Passenger's Satisfaction with their Travel- Comparison of Haryana Roadways Transport Corporation and Private Buses

*Smriti, Research Scholar, MDU, Rohtak

**Dr A S Boora, Director, IMSAR, MDU, Rohtak

Introduction

The public bus transport is much more needed in metropolitan cities and it also connects different categories of people from different places. So it is very important for any city to have an effective public transportation system and the same has to be managed to face upcoming, future challenges and to ensure effectiveness in their operations, service quality to satisfy the unpredictable expectations of the passengers from different segments. Now, the major city like Gurgaon is heavily stressed to keep pace with the demand for Bus Transportation system to go with economic growth and infrastructural development. With a rise in demand for adequate public bus transportation system and increase in population size, it may create and insist on the transport sectors to have higher and good quality of transport service. But it also creates overcrowding at the bus terminus and it will be the main cause of many service-related problems.

Moreover, business is dependent upon its customers. It is a fact that no bus transport business can exist without passengers. In every bus transport service related businesses, there is a need to develop relationship with the passengers and with the service providers to satisfy passengers' day-to-day service quality requirements. The owners of the different bus transport industries compete with each other to offer maximum satisfaction to passengers. Thus passengers' satisfaction, a business term is a measure of how services are supplied by an industry to meet passengers' expectation.

Passengers' satisfaction is an indefinite and conceptual term, the meaning of which will vary from person to person and services to services. Measurement of passengers' satisfaction is too difficult since it is related to the psychological state of mind.

An attempt is made in this study to have better understanding of passengers the level of passengers' satisfaction towards services provided by both public and private sector bus transport industries. The main aim of this study is to compare the services provided by public and private sector bus transport industries and to evaluate their efficiency to satisfy the needs of the passengers in an effective way.

Review of Literature:

Need for Public and Private Transportation and its Services:

Macario (2001) proposed that for any urban mobility system to provide appropriate and effective solutions to its clients, the system should focus on the interaction between agents of

the system who act within and across the various levels of planning and control (i.e., authorities, operators, suppliers, citizens, etc.). Macario also quotes Ciuffini (1995) to emphasize the need for an adequate balance between the two different dimensions, which are:

i)   There should be a balance between the modes and means of transport.
ii)   Environmental dimension must find a configuration of urban mobility system that result in a total sum of pollution below the endurance level.

UK's Midlands's operator Trent Buses conducted a thorough research with a view to improve services (Disney,1998) and to identify the customers top-most requirements. The identified requirements of customers are given as follows: The reliability, frequency of services, friendliness, maintenance of bus interiors and exteriors, comfort, value for money, accessibility, reasonable fares, and easy to understand and remember the time schedules of service provider. If bus operators failed to deliver these four requirements, then, they were not producing value for money. Low fare was not perceived as a critical requirement by a majority of the passengers. In an added study, examination of complaints received by the Rail Users Consultative Committee (RUCC) in the UK revealed that staff attitude, reliability, punctuality, and cleanliness of the trains are the main sources of getting complaints

From passengers (Disney,1998). In India, transportation systems have also been criticized for their low quality of services which was reflected in the growing number of standing passengers, lack of punctuality, irregularity, and substandard amenities (Mishra and Nandagopal, 1993).

Transportation and customer satisfaction

Edvardsson (1998) examined the written customer complaints to Goteborg Regional Public Transport in Sweden and conducted personal interviews with customers who made a complaint earlier, and it was found that the staff attitude to be the main issue of given complaints. While conducting interviews, absence of punctuality is also an other cause of receipt of complaints. This indicates that customers' view on lack of punctuality is quite unfortunate but it is unavoidable because of road congestion.

The Government of India recognizes the importance of the private sector in bridging the resource gap in investment and improving the operational and managerial efficiency in the transport sector in order to address capacity constraints and deficiencies in the existing transport infrastructure and meet rapidly growing demand. The Government is actively pursuing policies to promote private sector involvement in the development of transport infrastructure and services (Puri, 2003).

Aworemi et al. (2008) conducted research on public transport and private transport system and suggested that socio-economic factors play an important role. In addition, further studies were also conducted by many researchers and all of them found that the customers expect

quality service either from private or from public organizations. If they improve quality then passengers will be satisfied, and the same would be helpful in gaining reputation and also to earn profit for their business. Many researchers found that, in transportation sector, service quality plays an important role with the following elements such as stability, capacity, and security. Feedbacks from passengers are also important to enhance service quality and to provide what the customers want.

Andreassen (1995) stated that customers' level of satisfaction or dissatisfaction in public transport system mainly depends on the following factors: ticket fare, range of ticket fare system and, conditions of platform and bus station. He also concluded that the public transportation is a region with lesser usage due to the rate of gap between customer needs and the services provided. In addition to the above findings, he also insists that the reliability and convenience are the main factors in deciding the level of customers' satisfaction. Therefore, reliability and convenience in transportation sector increase the level of customer satisfaction. Reliability, time taken to reach destination and the level of comfort are considered to be the main factors which creates impact on the level of customers' satisfaction. The passengers who have used buses for professional purposes will consider time as an essential aspect in bus travel. The study discovered that the fare for bus ticket is not significant and it does not create any direct impact on customer satisfaction (Beira and Cabral, 2007).

According to Anderson et al., (2007) dissatisfaction of the customers regarding services leads to failure in operation. As per this study, the main reason for operation related failure is delay of transportation which leads to dissatisfaction. They also observed that the customers have the tendency to blame the service provider for everything that happens, even if the failure in service has an effect on external factors. It is observed that communication between the customers and working personnel has a major impact, and create satisfaction. The study also revealed that the operation related failures also reduce the level of contact between them. Therefore, the result of lack of contact leads the customers to become biased against the workforce of a public transportation.

Dziekan and Kottenhoff (2007) found that at the bus stop, information displays influence customer satisfaction. In addition, it has the optimistic psychological effects and decreases uncertainty and stress as customers know the actual departure time. Information displays also increases the sense of security among customers especially at night. Finally, the displayed information increases the comfort of customers when they make a trip. It also increases, creates regulated travel behavior among the passengers and passengers can also use their waiting time constructively and for their effective travelling. In addition to all the above findings, it also aids transit customers to get information on the mode of transport.

Tyrinopoulos and Antoniou (2008) showed that service frequency, bus cleanness and service coverage area are the important aspects for customer satisfaction followed by waiting conditions and neatness, particularly in buses.

Gopal and Cline (2007) stated that on one hand, the importance of 'Customer Relationship Management' in public transportation is the key factor for customers' decisions. Customer Relationship Management is an important technique help to the management to evaluate their customers' behavior, and to provide quality services. The study also insists on the behavior of working personnel and specifically the bus drivers' behavior, service frequency, reliability of the service provider , time consumption and mainly waiting time to be the most essential factors affecting customer satisfaction.

Need for the study:

The decision of the State Government to add new routes to the draft transport policy has attracted sharp criticism from the roadways unions, who are now up in arms against the Government for privatization of the roadways. This trend of severe competition between private bus operators and Haryana Transport is reflected very much in certain routes as many private operators run their buses in the same route along with government corporation buses. The extent of such competition is generally more in profit making routes.

The passengers have opportunity to travel in the buses operated by both private operators and government corporations. Therefore, comparative evaluation of passenger transport service extended by private operators and government corporation buses should be made. Such a comparative evaluation is expected to reveal the extent of satisfaction derived by the passengers in both the buses and also the areas for improvement in the bus services operated by both private sector and government sector.

Objectives of the study:

Following are the objectives of the study:

    a) To find out if extent of satisfaction for State buses travelers and the private bus travelers is same or different.

    b) To Classify the passengers under relevant categories based upon their degree of satisfaction

Research Methodology:

Satisfaction of the passengers on the various aspects of their travel is abstract and qualitative. It cannot be measured directly. It can be measured only indirectly through their opinions or responses to various aspects of their travel. A scale by name "Passenger Satisfaction Scale" has been constructed to measure the level of satisfaction of each passenger respondent. The scale is a Likert type-five points scale containing 40 items relating to the various aspects of travel. These 40 items have been grouped under five dimensions as given below, with the number of items under each head in brackets.

1.   Passenger Comforts (10)
2.   Punctuality and Regularity (10)
3.   Safety and Reliability (6)
4.   Crew Related .Satisfaction (6)
5.   Social Responsibility (8).

The responses of the respondents to the items have been recorded on five degrees (0-4) on satisfaction where "0" signifies most dissatisfied and "4" most satisfied. Thus the Passenger Satisfaction Scale has maximum score of 160 (40x4). The respondents have been grouped in

three groups, based on their level of satisfaction as (1) Low, (2) Medium, and (3) High. Passengers with less than 25 per cent of the total scores (0 to 40 scores) have been grouped

Variation in Passenger Satisfaction of Respondents between HRTC and Private Buses					
Bus Operator	Average Satisfaction Score (ASS)	Range	No. of Respondents		
			Above ASS	Below ASS	TOTAL
HRTC	102.8	48-146	237	163	400
Private	94.7	12-128	134	266	400

into 'Low Satisfaction' category, passengers with total score between 26 and 75 per cent (41 to 120 scores) under 'Medium Satisfaction' category and the respondent with above 75 (above 121 scores) per cent of the total scores in the 'High Satisfaction' category.

Analysis:

H01: There is no significant difference between the extent of passenger satisfaction in HRTC and private buses:

Researcher has compiled the passenger's satisfaction score in Table 1.1. It is easy to understand that passenger satisfaction scores of the respondents range from 48 to 146 for HRTC bus operation and their average satisfaction score is 102.80. Out of 400 respondents, 237 respondents have their respective satisfaction scores above the average and 163 respondents below the average. As the average passenger satisfaction score (ASS) is 102.8 out of the maximum of 160, it can be inferred that the Passenger Satisfaction with regard to HRTC bus operation among the commuters in Haryana are satisfactory.

Table 1.1

It has been observed that the Passenger Satisfaction Scores of the sample respondents in private buses is 94.7 and the individual scores range from 12 to 128. The number of respondents above the average satisfaction score were 134 and 266 respondents were below the average satisfaction score. As the average satisfaction score is 94.7 out of the total score of 160, it is inferred that commuters are satisfied with regard to private bus operations too. *However, as the mean satisfaction score is higher for HRTC buses than that for private buses it can be inferred that the respondents are relatively more satisfied with their travel in HRTC buses than in private buses.*

In order to establish whether this difference is significant or not, 't' test was applied to test the hypothesis.

Table 1.2

Differences in Passenger Satisfaction between HRTC and Private Buses: 't' test				
No. of Respondents	Differences			
	Mean	Std. Dev.	t-value	Sig.
400	8.1	14.6	3.78	0.03

Researcher has also used the t-test to ascertain the significance of the difference in the average satisfaction scores between HRTC and private buses. The mean difference and standard deviation are 8.1 and 14.6 respectively. The t value comes to be 3.78 and it is significant ($p \leq 0.05$) at 5% level of significance.

Hence, test reveals that the average satisfaction for the passengers of both HRTC and private buses is not same.

Classification of passengers:

The respondents were classified into three groups (Table 1.2) viz., 1. Low Satisfied 2. Medium Satisfied and 3. High Satisfied; on the basis of their individual Passenger Satisfaction Scores.

Table 1.3

Extent of Passenger Satisfaction of the Respondents		
Level of Satisfaction	**HRTC**	**Private**
Low	34	49
Medium	319	328
High	47	23
Total	400	400

In the case of HRTC buses, out of 400 respondents, 34 passengers come in the category of "low Satisfaction". There are 319 respondents in the 'Medium Satisfaction' group and 47 respondents in the 'High Satisfaction' group. It is easy to understand that in case of HRTC, the satisfaction level of most of the passengers is medium. It is an important finding.

With regard to private buses, out of 400 respondents, 49 respondents come in "low Satisfaction", 328 respondents are in 'Medium Satisfaction' group and 23 respondents are in 'High Satisfaction' group. It is easy to understand that in case of private buses, the satisfaction level of most of the passengers is medium.

Thus, one may infer that the satisfaction level of most of the passengers in both HRTC and private buses lies in "Medium satisfaction" category.

Conclusion:

It is too difficult to any service sector to satisfy its customers and it is a known fact,that everyone is aware that it is a complex task or process to satisfy the different categories of bus passengers and other kind of transport sectors too. But it is mandatory for the transport sectors to satisfy their passengers to retain them and make them to avail the bus transport services of a particular service provider for a long time and to continue its services for the next generation and also for their future survival. But all these objectives will be achieved if the service providers are able to find or identify the attitude, psychology, pre-travel expectation and post-travel opinion of the passengers who prefer any service provider at their convenience. It is also necessary for the bus transport service providers to identify taste,

preferences, usage pattern, different levels of age, level of income of the passengers to assess their expectation level.

The study on Passengers' Satisfaction is vital for any transport operator, as this would bring out the state of affairs of the service they provide to their passengers which may facilitate them to formulate their policy, rearrange their schedule and trips and other service conditions, so as to enhance the level of passenger satisfaction and thereby secure the patronage of the public at large. The study of passengers' satisfaction in this paper reveals that the passengers are satisfied with the operation of buses by public (HRTC) and private sector in Haryana. However, the passengers are relatively more satisfied (but statistically the difference is insignificant) with public sector bus operation, namely HRTC, than the private sector operation.

Limitations of the study:

i)   Samples are taken only from the respondents of Gurgaon district due to time and financial constraints. .

ii)   The researcher focuses and collects the data only from the respondents who are able to understand and to give their answers for the questions asked for this research work.

Future scope of study:
In future other scholars may focus their work on finding the relationship between passengers' satisfaction and various operational aspects of bus operations. Researchers may also identify various factors which influence passengers' satisfaction. Also, in future the study may be conducted at the state level and national level against the present study which is conducted in Gurgaon district only.

Expected Contribution From The Study :
For Transport Sectors:

The study on travel behavior of the passengers' towards the bus transport services is important to understand the level of satisfaction and to suggest better strategic decisions to bus transport service providers of both private and public sector. If the bus transport service providers understand the travelling behavior of the travelers or passengers', then they are able to predict how passengers' are likely to react towards various circumstances during their travel and how they can shape up their travelling schedules and travel and service quality strategies accordingly. Further, the study also helps in identifying measures to be taken to improve the standard of existing practices of both bus transport industries. Study on passenger satisfaction, attitude, travel-related expectations of the passengers' and post-travel opinion may help in the formulation of policies with regard to passengers' satisfaction,

creating new ideas in fare fixation, giving quality service to the passengers' as well as developing promotional strategies.

For the Government
The study also helps the Government in providing good quality services to the passengers' as well as to the other related bus transport sectors and to enable it to understand what could be the expectations of the passengers' like frequency in operating buses, fare fixation, service quality, increasing passenger satisfaction, providing basic facilities in bus terminus and boarding point to enhance the service providers.

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