Female	110	55
Total		200	100

Source: Primary Data **Majority (55 %) of the passengers are female members.**

Age Group of Respondents

S No	Age group	Number of respondents	Percentage
1.	Up to 20years	79	40
2.	21-40years	89	45
3.	41-60years	25	12
4.	Above60 years	7	3
Total		200	100

Source: Primary Data **Most (45%) of the passengers from age group of 21-40 years.**

Occupational Status of the Respondents

S No	Occupational Status	Number of respondents	Percentage
1.	Student	109	55
2	Businessman	5	2
3.	Government employee	8	4
4.	Private employee	78	39
Total		200	100

Source: Primary Data **Majority (55%) of the passengers are students.**

Mode of Train Ticket Booking

S No	Mode of Train Ticket Booking	Number of respondents	Percentage
1.	Railway Station Counters	32	16
2.	IRCTC online website	164	82
3.	Through Agency	4	2
Total		200	200

Source: Primary Data **Majority (82%) of the passengers book their ticket through IRCTC online website.**

Mode of Train Ticket Payment

S No	Mode of payment	Number of respondents	Percentage
1.	Debit card	35	17.5
2.	Credit card	17	8.5
3.	Mobile/Net banking/cheque	82	41
4.	Cash	66	33
Total		200	100

Source: Primary Data **Majority (41%) of the passengers use mobile/net banking for the payment of tickets if tickets are been booked through online.**

Frequency of Travel by

S No	Frequency of travel	Number of respondents	Percentage
1.	Daily	162	81
2.	Weekly	4	2
3.	Monthly	30	15
4.	Rarely	4	2
Total		200	100

Source: Primary Data **Majority (81%) of the passengers travel rarely through train for their travel**

Ticket booking Preference

S No	Booking tickets	Number of respondents	Percentage
1.	At the time of travel	102	51
2.	Weekly	37	19
3.	Fortnight	16	8
4.	Monthly	45	22
Total		200	100

Source: Primary Data **Majority (51%) of the passengers book their tickets at the time of travel.**

Purpose of Travel

S No	Purpose of travel	Number of respondents	Percentage
1.	Work Purpose	20	10
2.	Business Purpose	04	02
3.	Personal Work	42	21
4.	Holiday/Vacation	134	67
Total		200	100

Source: Primary Data **Majority (67%) of the passenger's reason for travel by train is for holiday/ vacation.**

Reason for choosing Train Travel

S No	Reason for choosing train travel	Number of respondents	Percentage
1.	Cheap	67	34
2.	Comfort	95	47
3.	Easy to access	28	14
4.	Safety	10	5
Total		200	100

Source: Primary Data **Most (47%) of the passengers choose train travel for its comfort**

Preference of Berth

S No	Preference of Berth	Number of respondents	Percentage
1.	Lower berth	85	43
2.	Middle berth	51	25
3.	Upper berth	64	32
Total		200	100

Source: Primary Data **Most (43%) of the passengers prefer lower berth for long distance travel in trains.**

Preference of Food

SNo	Preference of food	Number of respondents	Percentage
1.	Food from pantry	26	13
2.	Food from home	153	77
3.	Food from vendors	21	10
Total		200	100

Source: Primary Data **Majority (77%) of the passengers prefer food from food.**

Ladies Coach

S No	Ladies Coach	Number of respondents	Percentage
1.	Highly Satisfied	22	11
2.	Satisfied	88	44
3.	Neutral	67	33
4.	Dissatisfied	15	8
5.	Highly Dissatisfied	8	4
Total		200	100

Source: Primary Data **Most (44%) of the respondents is satisfied with the ladies coach.**

Mobile Charging

S No	Mobile Charging	Number of respondents	Percentage
1.	Highly Satisfied	35	17
2.	Satisfied	86	43
3.	Neutral	61	31
4.	Dissatisfied	8	4
5.	Highly Dissatisfied	10	5
Total		200	100

Source: Primary Data **Most (43%) of the respondents is satisfied with the mobile charging facility available in trains.**

Coach for Physically challenged people

SNo	Coach for Physically challenged people	Number of respondents	Percentage
1.	Highly Satisfied	34	17
2.	Satisfied	78	39
3.	Neutral	71	35
4.	Dissatisfied	10	5
5.	Highly Dissatisfied	7	4
Total		200	100

Source: Primary Data **Most (39%) of the respondents are satisfied with the coach available for the physically challenges people**

Class Preference in Train Compartments

S.No	Class preference	Number of respondents	Percentage
1.	First class with AC	42	21
2.	Second class with AC	49	25
3.	Third class with AC	32	16
4.	General class	69	34
5.	Ladies compartment	8	4
Total		200	100

Source: Primary Data **Most (34%) of the passengers prefer general class for their travel in train.**

Clean lines of Platform

S.No	Cleanliness of Plat form	Number of respondents	Percentage
1.	Highly Satisfied	18	9
2.	Satisfied	71	36
3.	Neutral	77	38
4.	Dissatisfied	21	11
5.	Highly Dissatisfied	13	6
Total		200	100

Source: Primary Data **Most (38%) of the respondents are neutral with the clean lines of platforms.**

Chi- Square Test**Preference of Class compared with Cleanliness Hypothesis:**

H0= There is no significant relationship between education qualification and satisfaction with credit facilities

H1= There is significant relationship between education qualification and satisfaction with credit facilities

Observed Frequency

Class Preference	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Total
First Class with AC	4	13	15	7	3	42
Second Class with AC	4	13	20	8	4	49
Third Class with AC	2	11	14	4	1	32
General Class	10	17	24	11	7	69
Ladies Compartment	0	0	5	3	0	8
TOTAL	20	54	78	33	15	200

Expected value Row total*column total / Grand total

Class Preference	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Total
First Class with AC	4.2	11.34	16.38	6.93	3.15	42
Second Class with AC	4.9	13.23	19.11	8.08	3.68	49
Third Class with AC	3.2	8.64	12.48	5.28	2.4	32
General Class	6.9	18.63	26.91	11.38	5.17	69
Ladies Compartment	0.8	2.16	3.12	1.32	0.6	8
Total	20	54	78	33	15	200

DEGREE OF FREEDOM

$$= (\text{ROW}-1) * (\text{COLUMN}-1) = (5-1) * (5-1) = 16$$

$$X^2 = (\text{observed value} - \text{expected value})^2 / \text{Expected value}$$

$$X^2 = 13.4530015$$

$$DF = 16$$

$$P\text{VALUE} = 26.296$$

Interpretation

The table value of chi-square for 16 Degree offered at 5% significant level is 26.296. The calculated value of chi-square is less than the table value of chi-square. So, the hypothesis is no significant relationship Preference of Class and Cleanliness.

Friedman's Ranking
Problems Faced By the Passengers

FACTORS	MEAN RANK	RANK
Vendors	9.11	XIII
Quality of the food	7.47	V
Restroom	5.83	I
Trains schedule	9.32	XIV
Overcrowded	7.69	VIII
Luggage safety	7.99	IX
Language barrier	8.20	X
Public nuisance	7.39	IV
Theft	6.86	II
Seating	8.60	XI
Payment through online	10.02	XV
Unhygienic	7.38	III
Dirty linen (seats, towels, bed sheets, pillow covers)	7.67	VII
Enquiry counters	8.82	XII
Improper pantry services	7.65	VI

Source: Primary Data

Interpretation

This table reveals the problems faced by the passengers in Southern Railways, in the restrooms (5.83), theft (6.86) and for unhygienic (7.38) are ranked as first, second and third respectively, these are the major problems faced by the Southern Railway passengers. Public nuisance (7.39) is ranked fourth, quality of the food (7.47) is ranked fifth, improper pantry services(7.65) is ranked sixth, dirty linen (7.67) stands in the seventh position, overcrowding of people (7.69) ranks the eighth position, followed by luggage safety (7.99) in the ninth position, language barrier (8.20) in the tenth position, allocation of seats (8.60) in the eleventh position, enquiry counters (8.82) ranks the twelfth position, vendors (9.11) is ranked in the thirteenth position, train schedule (9.32) is ranked in the fourteenth position and payment through online (10.02) is ranked in the fifteenth position.

FRIEDMAN RANK TEST ANALYSIS

Rank the level of satisfaction by the railway service.

Factors	Mean Rank	Rank	N	165
Availability if advance reservation	2.07	I	Chi-Square df	275.440
Seating comfort	2.72	II		
Speed	2.99	III		5
Security	4.03	IV	Asymp. Sig.	<.001
Less frequency of accidents	4.27	V		
Sleeping comfort	4.93	VI		

Source: Computed Data

Interpretation

It shows the mean rank for various factors of the satisfaction of the railway services. The ranks are allocated on the basis of Passenger satisfaction in railways services, with the Availability if advance reservation 2.07 mean rank stands first, Seating comfort with the mean rank of 2.72 stands the second highest. With the mean rank of 2.99 Speed is at third, with the mean rank of 4.03 Security is at fourth, less frequency of accidents with 4.03 mean rank stands fifth, with the mean rank of 4.93 Sleeping comfort sixth rank. **Major problem faced by the passengers is restroom (5.38) ranks first in trains.**

ANOVA

Passengers' Satisfaction towards Facilities and Services Hypothesis:

H0=There is no significant relationship between education qualification and satisfaction with credit facilities

H1= There is significant relationship between education qualification and satisfaction with credit facilities

Particulars	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied
Payments	34	78	71	10	7
Food	40	74	66	12	8
Timing	41	68	73	14	4
Fiestaaid Facilities	36	70	65	20	9
Waiting Rooms	45	60	80	10	5

(Source: primary data)

Groups	Count	Sum	Average	Variance
Payments	5	200	40	1107.5
Food	5	200	40	910
Timing	5	200	40	961.5
Fiesta Facilities	5	200	40	725.5
Waiting Rooms	5	200	40	1037.5

SINGLEFACTOR ANOVA

Source of Variation	SS	df	MS	F	P-value	Fcrit
Between Groups	16	4	4	0.004184	0.999962	2.866081
Within Groups	19120	20	956			
Total	19136	24				

INTERPRETATION

The table value of single factor anova for 4 degree of freedom at 5% significant level is 6.26. The calculated value of single factor anova is less than the table value of single factor anova. So, the hypothesis is accepted that there is no significant relationship between satisfaction level and facilities & services provided by southern railways.

RELATIONSHIP BETWEEN DEMOGRAPHIC FACTORS AND THE SATISFACTION LEVEL OF THE DAILY RAILWAY PASSENGER - ONE WAY ANOVA

	Classification	N	Mean	Std. Deviation	f	Sig	S/NS
Age	Up to 20years	79	17.0	5.0	2.059	0.108	NS
	21-40years	89	18.5	4.5			
	41-60years	25	19.5	7.7			
	Above60 years	7	21.2	3.0			
Educational qualification	Up to HSC	29	20.3	2.7	1.371	0.246	NS
	Undergraduate	120	17.1	4.8			
	Graduate	35	18.5	5.8			
	Postgraduate	11	19.0	4.4			
	professional	5	17.6	5.5			
Occupation	Student	109	17.3	4.9	3.109	0.028	NS
	Businessman	5	20.8	4.2			
	Government employee	8	14.8	3.0			
	Private employee	78	17.0	5.6			
Monthly income	Below 10,000	118	17.4	5.0	1.259	0.290	NS
	10,000-20,000	57	16.3	4.3			
	20,000-30,000	25	19.6	1.5			

Interpretation

From the table 4.4.2 shows that f value of age is 2.059, educational qualification is 1.371,

occupation is 3.109, and monthly income is 1.259. The calculated p value for age 0.108, educational qualification 0.246, occupation 0.028, monthly income 0.290. Since the p value is more than 5 percent level of significant (0.05). So, it is concluded that there is no significant relationship between demographic factors such as age, educational qualification, occupation, and monthly income towards satisfaction level of the daily railway passenger. **Hence the null hypothesis is accepted.**

Garret Rank
Passengers Preference towards Southern Railways Services

Particulars	Total	Mean Score	Garret Rank
Less cost and Affordable	5859	58.59	1
On time arrival and Departure	5461	54.61	2
Customer friendly services	5185	51.85	3
Pantry Car	4880	48.80	7
Safe and Secured	5183	51.83	4
Convenient and Comfortable	4907	49	6
Proper maintenance of sanitation	5142	51.42	5
No traffic congestion	4739	47.39	8
Accessibility to various venues from station	4226	42.26	10
No maximum limit for luggage	4359	43.59	9

Source: Primary Data

From the Table 7, it can be explained that the item “Less cost and Affordable” ranks first in the opinion of the respondents, and “Accessibility to various venues from station “ranks tenth in the opinion of the respondents.

FINDINGS

Descriptive Analysis

- Majority (55%) of the passengers are female members.
- Maximum (45%) of the passengers are from age group of 21- 40 years.
- Majority (55%) of the passengers are students.
- Majority (82%) of the passengers book their tickets through IRCTC online website.
- Majority (41%) of the passengers use mobile/ net banking for the payment of tickets if tickets are been booked through online.
- Majority (81%) of the passengers travel daily through train for their travel.
- Majority (51%) of the passengers book their tickets at the time of travel.
- Majority (67%) of the passenger’s reason for travel by train is for holiday/ vacation purpose.
- Maximum (47%) of the passengers choose train travel for its comfort.
- Most (34%) of the passengers prefer general class for their travel in train.
- Maximum (43%) of the passengers prefer lower berth for long distance travel in trains.

- Maximum (44%) of the respondents is satisfied with the availability of ladies coach.
- Maximum (43%) of the respondents are satisfied with the mobile charging facility available in trains.
- Most (39%) of the respondents are satisfied with the coach available for the physically challenged people.
- Most (38%) of the respondents are neutral with the cleanliness of platforms.

Chi- Square Test

The table value of chi -square for 16 Degree of freedom at 5% significant level is 26.296. The 70 value of chi-square is less than the table value of chi-square. So, the hypothesis is no significant relationship Preference of Class and Cleanliness.

Friedman's Ranking Method

The problems faced by the passengers in Southern Railways, in the restrooms (5.83), theft (6.86) and for Unhygienic (7.38) are ranked as first, second and third respectively.

Anova

The table value of single factor anova for 4 degree of freedom at 5% significant level is 6.26. The calculated value of single factor anova is less than the table value of single factor anova. So, the hypothesis is accepted that there is no significant relationship between satisfaction level and facilities & services provided by southern railways.

SUGGESTIONS

- Restrooms should be improved and maintained properly in trains.
- The quality and hygiene of the food provided in the train pantries should be improved.
- Online bookings should be upgraded.
- Halt time in the stations should be increased.
- Overcrowding should be avoided.
- Seating allocation should be enhanced and berth preference can be according to the age of the passengers.
- Cleanliness of the trains as well as platforms should be maintained properly.
- Passengers safety should be monitored.
- Number of ticket counters should be increased.
- The train schedules and on-board information should be intimated correctly.
- Installation of escalators in the railway stations. Introduction of high-speed trains and Wi-Fi.

CONCLUSION

This study's contribution is the identification of the variables that affect customers' satisfaction with the ability of service provided by Southern Railways. The railway authorities had neglected to take the required steps for the betterment of the passengers as well as in the enhancement of services to the passengers due to the rising demand for services. Although a large number of travelers from various socioeconomic backgrounds have relied on this industry for their travel needs, there is a push to further improve the overall services in order to draw in more customers. The true kings of the modern world are the consumers. To learn about their perceptions and opinions, a study was done. Passengers are not highly satisfied with the services provided by the Indian Railways, according to research. The suggestions would have created a healthy environment for both Indian Railways and the passengers if they had been positively taken into consideration.

Books

- Allen B. Downey, "Think Stats: Probability and Statistics for Programmers, Published by Green Tea Press, Needham, November 2011, pp 87-90.
- Gurcharan Das, "Indian Railways The Weaving of a National Tapestry, Penguin Random House, India, February 2017, pp 164-179.
- M. A. Rao, "Indian Railways", National Book Trust Publishers, India, August 2006, pp 89-92.
- Rajendra B. Aklekar, "A Short History of Indian Railways", Rupa Publications, Mumbai, May 2019, pp 182-200.
- R. Pannerselvam, "Research Methodology", Published by Asoke K Ghosh, PHI Learning Private Limited, II Edition, Pondicherry, August 2018, pp 209-215