

# A Study of Consumer Attitude towards Private Bus Transport Services in Aruppukottai

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**Abstract-**The transport system provides the basic infrastructure on which the other economic activities grow and flourish. Neither the process of industrialization nor the modernization of agriculture is possible without a well coordinate, adequate and economic transport system. In the dynamic world, private bus has played an important role. The private bus service is being used by the people for their comfortable and convenient journey. The main features of the private bus service are that, it provides a better service to the public. This chapter helps the researcher to analyze the services offered by the private bus transport services. Therefore a brief study has been made by the researcher to bring out the passengers behavior of private bus transport services in Aruppukottai.

## I. INTRODUCTION

A well unit transport system is a basic necessity for all round and sound development of the country. It combines different components and different sectors of the company at all points of development. It is the basic ground on which the edifice of economic development is created. Infact, a well developed transport system has become a symbol of civilization "if agriculture and industry are the body and bones of national organism, transport and communication are its nerves. In the dynamic world, private bus has played an important role. The private bus service is being used by the people for their comfortable and convenient journey. The main features of the private bus service are that, it provides a better service to the public. Hence the selected this topic for his research. The importance of transport is increasing everyday with the new developments in the fields of ways, means, motive power, engineering, techniques, organizations, legal enactments and social, economic and political factors. In those olden days roads did not exist and people used to walk along the tracks. As a result of progress in trade and commerce, pack animals began to be used. Even the stage of economic development roads was not found; but wide tracks were automatically made due to the movement of hundreds of animals together. Dogs, horses, camels etc., were used as beasts to bar den; and even today in some parts of world their importance has not been diminished.

## II. STATEMENT OF THE PROBLEM

The main aim of private bus is to render services to the rural people effectively and efficiently. Aruppukottai town is famous for Agriculture ,cotton mills and weaving .It is located 49 km south of Madurai. This town belongs to Virudhunagar District. Town is very good for school level education. Lovely place to live your life. Best known for Pure Hand Loom SAREES. The small villages & towns surrounding Aruppukottai are famous for production of Jasmine flowers. So, there are large number of passengers who are coming into the town from rural areas at the same time many passengers can go out of Aruppukottai for the reason of studies and employment. Private buses are in fact connecting Aruppukottai town with the nearby villages and other places. The services of private bus are commendable by the passengers also have some grievances with the operations of private buses like maintenance of bus, driving speed of drivers, attitude of drivers and conductors, and facilities of private bus etc.Hence the researcher aims to bring out the services that which the private buses are rendering best services to the Aruppukottai people. Also the researcher makes an attempt to analyze the problems faced by the passengers and private bus operators like competitors, government bus operators, also students, drunkards, village peoples etc.,

## III. SCOPE OF STUDY

The researcher attempts to study the passenger's attitude towards the services of the transportation. The study also deals with the problems of private bus transport from the point of view of passengers like drunkards, students to private bus operators.

## IV. METHODOLOGY

For the purpose of this study both primary data and secondary data have been used.

### *Sampling design*

The universe of the study is the public at large, as now a day there is no one who does not use the transportation system. Hence, sample study is only feasible.

Therefore judgment random sampling technique has been adopted to select the respondents. Hence the researcher has contacted 80 for her research. The investigator has interviewed each and every respondents individually.

**Statistical tools**

The information collected from various respondents have been analyses, by using the statistical tools Chi-square Test and scaling.

**Hypotheses of study**

The study to test the following hypothesis in line with the objectives of the study:

1. There is no significance difference between income level of the respondents and frequency of travel in private bus.
2. There is no significant association between monthly income level of respondents and spending amount of travel cost per month in private bus.
3. There is no significant association between the different age group of respondents and opinion about the mode of private bus driving.

**V. RESULTS AND DISCUSSION**

Out of 80 repondents majority (51%) of the respondents are male, (37.50%) of the respondent belongs to the age group of less than 25 years, (35.72 %) of the respondents has completed post graduate degree,(50 %) of the respondents lives in rural areas, (25 %) of the respondents are students.

**Chi-Square Test**

Chi-square test is applied to know the influences of socio-economic conditions of respondents on the factors considering before taking purchase decision. The following formula has been used.

$$\text{Chi-square test } (\chi^2) = \sum \frac{(O-E)^2}{E}$$

The respondents have been classified into three categories like high, medium, low level of opinion on the basis of total scores obtained by each respondent.

**Hypothesis**

In order to test the influences of socio-economic conditions on factors consider before taking the purchase decision the following null hypothesis has been frame. “There is no association between the Literacy Level of respondents and purchase decision of the respondents“.

For testing the above hypothesis  $\chi^2$  value was calculated. The calculated value of  $\chi^2$  was compared with the Table value of  $\chi^2$ , located from  $\chi^2$  Table for the desired level of significance on the given degrees of freedom. If the calculated value of  $\chi^2$  is less than the Table value of  $\chi^2$ , it conforms to the hypothesis. In case the calculated value exceeds the Table value the null hypothesis is rejected. For the purpose of this analysis, 95 per cent level of confidence has been adopted. The Table value of  $\chi^2$  is denoted as  $\chi^2_{0.05}$  at 95 per cent level of confidence (or) 5 per cent level of significance. The calculated value is denoted as  $\chi^2$

**Test of Hypothesis**

*“There is no significant association between the income level of the respondents and the frequency of travel in private bus”*

Hence an attempt has been made to analyses whether there is no significant association between the income level of the respondents and the frequency of travel in private bus. For this purpose a Chi-square Table has been prepared. Table 1 shows the income level of the respondents and frequency of travel.

TABLE I OBSERVED FREQUENCY (O)

S. No.	Income level	Frequency of travel				Total
		Daily	Frequently	Occasionally	Rarely	
1	Less than Rs.10,000	6	2	5	5	18
2	Rs. 10000 to Rs.20,000	14	1	2	2	19
3	Rs.20,000 to Rs. 30,000	6	1	7	9	23
4	Above Rs.30,000	10	1	2	7	20
	Total	36	5	16	23	80

Source: Primary Data

In order to test income level of the respondents and the frequency of travel in private bus, Chi-square test is applied. Table 3 shows the workings of the chi-square test

TABLE II EXPECTED FREQUENCY (E)

S. No.	Income level	Frequency of travel				Total
		Daily	Frequently	Occasionally	Rarely	
1	Less than Rs.10,000	8	1	4	5	18
2	Rs. 10000 to Rs.20,000	9	1	4	6	20
3	Rs.20,000 to Rs. 30,000	10	1	5	6	22
4	Above Rs.30,000	9	1	4	6	20

TABLE III CHI-SQUARE TABLE

O	E	(O - E)	(O - E) <sup>2</sup>	(O - E) <sup>2</sup> / E
6	8	2	4	0.5
2	1	1	1	1.00
5	4	1	1	0.25
5	5	0	0	0
14	9	5	25	2.78
1	1	0	0	0
2	4	2	4	2.00
2	6	4	16	2.67
6	10	4	16	1.60
1	1	0	0	0
7	5	2	4	0.80
9	6	3	9	1.50
10	9	1	1	0.11
1	1	0	0	0
2	4	2	4	2.00
7	6	1	1	1.67
Total	80			15.37

$$\chi^2 = \sum (O-E)^2 / E = 15.37$$

$$\begin{aligned} \text{Degree of freedom (V)} &= (r-1) \text{ c-1} \\ &= (4-1) (4-1) \\ &V = 9 \end{aligned}$$

Table value 5% level = 16.9

**VI. RESULTS**

Since the calculate value (15.37) is less than Table value at 5% level of (16.9).The null hypothesis is accepted. Here it is concluded that there is no significant relationship between income level of the respondents and frequency of travel.

Further the researcher has analysed and revealed that majority (95%) of the respondents say that the private bus

services are available in their area, (45%) of the respondents has travelled in the bus daily, (36.25%) of the respondents has traveled in private buses for going to the college, (33.75%) of the respondent travel daily due to traveling in limited stop, (40 %) of the respondents has traveled occasionally due to over rush in their buses,(37.50%) of the respondents have opined that private buses are rush during morning hours.

TABLE IV OBSERVED FREQUENCY (O)

S. No.	Income level	Spending amount of travel cost in private bus transport				Total
		Less than Rs.500	Rs.500 to Rs.1000	Rs.1000 to Rs. 1,500	Above Rs. 1,500	
1	Below Rs. 10,000	7	2	6	3	18
2	Rs.10,000 Rs.20,000	6	5	2	6	20
3	Rs.20,000- Rs. 30,000	20	5	2	5	23
4	Above Rs. 30,000	9	3	2	5	19
	Total	34	15	12	19	80

Source: Primary Data

**Test of Hypothesis**

*“There is no significance difference between the Income level of respondents and spending amount of travel cost per month”*

Hence an attempt has been made to analyses whether there is no significant association between the monthly income level of respondents and spending amount of travel cost per month in private bus transport services. For this

purpose a Chi-square Table has been prepared. Table 4 shows the monthly income level of respondents and spending amount of travel cost per month.

In order to test whether there is no significant association between monthly income level of respondents and spending amount of travel cost per month in private bus transport service Chi-square test is applied. Table 5 shows the workings of the chi-square test.

TABLE V CHI-SQUARE TABLE

O	E	(O – E)	(O – E) 2	(O – E) 2/ E
7	7.65	0.65	0.42	0.055
2	3.38	1.38	1.90	0.563
6	2.7	3.3	10.89	4.033
3	4.28	1.28	1.64	0.383
6	8.5	2.5	6.25	0.735
5	3.75	1.25	1.56	0.417
2	3	1	1	0.333
6	4.75	1.25	1.56	0.329
12	9.78	2.22	4.93	0.504
5	4.31	0.69	0.48	0.110
2	3.45	1.45	2.10	0.609
5	5.46	0.46	0.21	0.039
9	8.08	0.92	0.85	0.105
3	3.56	0.56	0.31	0.088
2	2.85	0.85	0.72	0.254
5	4.51	0.49	0.24	0.053
Total	80			8.61

$$\chi^2 = \sum (O-E)^2 / E = 8.61$$

$$\text{Degree of freedom (V)} = (r-1) c-1$$

$$= (4-1) (4-1)$$

$$V = 9$$

Table value 5% level = 16.9

Since the calculate value (8.67) is less than Table value at 5% level of (16.9). If the null hypothesis where accepted. Here it is concluded that there is no significant relationship between income level of respondents and spending amount of travel cost in private bus transport service.

Out of 80 respondents majority (66.25 %) of respondents feel that private bus fare is medium, (91.25%) of respondents opine that the present width of bus entrance is convenient, (57.14%) of the respondents say that the steps are inconvenient, (95%) of the respondents say that the window, shelter and roofing facilities are good, (75%) of the respondents have complained that there is no entrance curtain in the buses, (95%) have opined that the lighting facility is sufficient, (50%) of the respondents say that Audio/ video facilities are available in the buses, (72.50 %) of the respondents opinion is private bus facilities are good,(86.25%) of the respondents are satisfied with the

number of private buses running in their area,(55%) of respondents feel that private bus driving speed is very high.

**Test of Hypothesis**

*“There is no significance difference between the Different age group of respondents and opinion about the mode of private bus driving”*

The opinion about the mode of private bus driving can be differing from one another among different age group of respondents. Hence an attempt has been made to analyses whether there is no significant association between the different age group of respondents and opinion about the mode of private bus driving. For this purpose a Chi-square Table has been prepared. Table 6 shows the age group of respondents and mode of driving speed.

TABLE VI OBSERVED FREQUENCY (O)

S. No.	Age	Opinion about the mode of private bus driving				Total
		Careful	Careless	High speed	Cautious	
1.	Below 25 years	10	1	6	2	19
2.	25 – 35 years	6	4	7	2	19
3.	35 – 45 years	6	1	3	3	13
4.	45 – 55 years	7	4	7	2	20
5.	Above 55 years	2	4	1	2	9
	Total	31	14	24	11	80

Source: Primary Data

In order to test whether there is no significant association between different age group of respondents and opinion about the mode of private bus driving, Chi-square test is applied. Table VII shows the workings of the chi-square test.

TABLE VII CHI-SQUARE TABLE

O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
10	7.36	2.64	6.97	0.95
1	3.33	2.33	5.43	1.63
6	5.7	0.3	0.09	0.02
2	2.61	0.61	0.37	0.14
6	7.36	1.36	1.85	0.25
4	3.33	0.67	0.45	0.16
7	5.7	1.3	1.69	0.30
2	2.61	0.61	0.37	0.14
6	5.04	0.96	0.92	0.18
1	2.28	1.28	1.64	0.72
3	3.9	0.9	0.81	0.21
3	1.79	1.21	1.46	0.82
7	1.75	0.75	0.56	0.07
4	3.5	0.5	0.25	0.07
7	6	1	1	0.17
2	2.75	0.75	0.56	0.20
2	3.49	1.49	2.22	0.64
4	1.58	2.42	5.86	3.71
1	2.7	1.7	2.89	1.07
2	1.24	0.76	0.58	0.47
Total	80			11.92

$$\chi^2 = \sum (O-E)^2 / E = 11.92$$

$$\begin{aligned} \text{Degree of freedom (V)} &= (r-1) \times (c-1) \\ &= (5-1) \times (4-1) \\ &= 4 \times 3 \\ &= 12 \end{aligned}$$

Table value 5% level =21

Since the calculate value (11.92) is less than Table value at 5% level of (16.9). If the null hypothesis where accepted. Here it is concluded that there is no significant relationship between different age group of respondents and opinion about the mode of private bus driving.

Out of 80 respondents majority (78.75%) of the respondents feel that private bus services are very good, (88.75%) of the respondents opine the buses are arriving into bus stand at exact time, (44.44%) of the respondents say that the buses are late due do coercion of TNSTC or other private buses, (73.75%) of the respondents say that private bus condition is good, (73.75%) of the respondents feel that there is no any breakdown during their journey in

buses, (47.62%) of the respondents say that breakdown is due to rush driving, (53.75%) of respondents feel that bus maintenance is good, (75%) of the respondents opine that the operation is good, (67.50%) of the respondents have suggested that to avoid careless driving, (86.25%) of the respondents say that private bus is stopped correctly at all the bus stops, (45.45%) of the respondents say that the bus is not stopped because of overcrowding.

The researcher has collected overall opinion of private bus transport services. The opinion is given in the Table VIII.

**Scaling method**

The respondents are supplied with 10 factors with 5 degree of ranking namely Highly satisfied, Satisfied, No opinion, Dissatisfied, Highly dissatisfied.

TABLE VIII OVERALL OPINION OF PRIVATE TRANSPORT SERVICES

S. No	Opinion	HS	S	NO	DS	HDS	No. Of RES
1	Bus fare	21	59	0	0	0	80
2	Bus time	23	56	1	0	0	80
3	Audio/video	34	45	0	1	0	80
4	Cleanness	30	46	4	0	0	80
5	Driving speed	20	49	3	8	0	80
6	Care / convince	14	59	6	1	0	80
7	Seating arrangement	18	54	4	4	0	80
8	Spare bus	10	57	9	2	2	80
9	Attitude of driver/ conductor	16	46	8	8	2	80
10	First Aid box	10	50	17	3	0	80

The value the overall opinion in private bus transport services. The opinions are done on the following 5 point scale.

TABLE IX RANKING OF OVERALL OPINION ABOUT THE PRIVATE BUS TRANSPORT SERVICES

S. No.	Opinion	Hs	S	NO	DS	HDS	Total	Rank
1	Bus fare	105	236	0	0	0	341	IV
2	Bus time	115	224	3	0	0	342	III
3	Audio/video	170	180	0	2	0	352	I
4	Cleanness	150	184	12	0	0	346	II
5	Driving speed	100	196	9	24	0	329	VI
6	Care / convince	70	236	18	2	0	326	VII
7	Seating arrangement	90	216	12	16	0	334	V
8	Spare bus	50	228	27	4	2	311	VIII
9	Attitude of driver/ conductor	80	184	24	16	2	306	X
10	First Aid box	50	200	51	6	0	307	IX

Source: Primary Data

After the priority assignment by the respondents it is find that Audio/ Video arrangement to top the Table and very low priority is attitude of drivers and conductors. All the other data provided in Table 3.44. Audio/ Video facilities is given top most priority by the commuters.

**VII. CONCLUSION**

At present transport services are vital for the development of the people. Their importance in the mobility of labour is a contributing factor to the economic development of the country. From the above analysis, it is clear that the private bus operators are able to render efficient services to the utmost satisfaction of the traveling public. Further, it is also observed that the passengers and the crew members are confronted with many problems. Private bus operators must try and implement the above suggestions, so that they would be in a position to render efficient services to the traveling public.

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