

Passenger Perceptions On Service Quality Dimensions In Sr- A Study

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ABSTRACT

It is highly essential for any organization to attract prospective customers as well as to retain the existing customers for broadening the customer base. All these necessitate assurance of quality of service. According to Peter F. Drucker, creating a satisfied customer is the only purpose of an organization, everything else is a cost.¹ With the acceleration in the pace of industrial development along with the growth in population, the demand for transport is fast increasing. In this context, Indian Railway(IR) has understood that while trying to cope up with the increased demand, the service quality is likely to decline. Earnings can be increased by attracting more traffic and is possible by increasing customer satisfaction by improving service quality. For that performance efficiency level of our assets including human resources is to be enhanced. Develop more terminals to avoid congestion in major stations.

1. INTRODUCTION

The success of any service organization, particularly, the transport organizations depend largely on its strong customer base. It is highly essential for any organization to attract prospective customers as well as to retain the existing customers for broadening the customer base. All these necessitate assurance of quality of service. According to Peter F. Drucker, creating a satisfied customer is the only purpose of an organization, everything else is a cost.¹ With the acceleration in the pace of industrial development along with the growth in population, the demand for transport is fast increasing. In this context, Indian Railway(IR) has understood that while trying to cope up with the increased demand, the service quality is likely to decline. Therefore, IR has taken a number of steps to ensure the quality and efficiency of its service.

IR has understood that with the pace of modernization, a Railway passenger expects much more from the system than in the past in the form of amenities. From a customer perspective, overall quality of service is perceived as a combination of the physical product, frequency, travel time, fare level, comfort and cleanliness, network coverage, distance between stoppages, dependability, consistency of the operating system, infrastructure facilities available, the service offered by the staff, the safety and security and the environment in which the service is delivered. Effective delivery of service refers to the degree to which services are responsive to the needs and desires of the society it includes, in terms of both the quality and quantity aspects of service. At this backdrop, the opinion of passengers is sought and analyzed in order to see that whether the passengers are really satisfied with the amenities provided and services rendered.

MEASUREMENT OF SQ

Service quality can be measured in terms of customer satisfaction, customer perception, customer expectation and customer attitude.² Parasuram³ identified 10 key determinants of service quality and developed a model SERVQUAL, which was modified in the year 1988, into five, Reliability, Assurance, Tangibles, Empathy and Responsiveness. (RATER). Satisfaction from service quality can also be measured in terms of technical quality and functional quality⁴. Usually service quality is perceived from functional quality as many of the customers do not have much information about the technical aspects of a service.

Satisfaction is known to be difficult to measure, as it is influenced by complicated psychological and social processes⁵. Railways, being a service organization, also have to measure the level of customer satisfaction or their perception and attitude in respect of their service quality. In this study, service quality is measured in terms of passenger satisfaction, which has been accepted as an indicator of service quality. The efficiency of passenger service is measured in terms of cleanliness, punctuality, safety and amenities in trains, stations and platforms.

CUSTOMER EXPECTATIONS

As a prelude to the assessment of passenger satisfaction, the researcher examines the expectations of passengers from Railways and the extent to which it is being met. Passengers travel for different purposes, and they expect certain facilities/amenities in stations, ticket counters and in trains. Normally, passengers look forward for a comfortable, safe, punctual and cost efficient travel. The facilities/amenities at the counters, in stations and platforms, and in trains differ from Railway to Railway and also from division to division. It also varies according to the type of trains and the category of stations. The study is confined to Southern Railway, because it is passenger dominated with a number of tourist spots, consisting of places of historical, cultural and scientific importance. It is unique in character, compared to other Zones of Indian Railway with very limited goods traffic.

STATEMENT OF THE PROBLEM

The success of any service organization, particularly, the transport organizations depend largely on its strong customer base. It is highly essential for any organization to attract prospective customers as well as to retain the existing customers for broadening the customer base. All these necessitate assurance of quality of services. From a customer perspective, overall quality of service is perceived as a combination of the physical product, frequency, travel time, fare level, comfort and cleanliness, network coverage, distance between stoppages, dependability, consistency of the operating system, infrastructure facilities available, the service offered by the staff, the safety and security and the environment in which the service is delivered. Effective delivery of services refers to the degree to which services are responsive to the needs and desires of the society it includes, in terms of both the quality and quantity aspects of service. At this backdrop, the present study is an attempt to identify various service quality dimensions in SR on varied aspects as fare and charges, ticketing and facilities at the counter, facilities at stations and platforms, facilities in trains, Employees behavior and punctuality of trains.

2. OBJECTIVES OF THE STUDY

The study is conducted with the following specific objectives:

- To identify various Service Quality dimensions perceived by passengers in Southern Railway.

- To study the variation in perceptions of passengers on SQ dimensions across divisions, travel behavior and demographic variables.

HYPOTHESES

- There is no significant difference in the perception of passengers on various service quality dimensions across passengers with different demographic variables.
- There is no significant difference in the perception of passengers on various service quality dimensions across passengers with different travel behavior.

3. METHODOLOGY

There are six divisions in Southern Railway and the major part of these divisions spread over the states of Kerala and Tamil Nadu. However, the study is limited to four divisions- two divisions each from Kerala (TVC and PGT) and (SA and MAS) Tamil Nadu. These four divisions have negligible Metre Gauge network and the remaining two divisions such as Thiruchirappalli (TPJ) and Madurai (MDU) are deliberately excluded, since these are under gauge conversion. Therefore, the service quality of these two divisions could not be measured under the present circumstances.

The number of passengers for detailed study and analysis was identified on the basis of the latest statistics furnished by Zonal Railway office, Chennai. Accordingly, the researcher has taken 150 samples from SA, and 200 samples each from the other three divisions randomly, making the sample size of 750. A structured questionnaire was administered on sample respondents to elicit their view on various dimensions of SQ.

The scoring pattern is on five point scale with 5, 4, 3, 2, 1 for positive questions and 1, 2, 3, 4, 5 for negative questions ranging from highly satisfied (5) to highly dissatisfied (1). The scores are summated, averaged and compared across different groups so as to draw meaningful conclusions.

As part of Pilot study, 50 respondents were asked to express their opinion with regard to their expectations of service quality of Southern Railway with a full fledged questionnaire. From the responses received, the following variables are identified in relation to customer satisfaction:-

- The overall satisfaction with the journey, which includes security and punctuality.
- Cleanliness and ambience of stations and trains.
- Ticket fare.
- Amenities provided at stations, platforms and in trains.
- Attitude of employees towards passengers.

Attitude or perception towards service quality dimensions is measured on a five point Likerts scale. The reliability of the instrument was tested using Cronbach alpha which gave an overall reliability of 0.793 which is above the well accepted norm.

On the basis of these variables, a structured questionnaire , after reliability and validation, was administered on 750 passengers belonging to four divisions of Southern Railway to examine whether there is any significant difference between passenger perceptions about service quality with regard to demographic and travel behavior variables.

The statistical tools applied are Mean, Standard deviation and One-way ANOVA. ANOVA is applied to examine whether there is any significant difference between passenger perception about service quality with regard to demographic variables and travel behaviour.

VARIABLES

Customer satisfaction is a complex phenomenon in which many factors act and react upon each other. Multiple service quality attributes such as fare and other charges, ticketing and facilities at the counter, facilities at stations facilities in trains, employees’ behaviour, handling of complaints and punctuality are taken to represent the customer satisfaction. In order to assess the quality of customer service, the level of satisfaction experienced by the passengers in respect of the said variables are taken as the yardstick.

1. **Fare and other charges** - Majority of passengers feel moderate or low in respect of fare and other charges except AC fare.
2. **Ticketing and facilities at the counter** – Using ranking method, passengers’ preference for method of ticketing was surveyed and found that they prefer to get ticket through counters followed by e- ticketing, vending machines, JTBS and through post offices. As majority of passengers constitute salaried class, the opinion of season ticket holders is sought and they expressed their dissatisfaction in respect lesser number of unreserved coaches in trains. The awareness and availing of the innovative scheme of automatic up gradation is also studied and it reveals that 66.7 per cent are not aware and out of these, 60 percent have not availed this facility. Regarding Tatkal scheme, 57.3 per cent of the passengers are satisfied or feel moderate. With regard to facilities at the counter, 62.7 per cent of the passengers are either satisfied or feel moderate.
3. **Facilities at platform and stations** – These facilities differ from division to division and station to station and includes basic amenities, modern amenities, cleanliness, security, retiring room and cloak room and also out station facilities. Basic amenities include seating, lighting, safe drinking water, waiting rooms, pay and use toilets etc. and passengers rated as poor in respect of toilets and drinking water. Modern amenities include recreation and ATMs, signage, coach indication boards etc. A good number of passengers (64.7 %) feel satisfied in modern amenities . With regard to out station facilities which comprise of availability of porter, auto/ taxi and parking facilities, 52.6 per cent feel good and satisfactory.
4. **Facilities in trains** – It varies according to type of trains, class of travel, distance of travel etc. These include essential amenities, modern amenities, cleanliness, security, medical assistance, availability of ladies coaches etc. Essential amenities include proper maintenance of coaches, water facility and catering services. Modern amenities include mobile charging, recreation and facility for differently abled persons. 52.7per cent of the passengers are highly dissatisfied with essential amenities and 56.6 per cent passengers are satisfied with regard to modern amenities. 48.6 per cent of the passengers are dissatisfied with cleanliness and 46.6 per cent of the passengers feel dissatisfied with security in trains. 69.3 per cent of the passengers expressed their dissatisfaction on the medical assistance during emergency.
5. **Behaviour of employees** - Regarding employees’ behaviour at the counter, 65 per cent are either satisfied and feel moderate , 81.7 per cent at stations and 79.7 per cent in the train are of the opinion that employees’ behaviour is either good or satisfactory.
6. **Punctuality** -Regarding punctuality passengers of all type of trains have expressed their dissatisfaction and it is very high in case of passenger trains and least in case of Jan Shatabdi trains.

SAMPLE PROFILE AND TRAVEL BEHAVIOR OF RESPONDENTS

The profile of sample respondents is exhibited in the following table

Factor	Classification	Frequency	Percent
DIVISION	TVC	200	26.7

	PGT	200	26.7
	MAS	200	26.7
	SA	150	20
	TOTAL	750	100
AGE	Below 30	180	24
	30-39	240	32
	40-49	200	26.7
	50-59	74	9.9
	60& above	56	7.5
	TOTAL	750	100
GENDER	Male	506	67.5
	Female	244	32.5
	TOTAL	750	100
OCCUPATION	Salaried	382	50.9
	Professionals	172	22.9
	Student	84	11.2
	Business	76	10.1
	Others	36	4.8
	Total	750	100

FREQUENCY OF TRAVEL	Daily	417	55.6
	Weekly	102	13.6
	Occasionally	156	20.8
	Rarely	75	10
	Very rarely	00	00
	TOTAL	750	100
PURPOSE OF TRAVEL	Employment	514	68.5
	Study	114	15.2
	Household	54	7.2
	Touring	68	9.1
	TOTAL	750	100
TYPE OF TRAIN	Passenger	108	14.4
	Express	440	58.7
	Superfast	80	10.7
	Combination of trains	82	10.9
	TOTAL	750	100
CLASS OF TRAVEL	Second ordinary	275	36.7
	Second express	130	17.3
	Sleeper class	200	26.7
	AC class	60	8.0
	Combination	85	11.2
	TOTAL	750	100

Samples are drawn from 4 divisions as 150 from Salem and 200 each from other divisions.

Out of the total passengers surveyed, 30 - 39 age group with 32 per cent, followed by 40 – 49 with 26.7 per cent and below 30 with 24 per cent. Therefore, a large majority of passengers belong to the age band of 30-50.

Gender wise, 67.5 per cent are males and 32.5 per cent are females. Male dominate the sample population. Occupation-wise classification reveals that 50.9 per cent are salaried class followed by with 32.9 per cent professionals, 11.2 per cent students and the rest business class & others. Therefore majority of passengers are salaried people.

On the basis of frequency of travel, 55.6 per cent are daily travelers, 20.8 per cent occasional travelers and 13.6 per cent weekly travelers. However, only small fraction of passengers travels rarely/very rarely. On the basis of purpose of travel, most of the passengers travel for employment (69%) followed by study (15.2), touring (9.1) and household matters (%).

36.7 per cent travel in second ordinary, 26.7 per cent sleeper class, 17.3 in second express, 11.3 per cent in combination of trains and 8 per cent in AC class. Most of them (63 %) travel in either Ordinary or Sleeper class.

On the basis of type of train, 58.7 per cent travel in express trains, 14.4 per cent in passenger trains, 10.9 per cent in combination of these, 10.9 per cent in Jan Shatabdi and the remaining in super fast trains. Most popular among passengers is Express train.

ANALYSIS

Inferential analysis is done for the six variables viz. fare and other charges, ticketing and facilities at the counter, facilities at stations and platforms, facilities in trains, behavior of railway employees and punctuality of trains across age, gender, occupation, division, frequency of travel, type of train, travelling class and the purpose of travel of passengers. To test the hypothesis that there exists significant difference among the mean score at different level of each of the demographic variables considered, the null hypothesis is that there is no difference in the mean score at different level regarding the six variables as against there exist significant difference among mean scores. The demographic variables considered here are age, division, and occupation. Travelling behavior variables considered are travelling class, type of train and frequency of travel, which has more than two groups. Hence, for testing the hypothesis one-way ANOVA or F-test is used. For gender analysis, t-test is used, as it has only two groups, male and female.

The Mean Values of Different Factors of the Six Variables is Given in Table Below

	Fare & other charges	Ticketing & facilities at the counter	Facilities in stations & platforms	Facilities in trains	Employees' Behaviour	Punctuality
AGE-WISE						
Below 30	21.17	34.5	52.22	32.11	12.28	11.89
30-39	23.12	34.04	50.79	34.50	12.04	11.17
40-49	21.7	37.55	50.15	32.55	11.25	11.55
50-59	21.38	41.40	48.30	32.73	11.68	11.74
60 & above	23.82	34.39	49.39	33.71	11.89	11.80
TOTAL	22.15	34.85	50.61	33.17	11.84	11.55
DIVISION-WISE						
TRIVANDRUM	20.93	32.50	51.65	33.75	12.65	11.55
PALAKKAD	22.35	33.95	50.30	31.95	10.80	11.55
CHENNAI	22.51	38.05	49.45	33.40	11.35	11.75
SALEM	23.05	34.93	51.20	33.73	12.80	11.27
TOTAL	22.16	34.85	50.61	33.17	11.84	11.55
GENDER						
Male	22.40	34.22	50.93	42.77	12.14	11.50
Female	21.64	34.10	49.96	34.01	11.21	11.63

TOTAL						
OCCUPATION						
Student	23.33	33.64	49.83	33.71	11.69	12.05
Business	22.16	35.26	52.12	34.74	13.45	11.42
Salaried	21.97	35.70	50.62	32.40	11.20	11.47
Professional	22.18	32.26	49.66	33.69	12.23	11.53
Others	21.19	25.89	53.72	34.26	13.72	11.58
TOTAL	22.15	34.85	50.61	33.17	11.84	11.55
FREQUENCY OF TRAVEL						
Daily	21.86	36.89	51.76	33.30	12.08	11.33
Weekly	22.85	31.86	49.78	34.54	12.21	11.36
Occasionally	21.94	31.36	48.50	32.05	11.69	11.99
Rarely	23.29	34.87	49.76	32.93	10.32	12.11
Total	22.15	34.85	50.61	33.17	11.84	11.55
PURPOSE OF TRAVEL						
Study	23.16	34.26	49.79	33.53	11.51	11.60
Employment	21.80	35.27	51.13	33.01	11.82	11.54
Household matters	22.70	36.67	37.61	33.57	12.13	11.37
Touring	22.74	31.21	50.51	33.47	12.34	11.67
TOTAL	22.16	34.85	50.61	33.17	9.84	11.55
TYPE OF TRAIN						
Passenger	23.44	38.78	51.09	35.22	13.19	11.28
Express	21.96	35.42	51.38	32.93	11.85	11.68
Superfast	21.25	32.50	46.50	29.75	9.50	12.75
Jan shatabdi	121.73	26.50	47.25	33.62	10.88	11.25
Combination	22.34	35.93	51.17	33.02	12.12	10.88
TOTAL	22.16	34.85	50.61	33.17	11.84	11.55
CLASS OF TRAVEL						
Second ordinary	22.34	33.98	52.18	34.45	12.16	11.47
Second express	21.28	40.00	51.85	33.39	11.38	11.54
Sleeper	22.08	32.25	50.05	32.60	11.85	12.15
AC	21.57	35.3	49.33	31.33	12.50	10.83
Combination	23.49	35.24	45.88	31.35	11.00	10.88
TOTAL	22.15	34.85	50.61	33.17	11.84	11.55

1. Age-wise Analysis- Age-wise analysis is carried out on Rail Passengers as their preference on amenities varies according to age. Different Concessions in fare are also being offered to them on the basis of their age.

The analysis done out of survey data shows that there is significant difference among different age group in respect of fare and other charges, (F(4,745)=14.64, P=0.001), ticketing and facilities at the counter, (F(4,745)=6.99, P=0.001), facilities in stations and platforms, (F(4,745)=4.27, P=0.002) facilities in trains, (F(4,745)=6.09, P=0.001) behavior of employees (F(4,745)=2.63, P=0.033) and also in respect of punctuality of trains. (F (4,745)=10.15, P=0.001). Since all these variables differ significantly, Post-hoc Tukey’s test is done and the results are given in table.

POST-HOC ANALYSIS

Variable	Difference group (Mean Score)
Fare and other charges	Below 30 (21.17) with 30-39 (23.12) and 60 & above (23.82).
	Between 30-39 with 40-49 and 50-59.
	Between 40-49 with sixty and above
Ticketing	Below 30 with 40-49
	Between 30-39 with 40-49

	Between 40-49 with 50-59
Facilities in stations and platforms	Below 30 with 50-59
Facilities in trains	Below 30 with 30-59
	Between 30-39 with 40-49
Behavior of employees	Below 30 with 40-49
Punctuality of trains	Below 30 with 30-39,

2. Division-wise –Divisions of SR are spread over Kerala and Tamil Nadu and rail services offered by the divisions have differences in number of trains, convenient timings, number of stoppages etc. These are likely to influence the service quality perception. Hence, division-wise analysis is done.

Division-wise analysis indicates that there is significant difference in the perception of passengers regarding fare and other charges, ($F(3,746)=13.48, P=0.00$), ticketing and facilities at the counter($F(3,746)=12.38,P=0.00$), Facilities in stations and platforms, ($F(3,746)=3.15,P=0.24$), Facilities in trains ($F(3,746)=4.62,P=0.003$), behaviour of railway employees ($F(3,746)=17.05,P=0.00$) and also in punctuality of trains ($F(3,746)=4.20,P=0.006$)

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table.

POST-HOC ANALYSIS

Variable	Difference group
Fare and other charges	Between TVC with PGT, MAS and SA
Ticketing and facilities at the counter	MAS with TVC, PGT and SA
Facilities in stations and platforms	TVC with MAS
Facilities in trains	PGT with TVC, MAS and SA
Behaviour of employees	TVC with PGT and MAS
	SA with MAS
	PGT with SA
Punctuality of trains	MAS with SA

3. Gender wise analysis- Passengers are offered certain concessions and facilities on gender basis. Hence, gender-wise analysis is done to evaluate service quality.

The analysis shows that there is significant difference in the perception of male and female passengers in respect fare and other charges ($Z=2.87, Sig..004$), facilities in train ($Z=-2.88, Sig..004$) and behaviour of railway employees ($Z=3.58, Sig.001$).

4. Occupation-wise Analysis- Occupation-wise analysis is done since passengers belong to different category of employment with different standard of living, have different expectations in the quality of service.

The analysis indicates that there is significant difference in the perception of passengers regarding fare and other charges, ($F(4,745)=3.49, P=0.000$), ticketing and facilities at the counter($F(4,745)=9.32,P=0.000$), Facilities in stations and platforms, ($F(4,745)=3.102,P=0.015$), Facilities in trains ($F(4,745)=4.395,P=0.002$), behaviour of railway employees ($F(4,745)=12.14,P=0.00$) and also in punctuality of trains ($F(4,745)=3.922,P=0.004$)

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table.

POST-HOC ANALYSIS

Variable	Difference group
Fare and other charges	Student with salaried and others
Ticketing and facilities at the counter	Others with student, business, salaried and professionals.
Facilities in stations and platforms	Professionals with others.
Facilities in trains	Salaried with business class.
Behavior of employees	Salaried class with business, professionals and others.
	Business with salaried class.
Punctuality of trains	Student with business, salaried and professionals.

5. Frequency of travel – Passengers travelling daily, weekly and rarely are likely to have difference in the service quality expectations. Therefore, their perception is also analyzed on the basis of surveyed data.

Analysis on the basis of frequency of travel indicates that there is significant difference in the perception of passengers regarding fare and other charges, ($F(3,746)=3.49, P=0.000$), ticketing and facilities at the counter($F(3,746)=9.32,P=0.000$), Facilities in stations and platforms, ($F(3,746)=3.102,P=0.015$), Facilities in trains ($F(3,746),P=0.002$), behaviour of railway employees ($F(3,746)=12.14,P=0.00$) and also in punctuality of trains ($F(3,746)=3.922,P=0.004$)

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table.

POST-HOC ANALYSIS

Variable	Difference group
Fare and other charges	Daily with weekly and rarely
	Occasionally with rarely
Ticketing and facilities at the counter	Daily with weekly and occasionally
	Rarely with occasionally
Facilities in stations and platforms	Daily with occasionally
Facilities in trains	Weekly with occasionally
Behaviour of employees	Rarely with daily, weekly and occasionally
Punctuality of trains	Daily with occasionally and rarely
	Weekly with occasionally and rarely

6. Travelling class- Railway offers passenger service under different classes and fare and amenities change accordingly. The passengers’ preference varies according to the comforts and convenience offered in different classes. Therefore, a class-wise analysis is made to ascertain the difference in satisfaction, if any.

The analysis proves that there is significant difference in the perception of passengers regarding fare and other charges, ($F(4,745)=6.186, P=0.000$), ticketing and facilities at the counter($F(4,745)=14.591, P=0.000$), Facilities in stations and platforms, ($F(4,745)=13.175, P=0.000$), Facilities in trains ($F(4,745)=8.463, P=0.000$), behaviour of railway employees ($F(4,745)=3.231, P=0.012$) and also in punctuality of trains ($F(4,745)=24.931, P=0.000$)

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table.

POST-HOC ANALYSIS

Variable	Difference group
	Second ordinary with second express and combination.

	Combination with second ordinary, second express, sleeper and AC class.
Ticketing and facilities at the counter	Second express with second ordinary, sleeper class, AC and combination.
Facilities in stations and platforms	Second ordinary with sleeper class and combination
	Combination with second ordinary, second express, sleeper and AC class.
Facilities in trains	Second ordinary with sleeper class, Ac class and combination.
Behaviour of employees	Second ordinary with combination.

7. Type of train – Railways run different type of trains to cater to the needs of different type of passengers. Fare and amenities differ according to the type of train and the choice of train depends on convenience, comforts, speed and punctuality. The analysis is done to see whether there exists any significant difference in the perception of passengers availing the services of different types of trains.

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table.

POST-HOC ANALYSIS

Variable	Difference group
Fare and other charges	Daily with weekly and rarely
	Occasionally with rarely
Ticketing and facilities at the counter	Daily with weekly and occasionally
	Rarely with occasionally
Facilities in stations and platforms	Daily with occasionally
Facilities in trains	Weekly with occasionally
Behaviour of employees	Rarely with daily, weekly and occasionally
Punctuality of trains	Daily with occasionally and rarely
	Weekly with occasionally and rarely

The ANOVA table values on the basis of type of train shows that there is significant difference in the perception of passengers in respect of all the six variables viz. fare and other charges($F(4,745)=5.341, P=0.000$), Ticketing and facilities at the counter($F(4,745)=23.073, P=0.000$), Facilities in stations and platforms, ($F(4,745)=8.260, P=0.000$), Facilities in trains ($F(4,745)=8.105, P=0.000$), behaviour of railway employees ($F(4,745)=11.793, P=0.00$) and also in punctuality of trains ($F(4,745)=20.101, P=0.000$)

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table .

POST-HOC ANALYSIS

Variable	Difference groups
Fare and other charges	Passenger with express, S/F, Jan Shatabdi
Ticketing and facilities at the counter	Passenger with express, S/F, Jan Shatabdi.. Jan shatabdi with passenger, express, S/F and combination.
Facilities in stations and platforms	Passenger with S/F, Jan shatabdi. S/F with passenger, express and combination. Jan shatabdi with passenger, express and combination
Facilities in trains	Passenger with express, S/F, combination. /F with passenger, express, Jan shatabdi and combination.
Behaviour of employees	Passenger with express, S/F, Jan Shatabdi.. express with S/F/F with combination
Punctuality of trains	Express with S/F, Jan Shatabdi, passenger, and combination, S/F with passenger, express Jan shatabdi and combination.

7. Purpose of journey- A passenger performs journey for different purposes and their expectations differ accordingly. Therefore, analysis is made to ascertain the difference of perception of passengers, if any on the basis of purpose of journey. The analysis reveals that there is significant difference in the perception of passengers regarding fare and other charges, ($F(3,746)=6.339, P=0.000$), ticketing and facilities at the counter($F(3,746)=4.405, P=0.004$), Facilities in stations and platforms, ($F(3,746)=3.971, P=0.008$).

For further analysis, Post-hoc Tukeys test is done and the result is shown in the table.

POST-HOC ANALYSIS

Variable	Difference group
Fare and other charges	Study & employment
Ticketing and facilities at the counter	Touring , employment & household purpose.
Facilities in stations and platforms	Employment & household purpose.

Though Railways are providing various amenities to the travelling public at the counter, stations and in trains, the analysis proved that passengers are satisfied only with the facilities at the counter. Regarding fare and ticketing and with the facilities at stations and platforms, though they are in conformity with the overall satisfaction level, it is not satisfactory. Passengers are not all satisfied with the facilities provided in trains and with the employees’ behaviour which includes the mechanism for handling complaints. The CFA analysis showed that fare and facilities at the ticketing counter have no role in the passenger satisfaction. The facilities in trains, stations and platforms and handling of complaints including employees’ behaviour have much impact on passenger satisfaction. Security in running trains would be improved to avoid the threat of accidents from miscreant’s activity with expert opinion from IITs and NITs professionals. However, Railway, being a service organization, the satisfaction level needs to be considerably increased to reach the

maximum. This may be possible with a small fine tuning in their attitude towards passengers at stations and in trains. This will enable them to satisfy all the passengers. Behavioral training will enable the station staff, and the TTEs who are in direct contact with the passengers to enhance the satisfaction level.

Despite the best efforts of the Railways to provide efficient train services along with several passenger friendly initiatives, a number of problems that affect passenger service.

- a. Congestion at station platforms/concourses/circulating areas, modernization of stations etc.
- b. Slow progress of increasing platform height and cover over platforms.
- c. Overcrowding on trains especially in suburban and passenger trains.
- d. Lack of cleanliness of trains, platforms and stations.
- e. Low quality on-board catering services and lack of good quality bed-roll/linen.
- f.. Safety and Security of passengers in trains.
- g. Medical assistance during emergencies.
- h. Employees' behaviour at stations and in trains.

In addition to the above, punctuality and re-scheduling of trains, ticketless travel and touting, Slow speed of trains and excess journey time also affect the service quality.

4. CONCLUSION

Hence, the railway has to increase the Facilities in Trains, Handling of complaints and Facilities at the Platforms and Stations considerably. Earnings can be increased by attracting more traffic and is possible by increasing customer satisfaction by improving service quality. For that performance efficiency level of our assets including human resources is to be enhanced. Develop more terminals to avoid congestion in major stations. R&D Department should concentrate more on customer expectations and perception towards various services. Railways, which seek to serve multiple types of customers, a Strategic Business Unit (SBU) is to be created to serve a particular market segment. To reduce the staff and overcrowding at the counter, more ATVMs and JTBSs must be done. Moreover, passengers should also follow the rules and regulations of Indian Railways to protect the railway property and make the travel a memorable and pleasurable experience.

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