

PASSENGER PERCEPTION ON HYDERABAD PUBLIC TRANSPORTATION: METRO RAIL VS ROAD TRANSPORT

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Abstract

Public Transport Plays a Vital Role in Development of any country. In Developing Country like India having a road, rail network is about 468882 km&115000 km respectively shows the importance of road transport. Telangana State Transport Undertakings is Provide Mobility to passenger in Hyderabad by offering Various Services. But Rapid Growth of private vehicles signifies that customer satisfaction is dose not seen identical. A number of cities are planning metro projects and private capital has the capability and willingness to undertake such projects but somehow the public-private partnerships are not materialising.

The study concluded that the service quality conveyance meets the view of consumers. When all is said in done, individuals of twin urban areas of “Hyderabad and Secunderabad” are promoted with the service quality conveyance by public transport services. This paper draws out a service quality picture which can be embraced by different urban communities whose populace's special conditions relies on upon open transportation administrations.

Introduction

Rail-based metro system is crucial for supporting a city's expansion and growth. However, urban metro projects being capital intensive with long gestation and pay back periods may not be financially viable but socially desirable. More and more cities in India are announcing metro projects committing huge budgetary resources to these projects at the cost of sectors such as health and education. Given the huge requirement of capital and possibility of attracting willing as well as capable private investors to undertake urban transport projects, promoting public-private partnerships (PPPs) could be a key priority.

Role of Metro Projects on Public Transportation

A glance at the on-going metro projects in various Indian cities reveals that other than

Hyderabad and Mumbai, no other city has considered PPP for implementing metro project. Delhi airport metro express line, the first PPP metro project to become operational in India, has not been a success.

Literature Review

Review 1: Determinants of Customer Satisfaction of Service Quality: City bus service in Kota Kinabalu, Malaysia

This paper focuses on various components of satisfaction level of customer travel in public transport. For identifying the different components factor analysis has been used to evaluate 24 variables. Basic dimension has been used to analysing the data were comfort, accessibility and service. Sample size was 987 respondents drawn by the researcher and convenience sampling method was applied in this study.

Review 2: Service Quality and Customer Satisfaction in Public Transport Sector: An Empirical Study 4

In this study researcher highlights the most important issue of public transport. The main aim of this study was to study the impact of service quality in public transport, to study the customer satisfaction level and to find out the irrefutability between service quality and customer satisfaction.

Research Methodology

Objectives:

1. To assess the passenger's perception about choosing mode of road transportation in Hyderabad.
2. To identify the most influencing factors of passenger in choosing transportation facility.

- To analyse the customer satisfaction with respect to metro rail transport.

Questionnaire Framing

Questionnaire is a list of a research or survey questions asked to respondents, and designed to extract specific information. It serves four basic purposes: to (1) collect the appropriate data, (2) make data comparable and amenable to analysis, (3) minimize bias in formulating and asking question, and (4) to make questions engaging and varied.

Data collection methodology

1. Primary Data:

- Personal interview – data from the employees of the organizations will be collected through a personal interview.
- Structured questionnaire – a close ended questionnaire will be used to collect data from the passengers.

2. Secondary Data:

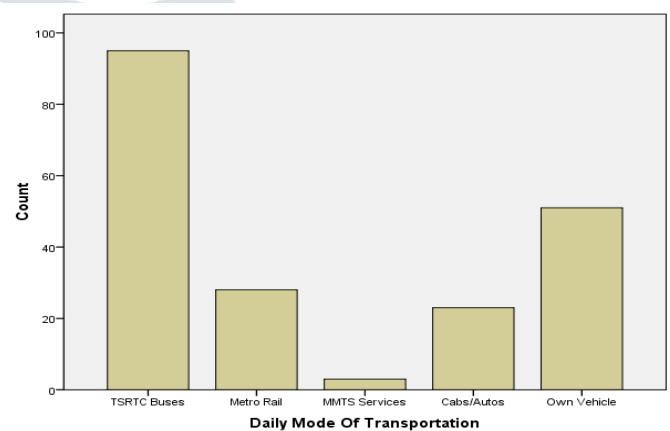
- Books
- Internet
- Articles from Magazines, journals & Newspapers

Data Analysis

The frequency distribution of age among the collected respondents data. Here 21-30 years of age group has highest percentage distribution i.e., 75% and lowest was registered under 50 and above group i.e., 3.5%.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20 years	16	8.0	8.0	8.0
	21-30 years	150	75.0	75.0	83.0
	31-40 years	17	8.5	8.5	91.5
	41-50 years	10	5.0	5.0	96.5
	above 50 years	7	3.5	3.5	100.0
	Total	200	100.0	100.0	

The following bar chart represents the daily mode of transportation vs number of respondents and TSRTC commuters are high as per the chart and second position was own vehicle users.



Chi Square Analysis

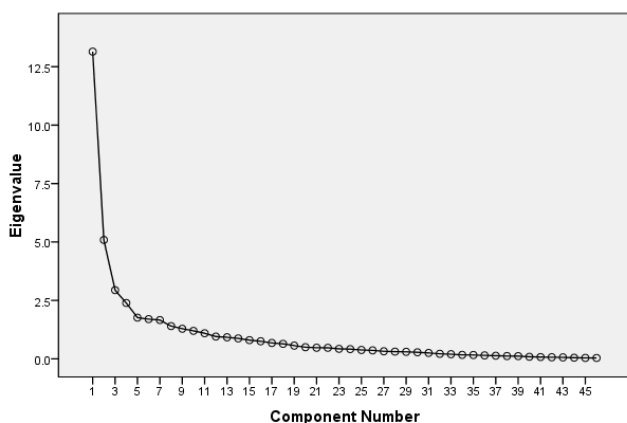
Chi square test is a statistical test, which analyses the association between the categorical variables. This test is also known as test of independence. As this specifies whether there exists any association among the variables considered (whether the variables are related in any sense or independent).

Hypotheses

1. Gender vs Daily mode of transportation

H₀: There is no significant association between the Gender of the person and the Daily mode of transportation in influencing the choice of transportation.

Scree Plot



Gender * Daily Mode Of Transportation Crosstabulation								
			Daily Mode Of Transportation					Total
			TSRTC Buses	Metro Rail	MMTS Services	Cabs/Autos	Own Vehicle	
Gender	Female	Count	58	16	3	15	39	131
		% within Gender	44.3%	12.2%	2.3%	11.5%	29.8%	100.0%
	Male	Count	37	12	0	8	12	69
		% within Gender	53.6%	17.4%	.0%	11.6%	17.4%	100.0%
Total		Count	95	28	3	23	51	200
		% within Gender	47.5%	14.0%	1.5%	11.5%	25.5%	100.0%

Age * Daily Mode Of Transportation Crosstabulation								
			Daily Mode Of Transportation					Total
			TSRTC Buses	Metro Rail	MMTS Services	Cabs/Autos	Own Vehicle	
Age	Below 20 years	Count	11	2	0	3	0	16
		% within Age	68.8%	12.5%	.0%	18.8%	.0%	100.0%
	21-30 years	Count	69	22	1	14	44	150
		% within Age	46.0%	14.7%	.7%	9.3%	29.3%	100.0%
	31-40 years	Count	5	1	1	4	6	17
		% within Age	29.4%	5.9%	5.9%	23.5%	35.3%	100.0%
41-50 years	Count	6	1	0	2	1	10	
	% within Age	60.0%	10.0%	.0%	20.0%	10.0%	100.0%	
above 50 years	Count	4	2	1	0	0	7	
	% within Age	57.1%	28.6%	14.3%	.0%	.0%	100.0%	
Total		Count	95	28	3	23	51	200
		% within Age	47.5%	14.0%	1.5%	11.5%	25.5%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.994 ^a	4	.200
Likelihood Ratio	7.088	4	.131
Linear-by-Linear Association	3.574	1	.059
N of Valid Cases	200		

From the above cross tabulation and chi square test it has been inferred that the P value obtained is **0.200** which is greater than **0.05**. Therefore there doesn't exist any significant relationship between the **Gender of the person and the Daily mode of transportation in influencing the choice of transportation**. Hence Null Hypothesis is **accepted**.

2. Age vs Daily mode of transportation

H0: There is no significant association between the Age of the person and the Daily mode of transportation in influencing the choice of transportation.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.395 ^a	16	.021
Likelihood Ratio	30.234	16	.017
Linear-by-Linear Association	.016	1	.899
N of Valid Cases	200		

a. 19 cells (76.0%) have expected count less than 5. The minimum expected count is .11.

From the above cross tabulation and chi square test it has been inferred that the P value obtained is **0.02** which is less than **0.05**. The null hypothesis is rejected. Therefore there exist a significant relationship between the **Age of the person and the Daily mode of transportation in influencing the choice of transportation**.

Findings

- 21-30 years of age group has highest percentage distribution i.e, 75% and lowest was registered under 50 and above group i.e, 3.5%.
- 65.5% were female respondents and 34.5 were male respondents.
- The data has Students of around 42%, working employees of 53.5%, people making their own business of 1.5%, and Home Makers of 3.0% in the respondents who have responded for the survey.

Conclusions

Overall satisfaction of commuters who ever using TSRTC were moderately satisfied and the influencing factors were failed in meeting with Metro facilities. Even though the fare has considered as the primary factor metro charges are 100% more than the TSRTC but public are much more influenced by the Time of journey, Comfortable and mainly Hyderabad traffic condition.

Suggestions

- i. This project output can be take forward to further study in different metropolitan cities any analyse their respective transportation system.
- ii. The influential factors may vary accordingly state to state and these need to be shortlisted according to demographic extent.

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