



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2016; 2(1): 288-292  
www.allresearchjournal.com  
Received: 14-11-2015  
Accepted: 16-12-2015

**Dr. Maheswari**  
Asst. Professor, Department of  
Commerce, Kovai Kalaimagal  
College of Arts and Science,  
Coimbatore.

**G.R. Dinesh Kumar**  
Research Scholar,  
Department of Commerce  
Kovai Kalaimagal College of  
Arts and Science, Coimbatore.

## **A study on Passenger Satisfaction of Amenities provided by Southern Railways with special reference to Coimbatore Junction**

**Dr. B. Maheswari, G.R. Dinesh Kumar**

### **Abstract**

Indian Railway is an Indian state – owned railway enterprise operated by the government of India through the ministry of Railways. It has the fourth largest railway network after those of the United States, Russia and china.

The objective of the study is to know the profile of Indian Railway and to know the level of satisfaction of public regarding the facilities provided to them by the Railway Department. The researcher has adopted.

Since this study is not a new in the field of research. The data's need for the study was collected through questionnaire method as a primary data and by secondary data. The collected data were analysed using statistical methods like chi-square test. The sample size decided for the study was 200.

The findings of the study was there was a significant relationship between the independent variable with level of satisfaction and it was proved by analysis.

**Keywords:** passenger satisfaction, amenities, southern railways, Coimbatore junction.

### **Introduction**

Indian Railways (reporting mark IR) is an Indian state-owned railway enterprise, owned and operated by the Government of India through the Ministry of Railways. Indian Railways has 114,500 kilometers (71,147 mi). Of total track over a route of 65,000 kilometers (40,389 mi) and 7,500 stations. It has the world's fourth largest railway network after those of the United States, Russia and China. The railways carry over 30 million passengers and 2.8 million tons of freight daily. In 2011-2012 Railway earned ₹104,278.79 crore (US\$20.8 billion) which consists of ₹69,675.97 crore (US\$13.9 billion) from freight and ₹28,645.52 crore (US\$5.71 billion) from passengers tickets.

Indian Railways is the world's fourth largest commercial or utility employer, by number of employees, with over 1.4 million employees. after Wal-Mart with 2.1 million employees, China National Petroleum Corporation with 1.61 million employees and State Grid Corporation of China with 1.53 million employees. As for rolling stock, IR owns over 229,381 Freight Wagons, 59,713 Passenger Coaches and 9,213 Locomotives.

Railways were first introduced to India in 1853. By 1947, the year of India's independence, there were forty-two rail systems. In 1951 the systems (many of which were already government-owned) were nationalized as one unit, the Indian Railways, becoming one of the largest networks in the world. IR operates both long distance and suburban rail systems on a multi-gauge network of broad, metre and narrow gauges. It also owns locomotive and coach production facilities. The Indian railways is proposing to build the highest railway track in the world overtaking the current record of the Beijing-Lhasa Railway line.

From 20 December 2010, the railways had deployed a 5 digit numbering system instead of the 4 digit system. The need is due to the fact that the Indian Railways runs 10,000 trains daily. Only a prefix of the digit 1 will be added to the four-digit numbers of the existing trains to make the transition smoother. The special trains run to clear festivals and holiday rush shall have the prefix of 0 (zero) In 31 March 2011, 21,014 km of the total 64,215 km route length is electrified (33%). Since 1960, almost all electrified sections on IR use 25,000 V AC traction through overhead catenary delivery.

### **Correspondence**

**Dr. B. Maheswari**  
Asst. Professor, Department of  
Commerce, Kovai Kalaimagal  
College of Arts and Science,  
Coimbatore.

### Objectives of the Study

1. To create among the public regarding the facilities provided by the south railway to its passengers both at Coimbatore junction and on trains run from and passing through Coimbatore junction.
2. To give the profile of the Indian railway.
3. To study the problems faced by the passengers in utilizing the amenities during the travel and at the station/Junction.
4. To recapitulate the major finding study and to offer constructive suggestions to improve the existing amenities to add more facilities to the passengers and for the maximum utilization of the available amenities.

### Profile of the Indian Railways

#### Indian Railways: A Profile since Independence

The railways were introduced in the country in 1853 by the British almost immediately after it appeared in England. From a modest beginning of 53 kms between Mumbai and Thane, the railways have made a long journey and emerged as the principal mode of transport in the country. After Independence, the railways of the country were totally integrated and brought under the unified management of the Railway Board. Today, the Indian Railways (IR) has a network spread over 63,000 route kms. and 7000 stations throughout the length and breadth of the country. It carries 12 million passengers and more than 1.2 million tonnes of freight daily, accounting roughly for 40 per cent of the freight and 2- per cent of the passenger traffic in the country. These figures, however, mask the true significance of IR's role in the Indian economy which is crucially dependent on it for transport requirements of the core sectors, long-distance travel of the people from one far corner of the country to another and suburban travel. IR also accounts for 8.5 per cent of the organised employment of the country either directly or indirectly.

In line with the massive growth of population and the pressure generated by economic growth, Indian Railways has had to deal with mounting demands in the face of declining resources to build adequate capacity. It has acquitted itself creditably. Transport output of both passenger and freight traffic in terms of net tonne/passenger kilometre has increased six-fold since Independence with only marginal addition to route kilometre and rolling stock.

The Indian Railways has also been continuously upgrading its systems to work out appropriate technological and managerial solutions for the problems peculiar to our country. In the midst of these challenges the Indian Railways has managed to earn an operating surplus year after year – a rare feat considering that most of the railway systems elsewhere – both in the developed and developing country – have failed to keep themselves above water.

If one has to list out all the achievements of the Indian Railways in terms of growth of physical output or improvements in efficiency indices, which are impressive by any reckoning, or its response to natural calamities as a national carrier and its role as an agent of socio-economic development, it will run into several pages. However some of the achievements stand out for their sheer impact in strengthening the nation and improving the lives of the citizens.

### Research Design Methodology

Research is an original contribution to the existing stock of knowledge making for its advancement. It, is the pursuit of

truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research.

A research method refers to the methods the researchers use in performing research operations. Research Methodology is a way to systematically solve the research problem. By research methodology not only the research methods are considered but also the logic behind the methods used in the context of the research study and explanation are given on why a particular technique is used.

### Methods of Data Collection

#### Sources of Data

Data were collected through both primary and secondary data.

#### Primary Data

A primary data is a data, which is collected afresh and for the first time, and thus happen to be original in character. The primary data with the help of structured questionnaire was distributed collected from various investors.

#### Secondary Data

Secondary data are the data which are already collected by someone else, i.e., data collected through brochures, catalogues, newspapers, magazines, and web site, etc.,

### Sampling Design

#### Sample

The most important task in carrying out a survey is to select the sample. Sample selection is undertaken for practical impossibility to survey the population.

#### Sampling Technique

In this research, the sampling technique adopted was convenience sampling, the sample units are selected according to the convenience of the investigator.

#### Sample Size

The sample size for this study was 200 respondents in Coimbatore Junction.

### Tools and Technique Used For Analysis

The data was collected through structured questionnaire it has been tabulated analyzed and applied the following statistical tools.

### Chi - Square Analysis

#### Chi - Square Test

Chi-square test statistical measure used in the context of sampling analysis for comparing variance to a theoretical variance. It can be used to determine if categorical data shows dependency or the two classifications are independent and also used to make comparison between theoretical population and actual data when categories are used.

$$\text{Chi-Square} = \sum [(O_i - E_i)^2 / E_i]$$

O = Observed frequency

E = Expected or theoretical number of respondents

N = Total number of observations

The total value is found at 5% level of significance and for available degree of freedom,

Where,

R = Number of rows

C = Number of columns

### Decision criteria

If the calculated value is less than the table value then the null hypothesis is accepted and if the calculated value is greater than the table value then the null hypothesis is rejected.

### Accommodation Classes

A standard passenger rate contains many coaches of different classes. The following table lists the classes in operation not all classes may be attached to a rate through.

### Accommodation Classes

Class	Description
1A	The First class AC: This is the most expensive class, where the fares are on par with airlines. Bedding is included with the fare in IR. This air – conditional coach is present only on popular routes between metropolitan cities and can carry 18 passengers. The coaches are carpeted having sleeping accommodation and have privacy features like personal coupes.
2A	AC – Two tier: Air conditional coaches with sleeping berths, ample leg room, curtains and individual reading lamps. Berths are usually arranged in two tiers in bays of six, four across the width of the coach then two berths long ways, with curtains provided to give some privacy from those walking up and down. Bedding is included with the fare. A broad gauge coach can carry 18 passengers.
FC	First class:-Same as 1AC without air conditioning. This class is not very common.
3A	AC three tier: Air conditioner coaches with sleeping berths. Berths are usually arranged as in 2AC but with three tiers across the width and two long ways as before giving eight bars of eight. They are slightly less well appointed, usually no reading lights or curtained off gang ways. Bedding is included with fare. It carries 64 passengers in broad gauge.
CC	AC Chair Car: An air-conditioned seater coach with a total of five seats in a row used for day travel between cities.
EC	Executive class chair Car: An air conditioned seater coach with a total of four seats in a row used for day travel between cities.
SC	Sleeper Class: The sleeper class is the most common coach and usually up to ten coaches could be attached. These are regular sleeping coaches with these berths vertically started. In broad gauge, it carries 72 passengers per coach.
2S	Seater Class: Same as AC Chair Car, but without the air – conditioning. G or UR General (or) Unreserved: The cheapest accommodation, with seats made of pressed wood and is rarely cushioned. Although entry into the compartment is guaranteed, a sitting seat is not guaranteed. Tickets issued are valid on any train on the same route if boarded within 24 hours of buying the ticket. These coaches are usually very crowded.

At the rear of the train is a special compartment known as the guard's cabin. It is fitted with a transceiver and is where the guard usually gives the all clear signal before the train departs. A standard passenger rate generally has four general compartments, two at the front and two behind of which one is exclusively for ladies. The exact number varies according to the demand and the route. A luggage compartment can also exist at the front or the back. In some trains a separate mail compartment is present. In long distance trains a pantry car is usually included in the others.

### Station Facilities

Railway stations usually have ticket booths, ticket machines or both, although on some lines tickets are purchased on the

trains. Ticket sales may also be combined with customer service desks (or) convenience stores many stations include some form of convenience store larger stations usually have a fast food (or) restaurant facilities. In some countries, stations may also take a bar (or) Pub. Other station facilities may include toilets, left-luggage, lost and found, departments and arrivals boards, luggage carts, waiting rooms, taxi ranks and buy bays. Langer or manned stations tend to have a greater range of facilities. A most basic station might only have platforms, though it might still be distinguished from a halt. A stopping or halting place that may not even have platforms. In many African and south American countries, stations are used as a place for public markets and other informal business. This is especially true on tourist routes on stations near tourist destinations as souvenirs can be made and sold to wealthy visitors to the country.

### Amenities of Indian Railways

With the quickening pace of modernization, the Railway traveller today expects much more from the system than he did in the past in the form of amenities. The provision of passenger amenities is therefore, one of the important objectives of the Indian Railways both as a business ethic and a social obligation. The Indian Railways have issued a citizen's charter on passenger services in which it has been pledged to ensure adequate passenger services in which, It has been pledged to ensure adequate passenger amenities in trains and at Railway stations. One of the thrust areas in the VIII Plan was to provide basic passenger amenities at all stations on Priority basis.

Consequent to the recommendations of the standing committee of parliament on Railways, the whole gamut of passenger amenities at stations was reviewed and Railway Board decided (May 1995).

1. To provide / augment the existing facilities in a planned manner, by drawing up a perspective plan for the provision of passenger amenities and,
2. To classify all stations into 5 categories (categories A,B,C,D and E) depending upon their importance and volume or traffic landed at each station.

The following were declared as minimum facilities (which were hitherto called the basic amenities) and were to be provided immediately.

### Amenities at Coimbatore Junction

- Online Reservation
- Advance Booking
- Information Center
- Touch Screen Facility
- Waiting Rooms
- Cloak Room
- Lodging Facilities
- Water Purifier
- Book Stalls
- RPF (Railway Police Force)
- Town Bus Facilities
- Packing Facilities
- Taxi and Auto Facilities
- Luggage Arrangements
- Wheel chairs and Stretcher

### Hypothesis

**Ho:** There is no significant difference between Occupational purpose of travel.

**Ha:** There is significant difference between Occupation and purpose of travel.

**Formula;**

$$\text{Chi-Square} = (O_i - E_i)^2 / E_i$$

**Table 1:** Chi-Square Analysis

Occupation Purpose of Travel	Govt. Employee	Entrepreneur	Private	Others	Total
Personal	15	20	29	05	69
Business	21	10	40	08	79
Tour	09	18	04	10	41
Others	01	01	08	01	11
Total	46	49	81	24	200

**Interpretation**

So we accept the alternative hypothesis at 5% level of significance and conclude that there is a significant associate between occupation and purpose of travel.

**Ho:** There is no significant difference between monthly income and buying ticket for train journey.

**Ha:** There is significant difference between monthly income and buying ticket for train journey.

**Formula;**

$$\text{Chi-square} = (O_i - E_i)^2 / E_i$$

**Table 2:** Chi-Square Analysis

Buying Ticket for Train journey Monthly income	Below 10,000	20,000	30,000	Above 30,000	Total
Instant Ticket counter	25	20	25	12	82
Reservation Counter	19	16	06	05	46
Online	02	06	12	12	32
Others	02	06	12	12	32
Total	17	10	08	05	200

**Interpretation**

So we accept the alternative hypothesis at 5% level of hypothesis hence we conclude that there is a significant associate between monthly income and buing ticket for train journey.

**Ho:** There is no significant difference between age and buying ticket for journey

**Ha:** There is significant difference between age and buying ticket for journey

**Formula;**

$$\text{Chi-square} = (O_i - E_i)^2 / E_i$$

**Table 3:** Chi-Square Analysis

Buying Ticket for Train journey Age	18-30	31-40	41-50	50-60	Total
Instant Ticket counter	25	30	22	05	82
Reservation Counter	20	10	13	03	46
Online	12	05	10	05	32
Others	11	10	17	02	40
Total	68	55	62	15	200

**Interpretation**

We accept the null hypothesis at 5% level of significance ad conclude that there is no significance association between the Age and Buying train tickets for journey.

**Findings and Suggestions and Conclusion**

In this chapter, the researcher has attempted to recapitulate the major findings study that has been carried out in the previous chapters and to offer valid suggestions to make the study more worth based on the findings.

**Findings**

1. Chi-Square test reveals that there is a significant relationship between the age, marital status, occupation and monthly income of the respondents and their level of satisfaction about the facilities provided at the Coimbatore junction.
2. Chi-square test computed that there is an insignificant relationship between the gender, family status, and family members of the respondents and their level of satisfaction about the facilities provides at the Coimbatore junction.

**Suggestions**

Based on the above findings of the study, the following suggestions are offered to the railway authorities to improve the facilities at the Coimbatore Junction.

1. Cleaning Drinking water facility should be assumed to the passengers.
2. Platform, railway tracks and Coaches should always be kept clean to ensure hygienic condition to the passengers.
3. Reservation should be speed up and more reservation counters should be opened.
4. Railway authorities should provide separate ticket counters for the issue to platform tickets.
5. Unreserved compartments shoulde improved in terms of facilities like neatness of compartments and toilets.
6. Vendor’s instruction is in a high level in the Coimbatore junction. So railway authorities should take proper action to avoid vendor’s interference to the passengers at the tie of travelling and waiting for the train.
7. Dogs roam in the Coimbatore junction causing a great merance to the passengers. So te railway authorities should take necessary action to capture and remove the dogs with the help of corporation workers.
8. Proper Information regarding arrival time and departure of trains should be given to the passengers through electronic information boards ad it must be easily understandable people too.
9. Number of passenger trains should be increased for the convenience of local passengers and commuters.
10. More suggestions should be kept at the platforms to enable the passengers to give suggestions to the railway authorities.

**Conclusion**

In the present scenario there are many facilities available to develop the railway junction and also a railway department. In my research I have found that the most of the respondents are interested to given valuable suggestions and ready give support to the railway department to develop their service provide to their passengers.

From this to conclude that the railway department and railway authorities should taken a necessary action to develop and rectifying the problems faced by the passengers.

### References

1. Germa Bel. A Study n Changes in travel time across modes and its impact on the demand for inter-urban rail travel, Journal of transportation research management.1997; 33(1):43-52.
2. McIL. Cleland RG. Gawthrpe. Institute for consumer exgonomics, Germany, A Study on the resporuses of railway passenger to pressure fluctuations in Germany1996; 17(196):305-315.website address: science direct.cm.
3. GleonLyns, Juliet Jain, daviI Hllay. A Study on the use of travelttime by rail passenger in Great Britain, Journal of transportation research management. 2007; 41:102-120.
4. Dr. Desh Gupta, Dr. Milind Sathye. A Study on financial turnaround of the Indian Railways; Good luck or god management, school of Business and government. University of canborra, Australia. Web address: Wikipedia, 2007.
5. Carana Robort Y, Corbett, Lawrence M, Lo Glender YL. A study on Developing zones of tolerance for managing passenger rail service quality, International Journal of quality and reliability management. 2007; 24(1):7-31.
6. Tom Cor. Jonathar Houdmont, Amanda Griffiths. A study on Rail passenger crowding, stress, health and safety in Britain, Institute of work, health and organizations, Indian journal of transport management. 2006; 40(3):244-25.
7. Dimitris A Tsambulas, anastasios Nikoleris. Passenger's willingness to pay for rail transport access time savings, International journal f quality and reliability management.2008; 42:10.
8. Eftihia Natharail. Measuring the quality of service for passengers on the Hollenic railways. Journal of transport research Part A; Police and practice. 2008; 42(1):48-66.
9. Reeti Agarwal. A study n Public transportation and customer satisfaction 2008; (9):257-272. web address:- sciencedirect.com
10. Moshe Givoni, Piet. Riterveld. The access Journey to the railway station and its role in passengers satisfaction with rail travel, a journal of transport management.2007; 14(200):357-365.