



## RELATIONSHIP BETWEEN PERSONAL FACTORS AND SATISFACTION LEVEL: A COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE BUS PASSENGERS

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### Abstract

This paper studies the relationship between various factors of personal nature like age, education, location of residence on the satisfaction level of public and private bus passengers. A scale for measuring the satisfaction of bus passengers was developed and data was collected from four hundred respondents. Results found that there exists the difference in the satisfaction level between different categories. The findings of the study will be of lot of implications for the government policy makers as well as the private players who are into the business of bus transportation.

**Key Words:** Private Bus Passengers, Public Bus Passengers, Satisfaction Level.

### Introduction

What drives satisfaction with public transport? This question has not been extensively dealt with in transport research. Instead, research is dominated by choice modeling and stated preference approaches, if cognitive perspectives are taken into account at all. However, satisfaction is an important concept that deserves further interest. From consumer research, satisfaction is known to be of great value in understanding customers' perceptions and evaluations, repeatedly showing it to be an important indicator of future customer behavior. Customer satisfaction, therefore, highlights and explains the link between what a company does (in terms of the products and services offered) and how its customers react. For public transport, this link is a key concern. In many countries, major investments are being made in public transport systems in order to make them more competitive with other means of transport, most notably private cars. New services are being developed and old ones are being improved. However, an increase in supply (qualitatively or quantitatively) will not automatically lead to a corresponding increase in demand and satisfaction. To make sure that investment really attracts the existing and potential customers expected, knowledge of satisfaction should provide policymakers and operational managers in the public transport system with valuable information. In particular, satisfaction studies can provide decision makers with information about what customers consider important, as well as information about how the existing public transport service is perceived as performing in these dimensions. For example, previous studies in public transport have shown that employee behavior is an important consideration for the traveler. Low satisfaction scores in this area indicate that investments should be directed towards staff training and incentives related to employee behavior.

In transport research, satisfaction is sometimes touched upon from a policy perspective. There are also a small but growing number of empirical studies that illustrate the concept using data from public transport users, as well as from private car users. There are also studies where satisfaction is used as an "effect" variable, e.g. when improvements in the public transport system are to be evaluated. Attributes like reliability, frequency, comfort, information, driver behavior, and cleanliness are shown to be key elements of public transport user satisfaction. These and similar studies have made important contributions to our understanding of what public transport satisfaction is, and what is actually satisfying. In this paper, we argue that the increased use of customer satisfaction in public transport warrants a similar discussion of the concept, taking into account insights from general satisfaction research, as well as the specific conditions of the sector.

### Review of Literature

#### Customer Satisfaction in Bus Transport

According to Oliver (1997), satisfaction is defined as the customer's fulfillment. It is a judgment made by the customers towards a product or service feature, level of consumption including the levels of under or over-fulfillment. Need fulfillment is also discussed and it is a comparative process which raises the level of satisfaction



and responses. If any gap occurs, then it will lead to dissatisfaction i.e., Positive feeling increases or maintains satisfaction and negative feeling create dissatisfaction.

Gatersleben and Uzzell (2007) investigated adverse experiences of daily travel. Questionnaires were sent to conduct survey among university employees. The results revealed that travelling in car as well as in public transport can be stressful because of delays caused by the traffic congestion. Public transport was perceived as unpleasant and public transport users expressed negative attitude toward their daily travel. The study shows the negative attitudes of the respondents and dullness among passengers is caused by too much of delay and waiting time. The researcher also suggested that the public transport is stressful due to unpredictability and longer travel times.

Fujii et al. (2001) conducted an investigation in Osaka (Japan) during a temporary closure of freeway that connected Osaka and Sakai City. The survey questionnaires were distributed at three tollgates. Through this study, it is found that the closure of the freeway increased public transport usage. It is also found that the expected travel time by public transport was also overrated by automobile travelers. Third, after some time based on the past experiences, the overestimate of travel times of public transport was also corrected. And finally, the people who corrected their travel time continued to use the same public transport when the freeway was reopened.

Van Vugt et al. (1996) conducted an investigation on motivational factors which lead to making decisions to travel by car or by public transportation modes. 192 employees participated and filled out a given questionnaire which contains questions related to social value orientation, the commuting situation and a series of post experimental questions. The findings provided strong evidence for the conclusion that the individuals prefer options saving travel time and need more trips of public transport.

Fellesson and Friman (2008) conducted a study which includes transnational comparison of customers' public transport, perceived service satisfaction in eight cities (Stockholm, Barcelona, Copenhagen, Geneva, Helsinki, Vienna, Berlin, Manchester and Oslo) in Europe. The result showed general factors such as road traffic, reliability and information; bus and bus stop design which make the customers more comfortable and make them feel happy with positive travel experience, staff skill and their knowledge, positive attitude of customer; and safety not only in bus and bus stop but also from traffic accidents. Further, it was concluded that the change in existing pattern of public transport technology and infrastructure may also reflect the change in individual's attitude and behavior.

Eboli and Mazulla (2007) investigated the service quality attributes which are essential to create customer satisfaction in bus transit service. Respondent were asked to rate the importance and satisfaction with 16 service quality attributes such as bus stop availability, route status, frequency in bus operation, reliability, bus stop status and facilities, overcrowding, cleanness, fare, information schedules, service promotion, safety on board, individual security, working personnel, complains and grievances, environmental protection and bus stop maintenance. The study found that the above stated variables are more important for creating global customer satisfaction.

Beirao (2007) also conducted in depth interviews in Porto to find out dissatisfying factors. Customers reported waste of time, too much of crowd, lack of comfort, uncertainty, lack of control, absence of reliability, too much of waiting time and no flexibility in changing bus route to avoid traffic congestion.

Friman (1998) examined the impact of quality improvements in public transport on customer satisfaction and frequency of perceived negative critical incidents. The studies were conducted in 13 regions in Sweden to identify quality improvements in public transport. Data were collected before and after the implementation of quality improvement program. Comparing passenger responses towards the offered services, it is found that passengers' responses are the better way to understand the type of quality improvement which leads to customer satisfaction. Finally it was concluded that the customer satisfaction is influenced by service quality improvements and it applies only to a limited extent. In addition, the effect was adverse among respondents who got less satisfaction and who often faced negative critical incidents after quality improvements. Hence, service quality improvements alone are not enough and do not always increase customer satisfaction. Thus, quality improvement is not only the criteria to



determine the success of public transport but it also includes a level of quality attached with the perception of the service.

From the above findings the service quality attributes are divided into four broader categories. They are reliability, treatment from working personnel, simplicity in passing information and design. Out of the above said subdivisions, the reliability of the system includes punctuality, travel time, and reliability in the service. The second sub division includes driving skills and employee knowledge. Third segment consists of simplicity in passing information, service quality related information, price and availability of ticket. The final segment is related to comfort, cleanliness and safety from traffic accidents. On the other hand, the negative critical incident and customer dissatisfaction could be limitations for people who want to continue public transport usage (Friman & Gargling 2001).

The above mentioned literature reviews are collected from the previous studies and it is properly segmented to understand the meaning and concept of those studies. The early study concentrates on improving customer satisfaction, importance of public transport system and ways to increase customer satisfaction in the field of bus transport. But the present study of the researcher completely differ from the earlier concepts and the present study finds out the relationship between variables such as place of residence, age, marital status, occupation, income, pattern and frequency of travel and their level of satisfaction.

### **Need for the Study**

Movement of the people from one place to another place and the increase in population resulted in heavy demand for quick, efficient transport services. Under these circumstances, there is every possibility for deterioration of the quality of services provided by transport industries because of healthy competition. Yet, the public as well as private sector transport industries have to provide better services because it is a question of survival for them. The importance of the study is to find out answer for the question, how satisfaction level varies with the change in various demographic factors.

### **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 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

This part of analysis aims at relating the passengers' satisfaction with their social and economic factors such as place of residence, age, sex, marital status, income, education, occupation, purpose of travel, distance travelled, frequency of travel and owning personal vehicle.

### Place of Residence and Passenger Satisfaction

People in urban areas enjoy more comforts and facilities than those in rural areas. Generally, the urban commuter population consists of middle class salary earners and manual workers. Their standard of living is higher than the rural commuters consisting of agricultural workers, housewives and petty traders. Therefore, the expectation of the urban commuters relating to the various travel criteria is generally higher than that of the rural commuters and hence it is expected that urban commuters would be less satisfied than the rural commuters.

It is apparent in table no 5.1 that out of 400 respondents, 271 (67.77 %) respondents were from urban areas. The average satisfaction score of the urban respondents is 106.9 (standard deviation is 21.36) for HRTC buses and 98.2 (standard deviation is 25.73) for private bus operators. Similarly, 129 (32.25%) respondents are from rural areas and their average satisfaction score is 94.2 (standard deviation is 18.31) for HRTC buses and 87.4 (standard deviation is 21.14) for private bus operators. **It may be inferred that both urban and rural passengers are more satisfied with HRTC buses than the private bus operators.** This may be attributed to various types of facilities like online ticketing, online grievance handling, luxury buses and timely services etc that are being offered by HRTC to its urban passengers.

**Table 5.1: Relationship between Place of Residence and Passenger Satisfaction**

Place of Residence	No. of Respondents	Satisfaction Scores			
		HRTC		Private	
		Mean	S.D.	Mean	S.D.
Urban	271	106.9	21.36	98.2	25.73
Rural	129	94.2	18.31	87.4	21.14
	400	102.8	21.27	94.7	24.86

There were 271 urban respondents in the sample. Their average satisfaction scores for HRTC bus and private buses are 106.9 and 98.2 respectively. Similarly, there were 129 rural respondents in the sample. Their average satisfaction scores for HRTC bus and private buses are 94.2 and 87.4 respectively. Researcher has used paired Z-test as shown in table 5.2 to compare the significance of difference in respondents' satisfaction for HRTC and private bus operators. It is obvious from table 5.2 that both types of passengers are more satisfied with HRTC.

**Table 5.2: Place of Residence and Passenger Satisfaction between HRTC and Private Buses: Paired 'Z' Test**

Place of Residence	Differences in Means	'Z' Value	Sig. (p value)
Urban	8.7	4.283*	0.05
Rural	6.8	2.762*	0.05

This may be noted from table no 5.2 that for urban people difference in the mean for HRTC and private operators is calculated as 8.7 and its' corresponding Z-value comes to be 4.283 that is found to be significant at 1 % level of significance. It means that the average satisfaction score for urban respondents is significantly higher for HRTC compared to private bus operators.

Similarly, table 5.2 also reveals that for rural people difference in the mean for HRTC and private operators is calculated as 6.8 and its' corresponding Z-value comes to be 2.762 that is found to be significant at 1 % level of significance. It means that the average satisfaction score for rural respondents is also significantly higher for HRTC compared to private bus operators.



## This Is Very Important Finding That Clearly Indicates Towards the Superiority of HRTC over Private Bus Operators in Urban and Rural Regions in Haryana

### Age and Passenger Satisfaction

The travel need and the demand of the passengers may differ according to the mental attitude and maturity of the passengers. Age contributes to the level of maturity and hence there may be differences in passenger satisfaction due to age difference. The respondents have been grouped into three categories viz., 1. Young (upto 30 years) 2. Middle Aged (between 31 and 50 years), and 3. Old (above 50 years)

**Table 5.3: Relationship between Age and Passenger Satisfaction**

Age Group	No. of Respondents	Satisfaction Scores			
		HRTC		Private	
		Mean	S.D.	Mean	S.D.
Young	182.00	100.60	22.15	92.10	25.68
Middle	154.00	104.10	21.22	97.40	21.77
Old	64.00	105.90	17.96	95.60	28.43
	400.00	102.80	21.27	94.70	24.86

The average satisfaction score of the 182 young respondents was 100.6 (standard deviation is 22.15) for HRTC and 92.10 (standard deviation is 25.68) for private operators. There were 154 middle aged passengers. The average satisfaction score of the middle aged respondents was 104.10 (standard deviation is 21.22) for HRTC and 97.40 (standard deviation is 21.77) for private operators. Sample comprised of 64 old aged respondents and their average satisfaction score was 105.90 (standard deviation is 17.96) for HRTC and 95.60 (standard deviation is 28.43) for private operators.

It may be concluded that all categories are more satisfied with HRTC compared to private bus operators. It may be attributed to the various facilities being extended to the people of different age by HRTC. It may also be observed from the above discussion that the “old aged” respondents is the most satisfied category with HRTC and “middle aged” category appears as the most satisfied one with private bus operators. It is also easy to note that the average satisfaction score increases with increase in age.

**Table 5.4: Age and Passenger Satisfaction between HRTC and Private Buses: Paired ‘Z’ Test**

Age Group	Difference in Means	‘Z’ Value	Significance
Young	8.5	3.3813*	Significant at 1% level
Middle	6.7	2.7349*	Significant at 1% level
Old	10.3	2.4504**	Significant at 5% level

Researcher has used paired Z-test as shown in table 5.4 to compare the significance of difference in respondents’ satisfaction for HRTC and private bus operators. It is obvious from table 5.4 that all three types of passengers are more satisfied with HRTC.

This may be noted from table no 5.4 that for “young aged” people difference in the mean for HRTC and private operators is calculated as 8.5 and its’ corresponding Z-value comes to be 3.3813 that is found to be significant at 1 % level of significance. It means that the average satisfaction score for “young aged” urban respondents is significantly higher for HRTC compared to private bus operators.

Similarly, table 5.4 also reveals that for “middle aged” people difference in the mean for HRTC and private operators is calculated as 6.7 and its’ corresponding Z-value comes to be 2.738 that is found to be significant at 1 % level of significance. It means that the average satisfaction score for “middle aged” respondents is also





significantly higher for HRTC compared to private bus operators. It may also be noted that for “old aged” people difference in the mean for HRTC and private operators is calculated as 10.3 and its’ corresponding Z-value comes to be 2.4504 that is found to be significant at 1 % level of significance. It means that the average satisfaction score for “old aged” respondents is also significantly higher for HRTC compared to private bus operators.

Therefore, it may be concluded that the difference in the average passenger satisfaction scores between HRTC and private buses are significant for all the three age groups of respondents. HRTC is certainly performing better than private bus operators to keep happy the people from different age categories.

### Marital Status and Passenger Satisfaction

Researcher has also made an attempt to measure the passengers’ satisfaction based on the marital status of respondents. In Table 5.5 respondents have been grouped according to their marital status. Out of 400, 256 are married and 144 are unmarried. The average satisfaction score of the married respondents is 105.8 (standard deviation is 21.31) for HRTC and 95.6 (standard deviation is 25.81) for private buses. Similarly, average satisfaction score of the unmarried respondents is 97.5 (standard deviation is 20.85) for HRTC and 93.1 (standard deviation is 22.99) for private buses. It may be concluded that both the married and unmarried respondents are more satisfied with HRTC compared to private bus operators.

**Table 5.5: Relationship between Marital Status and Passenger Satisfaction**

Marital Status	No. of Respondents	Satisfaction Scores			
		HRTC		Private	
		Mean	S.D.	Mean	S.D.
Married	256	105.8	21.31	95.6	25.81
Unmarried	144	97.5	20.14	93.1	22.99
	400	102.8	21.27	94.7	24.86

Table 5.13 reveals the differences in the average passenger satisfaction scores between HRTC and private buses for both the married and unmarried people.

**Table 5.6: Marital Status and Passenger Satisfaction between HRTC and Private Buses: Paired’ Test**

Marital Status	Difference in Means	‘Z’ Value	Significance
Married	10.2	4.8759*	Significant at 1% level
Unmarried	4.4	1.7275	Not significant

This may be noted from table no 5.6 that for married the difference in the mean for HRTC and private operators is calculated as 10.2 and its’ corresponding Z-value comes to be 4.8759 that is found to be significant at 1 % level of significance. It means that the average satisfaction score for married respondents is significantly higher for HRTC compared to private bus operators. Similarly, for unmarried the difference in the mean for HRTC and private operators is calculated as 4.4 and its’ corresponding Z-value comes to be 1.7275 that is found to be insignificant at 1 % level of significance. It means that the average satisfaction score for unmarried respondents is almost similar for HRTC and private bus operators. It may be inferred that the married people are more satisfied with HRTC than private operators whereas unmarried people are almost equally satisfied with HRTC and private bus operator.

### Occupation and Passenger Satisfaction

Passengers belonging to different occupations have been taken as the respondents for the study, on the premise that occupational differences will contribute to the differences in the perceptions of the individuals regarding the comforts, safety, reliability and punctuality of the buses they travel.



It is observed from Table 5.7 that the mean satisfaction score is different for respondents with different occupations. Employees in private as well as in public sector, businessmen, professionals and students etc (which include agriculturists, laborers, self-employed and unemployed) are relatively more satisfied with HRTC than with private buses.

**Table 5.7: Relationship between Occupation of the Respondents and Passenger Satisfaction**

Occupation	No. of Respondents	Satisfaction Scores			
		HRTC		Private	
		Mean	S.D.	Mean	S.D.
Govt. Employee	71	101.6	21.23	96.7	24.93
Pvt. Sector Employee	93	103.4	22.46	95.6	23.61
Professionals	43	102.3	20.09	93.4	23.31
Businessmen	68	102.6	20.45	93.6	25.89
Students	79	103.9	20.99	94.1	25.82
Others	46	102.3	21.46	93.7	25.11
	400	102.8	21.27	94.7	24.86

It may be noted in table no 5.7 that the private sector employees are the most satisfied with HRTC and government employees have the highest satisfaction for the private buses.

Researcher has also measured the difference in the average passenger satisfaction scores between HRTC and private buses for the people from different occupation as shown in table 5.8. This may be noted from table no 5.8 that for the government employees the difference in the mean for HRTC and private operators is calculated as 4.9 and its' corresponding Z-value comes to be 1.2609 that is found to be insignificant at 1 % level of significance. It means that the average satisfaction score for government employees is almost similar for HRTC and private buses. For private sector employees the difference in the mean for HRTC and private operators is calculated as 7.8 and its' corresponding Z-value comes to be 2.3083 that is found to be significant at 5 % level of significance. It means that the average satisfaction score for private sector employees is significantly higher for HRTC than private bus operators.

**Table 5.8: Occupation and Passenger Satisfaction between HRTC and Private Buses: Paired 'Z' Test**

Occupation	Difference in Means	'Z' Value	Significance
Govt. Employee	4.9	1.2609	Not significant
Pvt. Sector Employee	7.8	2.3083**	Significant at 5% level
Professionals	8.9	1.8965	Not significant
Businessmen	9.0	2.2495**	Significant at 5% level
Students	9.8	2.6177*	Significant at 1% level
Others	8.6	1.7659	Not significant

It may be inferred that for the government employees, professionals and "others" category people the average satisfaction is almost similar for HRTC and private buses. But for private employees, businessmen and students the average satisfaction is much more for HRTC than private buses.



### Income and Passenger Satisfaction

As the individual's level of income goes up, he/she prepares to pay more for better service than the individuals with less income and therefore their level of expectation with regard to comforts, safety and reliability is also high. Therefore the higher the level of income of the people, the lower they tend to be satisfied.

It is noted from the Table 5.9 that for the highest income group respondents the satisfaction level is the minimum for HRTC. The number of respondents in income group “up to 15000” is 132 and their average satisfaction score is 103.1 (standard deviation is 19.46) for HRTC and 90.8 (standard deviation is 25.11) for private buses. The number of respondents in income group “15000-30000” is 214 and their average satisfaction score is 103.6 (standard deviation is 22.78) for HRTC and 97.3 (standard deviation is 24.34) for private buses. Similarly, the number of respondents in income group “above 15000” is 54 and their average satisfaction score is 98.9 (standard deviation is 18.76) for HRTC and 93.9 (standard deviation is 25.01) for private buses.

**Table 5.9: Relation between Monthly Income and Passenger Satisfaction**

Monthly Income	No. of Respondents	Satisfaction Scores			
		HRTC		Private	
		Mean	S.D.	Mean	S.D.
Up to Rs 15000	132	103.1	19.46	90.8	25.11
15000- 30000	214	103.6	22.78	97.3	24.34
Above 30000	54	98.9	18.76	93.9	25.01
	400	102.8	21.27	94.7	24.86

It is observed that the people in “above 30000” are the least satisfied with HRTC compared to the people in other two categories. It may also be noted that the people from “up to 15000” category are the having the least satisfaction with private bus operators. Thus it is inferred that the level of income and average satisfaction of people are related to each other. For the people from “above 30000” the average satisfaction level is the minimum for both the HRTC and private buses.

Table 5.10 reveals that the difference in the average passenger satisfaction score between HRTC and private buses is not significant at 1 % level of significance for the people from “above 30000” category. The average satisfaction score for the people.

**Table 5.10: Income and Passenger Satisfaction between HRTC and Private Buses: Paired ‘Z’ test**

Monthly Income	Difference	‘Z’ Value	Significance
	Mean		
Upto Rs 15000	12.3	4.4484*	Significant at 1% level
15000- 30000	6.3	2.7645*	Significant at 1% level
Above 30000	5.0	1.1752	Not significant

From the remaining two categories is significantly higher at 1% level of significance for HRTC than the private buses.

### Frequency of Travel and Passenger Satisfaction

All the Passengers commuting in buses do not travel with uniform frequency. Some travel daily, going to offices, shops and other places of work, some do not travel daily but frequently and a few others travel occasionally. The daily travelers are more accustomed to the pleasures or otherwise of the travel than the other commuters. Therefore, the satisfaction of the passengers may vary because of the differences in their frequency of travel.





**Table 5.11: Relationship between Frequency of Travel and Passenger Satisfaction**

Frequency of Travel	No. of Respondents	Satisfaction Scores			
		HRTC		Private	
		Mean	S.D.	Mean	S.D.
Daily	179	105.1	21.98	92.7	24.75
Frequent	113	103.3	21.12	97.1	25.57
Occasionally	108	98.5	19.52	95.5	23.99
	400	102.8	21.27	94.7	24.86

In the Table 5.11, the sample respondents have been classified into three groups—(1) Daily travelers, (2) Frequent travelers, and (3) Occasional travelers.

It is noted from the table 5.11 that for the occasional travelers the satisfaction level is the minimum for HRTC. The number of respondents in category “daily” is 179 and their average satisfaction score is 105.1 (standard deviation is 21.98) for HRTC and 92.7 (standard deviation is 24.75) for private buses. The number of respondents in category “frequent” is 113 and their average satisfaction score is 103.3 (standard deviation is 21.12) for HRTC and 97.1 (standard deviation is 25.57) for private buses. Similarly, the number of respondents in income group “occasionally” is 108 and their average satisfaction score is 102.8 (standard deviation is 21.27) for HRTC and 94.7 (standard deviation is 24.86) for private buses.

It may be observed that the respondents from all categories are more satisfied with HRTC than private buses. The average satisfaction for HRTC is the highest for daily passengers and least for the occasional passengers. The frequent passengers are the highly satisfied with private buses.

**Table 5.12: Frequency of Travel and Passenger Satisfaction between HRTC and Private Buses: Paired ‘Z’ Test**

Frequency of Travel	Difference in Means	‘Z’ Value	Significance
Daily	12.4	5.0119*	Significant at 1% level
Frequent	6.2	1.9873*	Significant at 1% level
Occasionally	3.0	1.0080	Not significant

Table 5.12 reveals that the difference in the average passenger satisfaction scores for HRTC and private buses is not significant for occasional travelers at 5% level. For the daily and frequent travelers the differences in the average passenger satisfaction scores are significant at 1% level of significance. It is inferred that daily and frequent travelers are much more satisfied with HRTC than private buses but occasional passengers are almost equally satisfied with HRTC and private buses.

### Conclusion

The study of passengers' satisfaction in this paper have studied and concluded that personal factors like gender, income, age etc have a relationship with the satisfaction level of the passenger.

The study of the influence of personal factors to the differences in passenger satisfaction with HRTC and private bus operation has been attempted. The study involved testing hypothesis by applying Paired 'Z' Test.

Both urban and rural passengers are more satisfied with HRTC buses than the private bus operators. Respondents up to 50 years are more satisfied with HRTC and respondents above 50 years are equally satisfied with both the sectors. Married respondents are equally satisfied with HRTC and private buses and unmarried are relatively more satisfied with HRTC buses. Respondents who travel for social and official purposes are more satisfied with HRTC buses and those who travel for business purposes are more satisfied with private buses. Respondents who travel



less kms per month on an average tend to be more satisfied with HRTC buses whereas the respondents who travel medium distance and more distance tend to be satisfied with private bus operation.

Daily travellers are marginally more satisfied with private buses, frequent travellers are equally satisfied with both HRTC and private buses and the occasional travellers are more satisfied with HRTC. Respondents who own no vehicle and those who own scooter/motor cycle have the same level of satisfaction for both HRTC and private buses and those who own cars are more satisfied with HRTC buses followed by those who own moped.

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