

A Study on Passengers' Satisfaction of Omni Bus Service and its Determinants

Dr. K. Apsar Basha

(Deputed from Annamalai University)

Assistant Professor of Commerce, PG & Research Department of Commerce, Government Arts
College, Tiruvannamalai – 606 603, Tiruvannamalai District, Tamil Nadu

Abstract

In this paper examine the Passengers' Satisfaction of Omni bus service and its determinants in Tamil Nadu. Regarding the perception on the variables in customer value on omni bus service (CVBS), the significant difference among the rural and the urban respondents have been noticed in the case of seven variables out of the nine variables since their respective 't' statistics are significant at five per cent level. Regarding the level of expectation on variables in customers' preferences, the significant difference among the rural and the urban respondents has been seen in all the six variables in it since their respective 't' statistics are significant at five per cent level. The significant difference among the rural and the urban respondents has been noticed in the case of all the five determinants since their respective 'T' statistics are significant at five per cent level. Regarding the perception on variables in passengers' satisfaction on bus service, the significant difference among the rural and the urban respondents has been noticed in the case of six variables out of the eight variables in it since their respective 'T' statistics are significant at five per cent level.

Key Words: Omni bus service, Determinants, Variables, Mean Score, T Statistics, and Wilk's Lambda

Introduction

Bus is a clipped form of the Latin adjectival form omnibus ("for all"), the dative plural of omnis-e ("all"). ... Having invented the successful concept Baudry moved to Paris and launched the first omnibus service there in April 1828. A similar service was introduced in London in 1829. The first motor bus route started on July 15, 1926, and ran between Afghan Church and Crawford Market, Mumbai. The bus fare for the same journey was four annas, i.e 25 paise. The passengers' satisfaction is the mantra of the service providers in the globalized economy. Regarding the transport, it should be a mantra or otherwise the public transport will lose its market very soon since the competition is hectic. It is imperative to examine the factors influencing the passengers' satisfaction and also the passengers' satisfaction. Hence, the present study analyzes the passengers' satisfaction, its determinants.

Statement of the problem

The private players are playing a dominant role in covering the long route with the help of their omni bus services. They are highly competitive to other mode of transports. Even though, they are competitive to other mode of transports, they are facing hectic competition from other private players. The government is also promoting the private players to cover the long route through their omni bus services. The Omni bus operators who are not updating their services as per the requirement of their customers, they are gradually losing their market and also facing serious losses. Hence, the analysis of passengers' expectation and perceptions on services and service quality of the omni bus services is becoming an important problem to all omni bus operators.

Objectives of the Study

This study is undertaken with the following objectives:

1. To analyze the passengers' satisfaction on transport on omni bus services and its determinants.
2. To summarize the findings and give conclusions.

Area of the Study

While studying the service quality of the omni bus services, it is imperative to select the study area. In the present study, it is decided to include the omni bus services offered by the service provides at eleven important cities at Tamilnadu. These are Chennai, Madurai, Tirunelveli, Trichy, Coimbatore, Salem, Ramnad, Tirupur, Hosur, Tuticorin and Erode. The sampled passengers are selected from eleven important cities of Tamilnadu.

Scope of the study

The scope of the study is confined only to the service quality in omni bus services and also the passengers' attitude towards omni bus services at Tamilnadu only. The passengers are classified into two important groups on the basis of their nativity namely rural and urban respondents.

Review of Literature

Robinson (2003), mentioned that the public services that change are more likely to be in competition with services offered in the commercial sector, thereby offering the customer a choice. The relevance of service quality in this situation is clearly evident.

Roy and Datta(2005), analyzed the perception on various public transport modes. They identified that the bus service is preferred because of travel speed and comfort. The transit network and fares in the bus transport are better than the other transports. The feeling

of safety inside the vehicle is a function of engine condition, body condition, drivers' capability and the interaction between the vehicle and the other vehicles on the road.

Arawatiet al., (2007), revealed a strong correlation between service quality dimensions, service performance and customer satisfaction. In particular, service providers classified as excellent were rated most favourably in terms of responsiveness, access and credibility.

Results and Discussions:

Respondents' Perception on Customer Value on Omni Bus Services

The creation of customer value is one of the important determinants of passengers' satisfaction on bus services. The creation of customer value on omni bus service is a difficult task. The service provider has to measure it periodically to know how to enrich the customer value among their passengers. In the present study, the customer value on the omni bus services has been measured with the help of nine variables. The mean scores of the variables in customer value on omni bus services among the urban and the rural respondents have been computed and presented in Table -1.

TABLE - 1
Perception on Variables in Customer Value on Omni Bus Services (CVBS)

| Sl.No. | Variables in CVBS | Mean Score Among Respondents in | | 't' statistics |
|--------|---------------------------|---------------------------------|--------|----------------|
| | | Rural | Urban | |
| 1. | Economy of Service | 3.2458 | 2.667 | 2.3868* |
| 2. | Comfortability in Service | 3.0441 | 2.4562 | 2.4011* |
| 3. | Cheaper | 3.3304 | 3.0117 | 0.8996 |
| 4. | Ambience | 3.0224 | 2.3889 | 2.5441* |
| 5. | Luxuries | 2.8941 | 2.0844 | 2.7679* |
| 6. | Innovative | 2.7709 | 2.1708 | 2.8511* |
| 7. | Interior Design | 2.6677 | 2.0145 | 2.6113* |
| 8. | Opportunity Cost | 2.9949 | 2.8641 | 0.2465 |
| 9. | Value Addition | 3.1143 | 2.4086 | 2.8862* |

Source: Primary Data.

* Significant at 5 per cent level.

The highly perceived variables in customer value on omni bus service among the rural respondents are cheaper and economy of service since their mean scores are 3.3304 and 3.2458 respectively. Among the urban respondents, these two are cheaper and opportunity cost since their mean scores are 3.0117 and 2.8641 respectively. Regarding the perception on the variables in customer value on omni bus service (CVBS), the significant difference among the rural and the urban respondents have been noticed in the case of seven variables out of the nine variables since their respective 't' statistics are significant at five per cent level.

Customers' Preferences

The customers' preferences indicate that the level of expectation and preferences of the services from their service providers among the respondents. Since the customers' preferences is one of the important determinants of passengers' satisfaction on omni bus services, it is included as one of the determinants. The level of customers' preferences has been measured with the help of six variables. The respondents are asked to rate these variables at five point scale according to their order of expectation. The mean of each variable on customer preferences has been measured with its 't' statistics. Table 2 shows the mean scores of the variables in customers' preferences among the rural and the urban respondents along with its 't' statistics. The highly viewed variables among the rural respondents are value added services and comfortable services since their mean scores are 2.9196 and 3.0884 respectively. Among the urban respondents, these are value added services and comfortable services but with the mean scores of 3.8583 and 3.8994 respectively.

TABLE- 2
View on Customers' Preferences

| Sl.No. | Variables in customers' preferences | Mean Score Among Respondents in | | 't' statistics |
|--------|-------------------------------------|---------------------------------|--------|----------------|
| | | Rural | Urban | |
| 1. | Varieties of Services | 2.6673 | 3.6871 | - 3.5617* |
| 2. | Innovative Services | 2.4504 | 3.7302 | - 4.0173* |
| 3. | Value Added Services | 2.9196 | 3.8583 | - 3.3886* |
| 4. | Discriminatory Pricing Services | 2.6117 | 3.5089 | -3.6189* |
| 5. | Comfortable Services | 3.0884 | 3.8994 | - 3.4917* |
| 6. | Luxurious Services | 2.7079 | 3.7884 | - 3.6681* |

Source: Primary Data.

*Significant at 5 per cent level.

Regarding the level of expectation on variables in customers' preferences, the significant difference among the rural and the urban respondents has been seen in all the six variables in it since their respective 't' statistics are significant at five per cent level.

Respondents' Views on Customers' Complaints

The respondents' views on the response of the employees regarding the complaints made by their customers are treated as one of the important determinants of passengers' satisfaction. The level of views on handling customers' complaints is measured with the help of 12 variables. The respondents are asked to rate these 12 variables at five point scaled according to their order of perception. The mean scores of the variables in handling

customers' complaints among the rural and the urban respondents have been computed separately.

TABLE - 3
View on Handling Customers' Complaints

| Sl.No. | Variables in customers' complaints | Mean Score Among Respondents in | | 't' statistics |
|--------|------------------------------------|---------------------------------|--------|----------------|
| | | Rural | Urban | |
| 1. | Drivers' Treatment | 2.9969 | 2.4517 | 2.0411* |
| 2. | Conductors' Treatment | 2.6673 | 2.0886 | 2.3086* |
| 3. | Driving | 2.9092 | 2.6562 | 0.9961 |
| 4. | Punctuality | 2.7765 | 2.3088 | 1.5886 |
| 5. | Stopping at The Bus Stop | 2.9117 | 2.5886 | 1.4011 |
| 6. | Information | 2.8085 | 2.1173 | 2.7086* |
| 7. | Vehicle | 2.4541 | 2.0996 | 1.5022 |
| 8. | Maintenance | 2.6602 | 2.0173 | 2.1738* |
| 9. | Crowding | 2.8183 | 2.1732 | 2.8028* |
| 10. | Seating | 2.7104 | 2.2088 | 2.1891* |
| 11. | Traffic Planning | 2.9911 | 2.3089 | 2.2865* |
| 12. | Accident Handling | 2.8183 | 2.1483 | 2.7341* |

Source: Primary Data

*Significant at 5 per cent level

Table 3 shows the mean scores of the variables in handling customers' complaints among the rural and the urban respondents along with its 't' statistics. The highly viewed variables by the rural respondents are drivers' treatment and traffic planning since their mean scores is 2.9969 and 2.9911 respectively. Among the urban respondents, these are driving and stopping at the bus stop since their mean scores are 2.6562 and 2.5886 respectively. Regarding the views on variables in handling customers' complaints, the significant difference among the rural and the urban respondents have been noticed in the case of eight variables out of the twelve variables since their respective 't' statistics are significant at five per cent level.

Passengers' Trust among the Respondents

The level of passengers' trust on omni bus service is treated as one of the determinants of passengers' satisfaction. It is measured with the help of eight variables. The respondents are asked rate the eight variables at five point scale according to their order of acceptance. The mean scores of the variables in passengers' trust among the rural and urban respondents have been computed along with its 't' statistics. The results are shown in Table 4

TABLE- 4
View on Passengers' Trust

| Sl.No. | Variables in passengers trust | Mean Score among | 't' statistics |
|--------|-------------------------------|------------------|----------------|
|--------|-------------------------------|------------------|----------------|

| | | <i>respondents in</i> | | |
|----|---|-----------------------|--------------|---------|
| | | <i>Rural</i> | <i>Urban</i> | |
| 1. | Omni bus service genuinely committed to your satisfaction | 2.8997 | 2.3445 | 2.2338* |
| 2. | Omni bus service shows you enough consideration | 2.9091 | 2.6046 | 0.9140 |
| 3. | Omni bus service treats you and justly | 2.6646 | 2.0891 | 2.4892* |
| 4. | Omni bus service has a very good reputation | 2.8084 | 2.2973 | 2.5917* |
| 5. | Omni bus service is of high integrity | 2.5996 | 2.3886 | 0.7338 |
| 6. | Omni bus service is very competent | 2.7117 | 2.4118 | 0.6567 |
| 7. | Omni bus service is reliable | 2.6979 | 2.0734 | 2.8441* |
| 8. | Omni bus service have more trust among passengers | 2.9024 | 2.2085 | 2.9086* |

Source: Primary Data

*Significant at 5 per cent level

The highly viewed variable by the rural respondents are ‘omni bus service shows you enough consideration’ and omni bus service have more trust among passengers since their mean scores are 2.9091 and 2.9024 respectively. Among the urban respondents, these two are ‘omni bus service shows you enough consideration’ and ‘omni bus service is very competent’ since their mean scores are 2.6046 and 2.4118 respectively. Regarding the view on variables in passengers’ trust, the significant difference among the rural and urban respondents have been noticed in the case of five out of eight variables in passengers trust since their respective ‘t’ statistics are significant at five per cent level.

Determinants of Passengers’ Satisfaction

The determinants of passengers’ satisfaction included for the present study are customer value, customers’ preferences handling of customers’ complaints passengers’ trust and service performance. The scores on the above said three determinants have been computed by the mean scores of the variables in each antecedent. The mean score of each antecedent among the rural and the urban respondents has been computed separately. The ‘t’ test has been applied to find out the significant difference among the rural and the urban respondents regarding their view on determinants. Table 5 shows the mean scores of various determinants among the rural and the urban respondents and it respective ‘t’ statistics. The highly viewed determinants by the rural respondents are service performance and customer value since their mean scores are 3.0847 and 3.0094 respectively.

TABLE - 5
Various Determinants of Passengers’ Satisfaction

| <i>Sl.No.</i> | <i>Variables in determinants</i> | <i>Mean Score Among</i> | <i>‘t’ statistics</i> |
|---------------|----------------------------------|-------------------------|-----------------------|
|---------------|----------------------------------|-------------------------|-----------------------|

| | | <i>Respondents in</i> | | |
|----|-----------------------------------|-----------------------|--------------|-----------|
| | | <i>Rural</i> | <i>Urban</i> | |
| 1. | Customer Value | 3.0094 | 2.4518 | 2.5844* |
| 2. | Customers' Preferences | 2.7409 | 3.7454 | - 3.9196* |
| 3. | Handling of Customers' Complaints | 2.7927 | 2.2639 | 2.6331* |
| 4. | Passengers trust | 2.7742 | 2.3022 | 2.0996* |
| 5. | Service performance | 3.0849 | 2.5393 | 2.2579* |

Source: Primary Data.

* Significant at 5 per cent level.

Among the urban respondents, these two are customers' preferences and service performance since their respective mean scores are 3.7454 and 2.5393 respectively. The significant difference among the rural and the urban respondents has been noticed in the case of all the five determinants since their respective 't' statistics are significant at five per cent level.

Discriminant Determinants of Passengers' Satisfaction among the Rural and the Urban Respondents:

The perception on the determinants of passengers' satisfaction among the rural respondents may differ from the urban respondents. It is imperative to examine the important discriminant determinants of passengers' satisfaction among the two groups of respondents for some policy implication. The two group discriminant function has been administered for this purpose. Initially, the mean difference among the two groups of respondents regarding each determinants and its statistical significance have been computed. The discriminant power of the determinants has been examined with the help of the Wilk's Lambda. The results are given in Table 6. The significant mean differences are noticed in the case of customer value, customers' preferences handling of customers' complaints passenger's trust and service performance since their respective 't' statistics are significant at five per cent level. The higher mean differences are identified in the case of customers' preferences and customer value since their mean differences are – 1.0045 and 0.5576 respectively. The higher discriminant power is noticed in the case of customers' preferences since their respective Wilk's Lambda is 0.1044. The significant determinants have been included to estimate the two group discriminant function. The unstandardized procedure has been followed to estimate the function. The estimated function is:

TABLE- 6
Mean Difference and Discriminant Power of Passengers' Satisfaction

| <i>Sl.No.</i> | <i>Determinants</i> | <i>Mean Score among respondents in</i> | | <i>Mean Difference</i> | <i>'t' statistics</i> | <i>Wilk's Lambda</i> |
|---------------|---------------------|--|--------------|------------------------|-----------------------|----------------------|
| | | <i>Rural</i> | <i>Urban</i> | | | |

| | | | | | | |
|----|---|--------|--------|----------|----------|--------|
| 1. | Customers' Value (X ₁) | 3.0094 | 2.4518 | 0.5576 | 2.5844* | 0.1596 |
| 2. | Customers' Preferences (X ₂) | 2.7409 | 3.7454 | - 1.0045 | -3.9196* | 0.1044 |
| 3. | Handling of Customers' Complaints (X ₃) | 2.7927 | 2.2639 | 0.5288 | 2.6331* | 0.1732 |
| 4. | Passenger's trust (X ₄) | 2.7742 | 2.3022 | 0.4720 | 2.0996* | 0.1886 |
| 5. | Service performance(X ₅) | 3.0849 | 2.5393 | 0.5456 | 2.2579* | 0.1441 |

Source: Primary Data

* Significant at 5 per cent level.

$$Z = 0.2997 + 0.1411 X_1 - 0.1417X_2 + 0.1334 X_3 + 0.1459 X_4 + 0.1677 X_5$$

The relative contribution of discriminant determinants in the Total Discriminant Score (TDS) is computed by the product of discriminant coefficient and the mean difference of the respective determinants.

Passengers' Satisfaction on Omni Bus Services (PSBS) among the Respondents

The passengers' satisfaction on omni bus services is one of the important outcomes of the service quality of the bus services. The service providers are always expecting the passengers' satisfaction in order to survive in the market. The passengers' satisfaction in the present study is measured with the help of eight variables. The respondents are asked to rate these variables at five point scale according to their order of perception.

TABLE- 7
Passengers' Satisfaction on Omni Bus Service (PSOBS)

| Sl.No. | Variables in PSOBS | Mean Score Among Respondents in | | 't' statistics |
|--------|--------------------------------|---------------------------------|--------|----------------|
| | | Rural | Urban | |
| 1. | Service Quality | 3.2145 | 2.4085 | 3.0886* |
| 2. | Service Frequency | 3.0889 | 2.7138 | 0.9969 |
| 3. | Service Cost | 3.0071 | 2.8285 | 0.4566 |
| 4. | Timeliness of Service | 3.1117 | 2.3886 | 3.0172* |
| 5. | Value Added Service | 3.2886 | 2.4508 | 2.9697* |
| 6. | Information on Service | 3.0441 | 2.3996 | 2.8183* |
| 7. | Response on Passengers' Appeal | 2.9196 | 2.3085 | 2.3065* |
| 8. | Service Value | 2.8844 | 2.3011 | 2.0916* |

Source: Primary Data

* Significant at 5 per cent level

Table 7 shows the mean score of the variables in passengers' satisfaction among the rural and the urban respondents and its respective 't' statistics. The highly perceived variables by the rural respondents are value added service quality and service quality since their mean scores are 3.2886 and 3.2145 respectively. Among the urban respondents, these two variables are service cost and service frequency since their mean scores are 2.8285 and

2.7138 respectively. Regarding the perception on variables in passengers' satisfaction on bus service, the significant difference among the rural and the urban respondents has been noticed in the case of six variables out of the eight variables in it since their respective 't' statistics are significant at five per cent level.

Conclusion

The present study concludes that the service qualities of the omni bus services are not upto the level of expectation of the respondents especially the urban respondents. It is commonly seen in the case of basic, value added and critical service quality. The level of passengers' satisfaction is lesser among the urban respondents than among the rural respondents. The important determinants of passengers' satisfaction on omni bus services are response on customers' needs and; prompt and solitude action. The core service quality has more influence on the passengers' satisfaction among the rural respondents. Among the urban respondents, it is value added and critical service quality. The profile of the respondents especially age, level of education, personal income, family income and occupational background plays an important role in the determination of expectation, perception and gap in service quality of omni bus services. The study infers that the levels of perception on service quality of omni bus services are not upto the level of expectation among the respondents. The gap is higher among the urban respondents because of their higher expectation from their service providers. Hence, the service providers are advised to examine the gap service quality gap at various customers' segment and formulate suitable strategies to fill up the gap initially. Then they are advised to enrich their service performance in order to generate service quality since the cost of retaining existing customers is lesser than the cost of attracting new customers.

References:

1. Robinson, J (2003), "Following the Quality Strategy: The Reasons for the Use of Quality Management in UK Public Leisure Facilities", *Managing Leisure: An International Journal*, 4 (4), pp.201–217.
2. Dr. D.Paul Dhinakaran, "*Community Relations Of Tamilnadu State Transport Corporation Ltd*" *International Journal Of Research And Analytical Reviews* (E ISSN 2348-1269, print ISSN 2349-5138) Special Issue March 2019.
3. Sudip K. Roy and R.N. Datta (2005), "Ranking of Public Transport Modes According to the Characteristics of Abstract Nature–Case Study Kolkata", *Indian Journal of Transport Management*, April – June, p.136.
4. Dr. D.Paul Dhinakaran, "Passengers impression towards Tamilnadu State Transport corporation" *A Journal of road Transport*, (ISSN: 2394-2495) Volume I, Issue X, January-March 2017, P.1-10.

5. Arawati Agns, Sumita Barker and J. Kandampully (2007), “An Exploratory Study of Service Quality in the Malaysian Public Service Sector”, *International Journal of Quality and Reliability Management*, 24 (2), pp 177–190.
6. Ramamoorthy, K., and Ponnuraj, S., (2001), “Passenger Perception on Omnibus Services–An Analysis”, *Indian Journal of Transport Management*, October–November.
7. Robinson, J (2003), “Following the Quality Strategy: The Reasons for the Use of Quality Management in UK Public Leisure Facilities”, *Managing Leisure: An International Journal*, 4 (4).
8. D.Paul Dhinakaran, “Passengers’ Perception towards Service Quality in Tamilnadu State Transport Corporation (Kumbakonam) Limited, Kumbakonam” *Asia Pacific Journal of Research*, (ISSN: 2320-5504,)Volume I, Issue XIII, January 2014, P.170-181.
9. Shajahan, S., (2005), “A Study on the Level of Customers Satisfaction on Various Modes of Banking Services in India”, *The ICFAI Journal of Bank Management*, 4 (1), February.
10. Vijayalakshmi Nambiar (2001), “A Study of Service Quality of MSRTC as Perceived by Passengers In and Around Pune”, *Indian Journal of Transport Management*, March.