



Attitude of the Passengers Towards Mini Bus Services

KEYWORDS

Transport, Minibus, Road Ways

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ABSTRACT

India is a land of villages, people living in rural areas and in interior parts of the towns and cities was not facilitated with the adequate transport. The rural people have to go to the nearby towns for various purposes. The state transport services in rural areas do not meet all the requirements of the rural people upto their expectation. They are unable to play the hire charges of auto rickshaws and other hired vehicles. In order to overcome such difficulties, the Tamil Nadu Government has introduced minibus services. This is introduced mainly for the purpose of linking the people living in unserved rural areas to certain parts of neighboring towns. These buses are operated only by the private parties and the fare is fixed by government. In the modern era, the minibus services are unavoidable. They render valuable services to the passengers. They help to fulfill the ambitions of the father of the nation, Mahatma Gandhiji once said that the village should be improved if at all India is to be improved to a large extent. This study comprise the southern districts of Tamil Nadu, the structured interview schedule has been prepared to assess the attitude of passengers. For analysing the attitude, 300 persons were selected by using convenience sampling. Besides, in order to assess the perception of the passengers different techniques/tools have been used. The Friedman Test has been used to assess the opinion regarding the availability of physical facilities, the result of this test is that there is some association between level of Job satisfaction and the physical facilities the Chi-Square test is used to analysis the safety aspects of this minibus. The result is that the sex and occupation influence level of attitude towards safety aspects minibus services and the marital status, age, educational qualification, and monthly income have no significant relationship. The K.S. test has also been used to analysis the opinion about social responsibilities of the operators and crew. The result of this test is that these is some differences about importance of rating given the respondents about unlimited stop, providing special seats for deserving passengers, flexibility in the services and so on.

INTRODUCTION

Transport plays an important role in every stage of human civilization. The development of various sectors of the economy largely depends on transport. In modes of transport, transport industries find changes and introduce different types of vehicles in road transport. Minibus services are one among them. This service has been assuming growing significance not only among rural folks but also among town dwellers. This enshrining role played by minibus services is due to two distinct features namely service in unserved rural areas and reasonable fares.

As far as India is concerned, the rural population has less transport facilities when compared to the urban population. But after the introduction of minibus services, it gives the interior coverage to villages and it has a pivotal role to play. But the minibus services meet the needs of these poor people.

In this paper, an attempt has been made to analyse the socio-economic background of the sample passengers. Opinion regarding the availability of physical facilities, opinion about the safety aspects of this bus, opinion about the behavior of the crew, opinion about the social responsibilities of the operators/crew and so on.

2. REVIEW OF LITERATURE

The review of literature comprises references. All of them may not be directly linked to minibus services, but they discuss issues connected with the transport

M.V. Bagade and P.G. Patankar,¹ in their study, "Road Passenger Transport –Key to Profitability" have suggested making efforts to improve three parameters such as vehicle productivity, occupation ratio and manpower productivity to achieve higher profits, ensuring better financial health of the organisation for better services to the common man.

D.T. Hartgen and Tanner,² in their study, "Investigations of the Effect of Traveller's Attitude in Model of Mode Choice Behaviour", proved that the attitudes of commuters to specific transport qualities such as comfort and convenience could be used to measure differences in travel alternatives similar to quantitative measures such as travel and cost.

Patankar Vyankatesh,³ studied the relationship between growing sizes of cities and the pattern of inter-urban transportation as a business proposition in specific urban areas.

P.G. Patankar,⁴ in his study, "Quality in Road passenger Transport" stressed the quality in the service sector, especially, the road transport. He prescribed certain parameters to judge the quality of service offered by the transport undertakings such as punctuality, reliability, passenger amenities and comfort, incidence of breakdown, accidents and nature and quantum of public complaints. He concluded with an appeal to the state Transport undertakings to uphold the motto, service to Travellers'.

P.G. Patankar,⁵ in his study titled, "Road Passenger Transport in India" has analysed the operational efficiency and financial performance of State Road Transport Corporations. He had measured the operational economics by taking into account the difference between the revenue and cost, the problem of uneconomic fares and unlimited financial resources.

Though many attempts have been made to study the various aspects of transportation, no attempt has so far been made to study the attitude of the passengers towards minibus services. Hence, the present study.

OBJECTIVES OF THE STUDY

The following are the important objectives:

1. To analyse the socio-economic background of the passengers.
2. To assess the opinion regarding the availability of physical facilities
3. To study the opinion about the safety aspects of this bus.
4. To analyse the opinion about the behaviour of the crew.
5. To assess the opinion about the social responsibilities of the operators/crew.

METHODOLOGY AND SAMPLING DESIGN

The study is an empirical study based on survey method. An interview schedule was prepared separately for assessing the opinion of the passengers. The sample of the study comprises the southern districts of Tamil Nadu. There were 3925

buses that plied in Tamil Nadu and only 1036 buses plied in the sample area of the Southern Districts of Tamil Nadu during 2004-2005. Table 1 shows the details of the sample respondents.

TABLE 1
Details of Sample Respondent

Sl. No.	Name of the Districts	Total. No. of Buses Plied During 2004-05	No. of Buses Selected as Sample	No. of Passenger Selected as Sample
1.	Kanniyakumari	243	27	54
2.	Tirunelveli	211	24	48
3.	Tuticorin	171	20	40
4.	Virudhunagar	122	14	28
5.	Sivagangai	60	7	14
6.	Ramanathapuram	49	6	12
7.	Theni	93	11	22
8.	Dindigul	127	15	30
9.	Madurai	230	26	52
	Total	1306	150	300

In order to assess the attitude of the passengers, the researcher has firstly selected 150 buses by using proportionate random sampling. Secondly 300 persons were selected by using convenience sampling method, which is two passengers from each bus.

5. HYPOTHESES OF THE STUDY

To give specific focus to the objectives, a few hypotheses have been drawn up and tested by using appropriate statistical tools.

1. There is no association between the level of satisfaction of the passengers and the availability of physical facilities.
2. The present factors like sex, marital status, age, educational qualification, occupation and monthly income do not influence the level of attitude of the passengers towards the safety aspects of minibus service.
3. There is no relationship between the attitude of passengers and using of the minibus.
4. There is no difference in the importance of rating given by the passengers on the statements like opinion about the unlimited stop, operation of minibus service in the remote area, providing special seats for deserving passengers, flexibility in service, mentioning name of stop, the fare is cheap when compared to TNSTC bus fare, festival service trips are plied, drop at convenient place, reach in appropriate time, reach the designation easily and allow the passengers to carry more things.

FRAMEWORK OF ANALYSIS

The data were analysed by using appropriate statistical techniques such as Percentages, Friedman Test, Chi-square Test, Intensity Value and Kolmogrov-smirnov Test. These tests have been applied by using SPSS package (version 5.6)

RESULT AND DISCUSSION

Socio-economic Background of the Passengers

1. About 65.7 per cent of the passengers were males and the rest were females.
2. The married passengers were a little higher (48%) than the unmarried. The widows and widowers were 2 per cent and 4.7 per cent respectively.
3. Nearly, two-thirds of the respondents belong to the age group between 20 to 30 and 30 to 40 years of age.
4. Of 300 respondents, 265 of them were educated and 35 were illiterates.
5. As per survey made, the respondents comprises labourers, businessmen, agriculturists, professionals, government servant and others, it was noted that passengers belonged to a cross section of society.
6. About 82 per cent of the passengers belong to the monthly income of less than Rs.9000 and 18 per cent belong to the above Rs.9000 category.
7. Majority (59.3%) of the respondents were regular users of minibus services.

Opinion Regarding the Availability of Physical Facilities – Friedman Test

The physical facilities refer to the facilities inside the bus. The passengers normally expect more facilities in the bus. The operators should provide all necessary facilities to them. Space for luggage, easy boarding and alighting, sufficient leg space, noiseless window shutters, audio and video and so on are the physical facilities. The passengers get more satisfaction when there is a good physical facility available in the bus. Hence, the level of satisfaction depends on the availability of physical facilities. In order to assess this, the Friedman test has been applied. It is a non-parametric test. The null hypothesis is that there is no association between the level of satisfaction and the availability of physical facilities.

TABLE 2
Opinion Regarding the Availability of Physical Facilities

Sl. No.	Statement	Mean Rank
1.	Cleanliness in the Bus	8.59
2.	Adequate Moving Space Inside the Bus	7.45
3.	Proper Window/Shutters	6.82
4.	Adequate Provisions for Keeping Luggage	6.07
5.	Availability of Audio and Video	6.39
6.	Proper Steps	6.31
7.	Adequate Space for Standing	6.20
8.	Availability of Proper Ropes	5.66
9.	Proper Light	6.54
10.	Comfortable Seating Arrangement	6.52
11.	Distance between the Seats is Adequate	6.50
12.	Fan Facilities	4.96
	Degree of Freedom	= 11
	Calculated Value	= 243.613
	Table Value	= 19.7

As the Calculated Value of 243.613 is greater than Table value of 19.7, the null hypothesis is rejected. Hence, it is concluded that there is association between the level of satisfaction and the availability of physical facilities.

Opinion about the Safety Aspects of this Bus – Chi-Square Test

A proven track record of safety is bound to add to the positive image of the minibus services operated by particular firms, safety in travel is the concern of not only the passengers but also of the minibus operators.

Many road accidents are attributed to human failure rather than the failure of the machine. If this is a yardstick to measure the safety aspect of travel, the operators of minibuses should ensure that properly licensed and experienced drivers are at the wheel. This is part of the package of goodwill for minibus operators.

In this study, attitude of the passengers towards minibus service is divided, into three categories namely low, medium and high level. The level of attitude of passengers has been determined by the score values calculated for satisfaction by adopting the scaling technique. For the analytical purpose, the following statements have been taken into consideration to ascertain the attitude of passengers. The following statements have been used with regard to the safety aspects of this bus.

1. The speed of the bus is normal
2. There is no problem of theft inside the bus
3. Smooth driving of bus
4. All front lights are properly maintained
5. Availability of first – aid box
6. Availability of spare wheel
7. Availability of doors
8. Availability of proper windows
9. Following the traffic rules by the crew
10. Availability of hand ropes
11. Allowing limited passengers

In this section an attempt is made to study the factors influencing the safety aspects of minibus. The factors like sex,

marital status, age, education, qualification, occupation, income and regular user of minibus have been identified to study the level of attitude towards the safety aspects of minibus services.

TABLE 3
Safety Aspects of Minibus Service – Chi-square Test

Sl. No.	Factors	Results		Degrees of Freedom	Chi-square Test Result
		Calculated Value	Table Value		
1.	Sex	14.00	5.991	2	Rejected
2.	Marital Status	5.08	5.991	2	Accepted
3.	Age	3.312	9.488	4	Accepted
4.	Educational Qualification	3.0673	9.488	4	Accepted
5.	Occupation	11.684	9.488	4	Rejected
6.	Monthly Income	2.1599	9.488	4	Accepted
7.	Using Minibus	4.92	5.991	2	Accepted

Source: Primary Data

It was found that the sex and occupation influence level of attitude towards safety aspects of minibus because the calculated value is more than table value. Marital status, age, educational qualification, monthly income, and regular using of minibus have no significant relationship as the calculated value is less than the Table value.

Opinion about the Behavior of the Crew –Intensity Value

The courteous and decent behavior of the crew creates the nice atmosphere for the passengers. The tickets are to be checked by the crew politely. The other points of interaction are the playing the audio and video systems and handling of the luggage inside the buses. A gentle and fluently attitude of the crew even with an aggressive passenger adds to the image of the minibus operators.

The researcher has given ten statements in the questionnaire and asked the respondents to fill them. In order to find which the most important one is the researcher has used the Likert Five Point Scale. Likert scaling techniques is one of the techniques used to find out which one has the most positive outlook. The weightage is given for each column ranging from five to one point in order to find out the intensity value.

$$\text{Intensity value} = (SA * 5 + A * 4 + N * 3 + DA * 2 + SDA * 1)$$

TABLE 4
Opinion about the Behaviour of the Crew

Sl. No.	Particulars	SA Score 5	A Score 4	N Score 3	DA Score 2	SDA Score 1	Total Score	Average	Rank
1.	Politeness of the crew behaviour	710	304	126	50	15	1205	4.017	1
2.	Crew interested in the safety of passengers and buses	270	556	210	62	6	1104	3.680	2
3.	There is good understanding between the bus, crew and passengers	335	480	189	50	25	1079	3.597	3
4.	Crew help the passengers in boarding the bus and lifting the luggage	240	408	258	90	19	1015	3.383	8
5.	Crew do not waste time by stopping the bus unnecessarily	320	324	276	90	18	1028	3.427	6.5
6.	Avoiding quarrel with the other bus crew	265	356	294	72	24	1011	3.370	9.5
7.	Conductor gives proper change	250	456	234	76	20	1036	3.453	4
8.	Stopping at the right place	265	416	237	92	18	1028	3.427	6.5
9.	Crew consider the convenience of passengers	225	456	231	70	29	1011	3.370	9.5
10.	Waiting for the well being of the passengers	250	424	261	74	20	1029	3.430	5

Source: Primary Data

The intensity value shows that the maximum score is obtained by "politeness of the crew behaviours" followed by the safety of "the passenger and bus." The least score is obtained by "Crew consider the convenience of passengers and avoiding quarrel with the other bus crew." Hence, it is concluded that the passengers give primary importance to the "politeness of the crew behaviour" then only they can travel happily.

Opinion about the Social Responsibilities of the Operators/Crew –K.S. Test

There is binding on all business. Transport industry is not an exemption to it. The operators are held socially responsible for both the crew and the passengers. There are 11 statements given and the respondents asked to mark them against each Statement. Normally the passengers' opinion may differ. In order to analyze whether there is any difference in the importance of ratings given by the respondents on various statements, the Kolmogorow Smirnov Test (K.S. Test) has been applied. K.S. Test is a non-parametric test. It requires fewer assumptions. This test can be applied when the

sample size is more than 40. This is used to find out whether an empirical distribution agrees with an assumed theoretical one or not.

TABLE 5
Social Responsibilities about the Operators/Crew Members

Sl. No	Opinion	SA	A	NO	DA	SDA	Total
1.	No Limited Stop for the Passengers	190	58	21	24	7	300
2.	Operating in the Remote Areas	73	139	64	16	8	300
3.	Providing Special Seats for Deserving Passengers	70	95	81	32	22	300
4.	Flexibility in Service	48	109	83	37	23	300
5.	Mentioning the Name of the Stops	60	91	80	40	23	300
6.	Fare is Cheap When Compared to TNSTC Fare	49	73	111	45	22	300
7.	Special Festival Service Trips are Plieed	61	95	85	34	25	300

8.	Drops at Convenient place	48	111	83	32	26	300
9.	Reach in Appropriate time	62	105	82	29	22	300
10.	Reaches the Destination Easily	55	111	73	38	23	300
11.	Helps the Passengers to Carry More Things	58	87	98	38	19	300

Source: Primary Data

Out of 300 respondents, 190 respondents expressed 'strongly agree'. on no limited stop for the passengers, 139 respondents on 'agree on' operating in the remote areas, 95 respondents agree on' providing special seats for deserving passengers, 109 respondents 'agree on' flexibility in service, 91 respondents 'agree on' mentioning the name of the stops, 111 respondents have 'no opinion on' fare is cheap when compared to TNSTC fare, 95 respondents 'agree on' special festival service trips are plied, 111 respondents 'agree on' drop at convenient place, 105 respondents 'agree on' reach in appropriate time, 111 respondents 'agree on' reaches the destination easily and 98 respondents have 'no opinion' on help the passengers to carry more things. The researcher focuses on the above comments on the basis of the opinion about the respondents on maximum points.

The result of the K.S. Test is that there is difference about the importance of ratings given by the respondents about unlimited stop for passengers, operating in the remote areas, providing special seats for deserving passengers, flexibility in the service, mentioning the name of the stop, fare is cheaper when compare to TNSTC, special Festival trips, dropping at convenient places, arrival at appropriate time, reaching the destination easily and allowing the passengers to carry the luggage.

CONCLUSION

The importance of infrastructure for sustained economic development is well recognized. Passenger transports contribute "Consumers Service" Transport is fulfilling its true function, when it benefits the consumer. It is essential to the standard of individual consumption which is regarded the hall mark of civilization. At any of the bus services, passengers are the key ones.

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