



PASSENGERS PERCEPTION AND SATISFACTION TOWARDS PUBLIC TRANSPORT: STUDY ON LITERATURE REVIEW

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Abstract: Transportation is an essential component of human life as well as any country's economic life. Commerce, agriculture, and the service industry all rely on it to survive. It aids in the movement of people and objects from one location to another. A well-functioning transportation network is a must for a rising country like India's future economic progress. Public services can be described as the provision of services or meeting the needs of individuals or groups with an interest in the organization while adhering to the organization's rules and procedures. Passenger's perception and satisfaction are associated with each other. Perception is a user's assessment of a service after utilizing it and comparing it to what he expected and experienced previously. People pick, organize, and interpret information to construct a meaningful image of the world through perception. The same stimulus can be perceived differently by various people. And satisfaction is determined by how customers perceive public transport services. The focus of this article was on the literature on the study's core parts, which were perception, expectation, service quality, and passenger satisfaction. The accompanying principle focuses on service quality, customer expectation, customer satisfaction, SERVQUAL theory, and related studies on customer satisfaction and service quality. The study used a descriptive design, reviewing some of the literature on customer perception and satisfaction, as well as ways to enhance service quality in public transportation.

Index Terms - Perception, Satisfaction, Service Quality, SERVQUAL, Customer Expectation.

1. INTRODUCTION

Transportation is an essential component of human life as well as any country's economic life. Commerce, agriculture, and the service industry all rely on it to survive. It aids in the movement of people and objects from one location to another. A well-functioning transportation network is a must for a rising country like India's future economic progress. Public services can be described as the provision of services or meeting the needs of individuals or groups with an interest in the organization while adhering to the organization's rules and procedures.

Customer perception is a user's assessment of a service after utilizing it and comparing it to what he expected and experienced previously. People pick, organize, and interpret information to construct a meaningful image of the world through perception. Consumer perception of service quality have been studied by many scholars and researchers who have shown that they are positively related to satisfaction and brand image (Barber, et al., 2011; Marinkovic, et al., 2014; Truong, et al., 2017).

"Satisfaction is the consumer's fulfilling response," according to one definition. It's a determination that a product or service feature, or the service product itself, provided (or continues to give) a pleasurable level of consumption-related satisfaction, including levels of under- or over-fulfillment..." (1997, Oliver).

This article looked at the literature on the study's three main components: service quality, customer perception, and expectation. The following major points were highlighted in particular: 1. Service Quality, 2. Customer Expectations, 3. Customer Satisfaction, 4. SERVQUAL Model and related consumer satisfaction and service quality.

Service Quality: Service quality is considered to be a key factor in service sector performance, that is, profitability. Service quality not only entices new customers away from competitive firms but also induces customers' repurchase intentions (Venetis & Ghauri, 2002; Wantara, 2015).

2. LITERATURE REVIEW:

2.1 Customer Satisfaction towards Services Quality of Public Transportation By Thian Wan Jun:

He investigates consumer satisfaction with regard to public transportation service quality in his article. As indices of customer satisfaction, SERVQUAL was used on five dimensions. This research identifies the most important factors that contribute to service quality excellence. In this study, 200 sets of questionnaires were distributed to respondents, with an overall response rate of 80%. The descriptive statistics, Pearson correlation, and multiple linear regressions were used to analyse the data in this study. Pearson Correlation revealed that the five SERVQUAL factors have a positive association with customer satisfaction in this study. Multiple linear regressions, on the other hand, are used to anticipate the impact of the independent variable on the dependent variable. In other words, it's determining which of SERVQUAL's five dimensions the strongest predictor of customer happiness is. In a nutshell, tangibility is the most important and dominant factor in this study.

2.2 Measuring the Satisfaction of Multimodal Travelers for Local Transit Services in Different Urban Contexts: Marco Diana:

Even beyond more immediate marketing goals, the need of assessing consumer happiness for a public transportation service is obvious. The purpose of this study is to demonstrate how satisfaction metrics can be used to gain insight into the interaction between personal attitudes, transportation use, and the urban environment. A representative sample of Italian multimodal travelers indicated nine satisfaction measures of urban transportation systems (i.e. users of both private cars and public transport). Researchers used correlations and correspondence studies to demonstrate whether and how each feature is related to levels of public transportation use, as well as how the relationship is influenced by the urban surroundings. Then, by modifying a recently published method for combining ordinal variables into a single score to work with large samples and satisfaction measures having a neutral point on the scale (i.e. "neither satisfied nor unsatisfied"), researchers use it to combine ordinal variables into a single score. The overall satisfaction ratings and frequency of use were not associated. Smaller communities had the highest levels of satisfaction, whereas larger centres had the lowest. Because researcher had interested in multimodal passengers, Researcher offered an interpretation paradigm in which transit services must be well-received by car drivers in smaller towns in order to be regarded a viable alternative to automobiles.

2.3 What Influences Satisfaction and Loyalty In Public Transport? A Review Of The Literature: Dea van Lierop, Madhav G. Badami & Ahmed M. El-Geneidy

For many communities, retaining public transportation riders is a difficulty. Understanding the factors of public transportation that influence users' loyalty to the system is crucial for developing comprehensive policies targeted at keeping riders. This paper reviews the literature on the factors that influence public transportation pleasure and loyalty. On-board cleanliness and comfort, courteous and helpful behavior from operators, safety, punctuality and frequency of service are the service variables most related with satisfaction, according to research findings. Passengers' perception of value for money, on-board safety and cleanliness, interactions with workers, and the image and dedication to public transportation that users feel are all linked to loyalty. Furthermore, the findings indicated that the best way to define loyalty is to look at consumers' intents to keep using the service, their desire to promote it to others, their overall pleasure, but most significantly, their perception of and involvement with public transportation. Users who have a positive perception of the agency and see public transportation as an important part of city life are more inclined to show loyalty and act as public transportation ambassadors.

2.4 Perception Of Public Transport Quality Of Service Among Regular Private Vehicle Users In Madrid, Spain: Juan de Oña, Esperanza Estévez, Rocío de Oña:

The use of public transportation instead of private vehicles can help to minimise traffic congestion in cities. This modal shift can be accomplished by imposing limits on private vehicles or enacting policies that improve people's contentment with public transportation. Many research have found that service quality influences customer satisfaction, which influences behavioural intentions toward the service; nevertheless, these studies have primarily focused on public transportation customers. The goal of this study is to uncover the key factors that influence how private vehicle owners perceive Madrid's public transportation services (Spain). An online panel poll with a sample size of 500 frequent private vehicle users was used to test ordinal logit models. 15 models for the total sample and 14 user segments were created to achieve a comprehensive analysis and to deal with variation in perceptions. The findings show that residents in Madrid are satisfied with public transportation, with regularity, speed, and intramodality being the most essential public transportation service features for private vehicle users. For all segments, frequency is critical, however for the majority of segments, speed and intermodality are critical. A segment analysis has shown traits that, while not crucial in most cases, are important for specific segments. Another intriguing discovery was that two characteristics (accessibility and individual space) were not found to be significant in any segment. The findings of this study can be utilised to generate policies and suggestions to encourage more people to use public transportation instead of driving their own cars.

2.5 Modeling The Satisfaction Of Bus Traffic Transfer Service Quality At A High-Speed Railway Station: Xiaoyun Cheng,¹ Yu Cao,² Kun Huang,¹ and Yuejiao Wang¹

At high-speed railway (HSR) stations, bus transit is one of the most common ways of transportation. It is critical to conduct a scientific and reasonable evaluation of the current bus traffic transfer service in order to improve the efficiency of the high-speed railway and increase the system's utilization. This article focuses on the transfer experience of passengers and presents a methodology for assessing existing bus traffic transfer service. Convenience, comfort, safety, service, and economy are factors that determine passenger satisfaction during the bus transfer process at high-speed train stations based on passengers' perspectives.

The associations between bus transfer service, passenger perceived value, and passenger satisfaction are investigated using a structural equation model. A questionnaire survey of people moving to a bus was done at Xi'anbei Railway Station to calibrate the model. In the measured model, this research examines the links between observed variables and latent variables, the effects of exogenous variables on endogenous variables in the structural model, and the impact of passengers' socioeconomic characteristics on passenger satisfaction. The results of the structural equation model analysis suggest that cost and convenience are the most important elements influencing customer happiness, with bus fare preference policy and transfer distance being the most important. The findings may be useful to planners and managers in improving the services of current high-speed railway stations and guiding the development of new ones.

2.6 Customer Perceptions Of Quality Of Service In Public Transport: Evidence For Bus Transit In Scotland: 1 Craig Morton A Brian Caulfield B Jillian Anable C

This article examines in depth a quality of service indicator used by the Scottish Government to gauge passenger attitudes regarding bus transportation. The service quality indicator is an 11-item opinion scale that covers a wide range of service factors. The latent constructs included in this scale are identified via factor analysis. There are three latent variables related with attitudes about perceived bus service quality, spanning issues such as convenience, cabin environment, and simplicity of use. These latent dimensions are further investigated by examining how attitudes toward perceived bus service quality differ among socioeconomic cohorts, as well as the extent to which these views may be used to explain variation in reported bus service satisfaction. According to the findings, attitudes toward bus service quality vary significantly across passenger groups, with females having a tendency to express relatively negative opinions about the cabin environment, with a similar finding in the case of passengers who are responsible for their home and family. Furthermore, perceived bus service convenience appears to have a strong positive explanatory power over perceived bus service satisfaction, implying that increased service frequency, availability, reliability, and stability will likely raise perceived contentment among existing passengers. On a more general level, this paper highlights the quantity of extra knowledge that can be gained by analyzing current transportation policy data in greater detail.

2.7 Factors Influencing Passengers' Preference Towards Public Bus Transportation From Kelantan To Northern Region: Mohammad Nizamuddin Abdul Rahim1 , Zuraimi Abdul Aziz2 , Abdul Aziz Mat Hassan3 , Mohd Fathi Abu Yazid4 , Muhammad Ashlyzan Razik5 , Zamri Miskam6 ,Nora'ani Mustapha7:

Every country's progress requires a convenient and dependable transportation system, and this study looks into the elements that influence customers' preference for public bus transit from Kelantan to the Northern Region. The number of passengers who go to the Northern Region by public bus is higher than those who travel by rail or plane. This study used a quantitative approach, with a total of 384 respondents using express buses to get to their destinations. Using a basic random sample technique, this study was conducted in Kota Bharu, Kelantan. The hypothesis that the parameters are positively associated to the passengers' preferences was evaluated in this study. Cronbach's Alpha was also used to examine the dependability and Pearson Correlation. The outcomes of this study suggest that characteristics like accessibility, convenience, and safety have a significant influence in encouraging people to use public transit. However, the study found that the price of a bus ticket is the most important element in determining a passenger's selection. The findings of this study will aid bus operators in their efforts to continually improve their services for their customers, and it is recommended that future studies be conducted with a large sample size and include other bus transportation service providers from other states or Malaysia as a whole.

2.8 Consumer Perception On Public Transport: Mr. Jeevan Raj and Ms. Neekshitha V Shetty:

In this article researchers has explained about "Customer Perceptions on Using Public Transportation" was the subject of a study. The project's goal was to learn more about how customers felt about taking public transportation. For a long-term future, public transportation is critical. The majority of people in our country now rely on public transportation on a daily basis. The study was carried out using a descriptive sampling technique, with passengers serving as the sample. A questionnaire was used to collect the primary data. Secondary data was gathered through published records, books, research reports, documents, and websites, among other sources. One hundred people who use public transportation were given a standardized questionnaire, and data was obtained from the same source. The percentage and linear scale methods were used to analyses the data. The investigation concludes that the majority of individuals prefer public transportation to own vehicles, and that some of the causes are also causing passenger dissatisfaction. It has been discovered that public transportation consumers' discontent reduces their desire to use it. Also, for the betterment of the prospects, helpful recommendations are supplied.

2.9 User Perceptions Of Service Quality: Shalini Sinhaa *, H.M.Shivanand Swamyb , Khelan Modic :

Public transportation authorities' and consumers' perceptions may differ, resulting in a mismatch between policy measures and user expectations. As a result, it's critical to comprehend user views and discover factors that are more likely to affect their decision to use public transportation. The article examines user opinions of service quality in city buses and the Bus Rapid Transit System in Ahmedabad, India. The findings show that important service quality characteristics are consistent across public transportation modes, include both on-board and off-board measures, and are related to the whole journey experience. Passenger expectations, according to the report, are linked to current service quality levels. Users are more worried about basic service qualities and less attentive to 'higher order' quality indicators when service quality is low. User perceptibility to a greater set of service parameters grows as service quality improves.

2.10 Assessment Of Passenger Satisfaction With Public Bus Transport Services: A Case Study Of Lucknow City (INDIA): SINGH Sanjay Indian Institute of Management Lucknow, INDIA :

This research has three key objectives. It begins by attempting to gauge customer satisfaction with public bus transportation in the Indian city of Lucknow. Second, it aims to investigate the factors that influence passenger satisfaction with service quality. Third, it attempts to rank the relative relevance of service quality qualities in order to determine

which service quality enhancements should be prioritized in order to improve passenger happiness. Between May and July 2014, a survey of objective and subjective questions was undertaken. The survey included five main bus stops in Lucknow. A self-rated questionnaire was used to elicit overall satisfaction and factors that influence satisfaction in the utilization of public bus transportation services in Lucknow from a total of 148 respondents. Principal component analysis, a statistical approach for reducing the dataset's dimensionality, and descriptive analysis are used to the collected sample of replies. According to the findings of these studies, commuters in Lucknow are generally unsatisfied with public bus services. Five underlying characteristics that influenced passenger satisfaction with public bus transportation services in the city were retrieved using principal component analysis. The adequacy of capacity of public bus transportation services, orderly and clean atmosphere inside buses, exquisite design of buses and bus stations, and accessibility to public bus transportation services in the city are the five variables that have the biggest impact on overall satisfaction. The study thus points the way for the city's public bus transportation administration to better identify the gaps in its services and try to solve them in order to improve passenger satisfaction and, as a result, attract more people to use public transportation.

2.11 Transport Service Quality And Perceived Service Value: An International Comparative Survey In European And Indian Context : Naveen Bangalore Ramu; Anjula Gurtoo:

The importance of road transit as a means of transportation cannot be overstated. As a result, ensuring that this service is of high quality is vital. In this study, researchers look at the characteristics of intercity bus passenger transportation in Europe and India, as well as the factors that influence commuters' perceived service value. Passengers' perceptions of service quality were captured through face-to-face presentation of a prepared questionnaire. Factor analysis and multiple linear regression were used to test the study's research hypotheses. Passengers from Europe and India respect timely service, women's friendliness, ticket price affordability, and service to price satisfaction, and these factors have a significant impact on commuters' perceived service value, which is defined as total satisfaction. In Europe, external tangibles such as good drinking water and clean bus stops are more important, while in India, luggage handling is a more relevant tangible. According to supplementary studies, in both cases, technology has a significant impact on passenger satisfaction. Certain comparative results' context similarities and differences were investigated.

2.12 Commuters' Perceptions On Service Quality Of Bus Rapid Transit Systems: Evidence From The Cities Of Ahmedabad, Surat And Rajkot In India : Mahesh L. Chaudhary1*

In today's society, urban public transportation is becoming increasingly important. This is demonstrated by its inclusion in the United Nations Development Program's Sustainable Development Goals as the eleventh aim, 'Sustainable cities and communities.' Cities' competitiveness is primarily determined by the reliability of their transportation systems. In India, significant sums have been spent on public transportation projects in cities all around the country. These investments have benefited Ahmedabad, Surat, and Rajkot in Gujarat, India. For such initiatives, it is critical to capture the demand side quality of services, hence an attempt has been made to see if commuters' impressions of the quality of services provided by Bus Rapid Transit systems varies across demographic cohorts. The study is divided into nine demographic cohorts. The SERVPERF model was used to investigate the performance of the city's BRT networks. The performance is judged on six different criteria: tangibles, empathy, cleanliness, reliability, safety, and affordability. Surat was determined to be the best of the three cities in terms of service quality, followed by Rajkot and Ahmedabad. Additionally, commuters' perceptions of service quality differ by demographic groups such as gender, journey time, education, employment level, length of patronization, and trip purpose.

3. RESEARCH GAP:

According to the structure of quality attribute categories, the most commonly investigated categories are cost, availability, time, and comfort, which are covered by more than half of the analyzed studies. The most extensively discussed category is availability, with a focus on modalities (bus vs rail) and network (coordination, transfers, access and egress). However, there are no details on the operational element of availability, such as working time and frequency. The examined studies have focused on reliability in the time category. There are no elaborations of trip time, such as studies on travel time improvements in regional public transportation. Some publications mention attributes like accessibility, information, customer service, security, and environmental effect, but they don't go into detail. Environmental impact and its impact on mode choice, ridership, and customer satisfaction is a category that has received little attention.

4. DISCUSSION: Due to the scarcity of previous research on the subject, many of the findings from this analysis are indicative rather than conclusive. The fact that the methods utilized and factors controlled for in the analyzed studies vary further limits the ability to draw firm conclusions. Nonetheless, the review gives an overview of quality studies in regional public transportation and highlights several quality traits that have been shown to be essential in these studies on a regular basis. It's important to note that the way quality attributes are defined and applied differs amongst the studies evaluated. This makes the evaluation more difficult, but by adapting the methodology described in Section Service quality attributes, we were able to compare research and uncover some general trends. This framework underpins the debate and findings, but the underlying studies may employ various notations.

5. CONCLUSION:

By reviewing various available literature, we can conclude that due to rise in fuel prices and rise in air pollution people are preferring to travel by public transport system in urban and rural part of the countries in the world. By providing more accessible services, public transportation might become more appealing. The functional aspect has a significant impact on customer satisfaction and requires more attention in order to improve it. The main factors that contribute to a better degree of satisfaction are frequency, pricing, punctuality, and trip time. Listening to the customer's voice is a typical and effective method of determining the customer's needs and how to meet them. Customer satisfaction is already measured annually in a number of cities like Europe. A research was also undertaken in the United Kingdom to determine customer needs in

public transportation. The research effort is focused on developing a marketable and appealing public transportation system.

REFERENCES

1. Lierop, Dea & Badami, Madhav & El-Geneidy, Ahmed. (2018). Transport Reviews What influences satisfaction and loyalty in public transport? A review of the literature What influences satisfaction and loyalty in public transport? A review of the literature. *Transport Reviews*. 38. 52-72. 10.1080/01441647.2017.1298683.
2. Van Lierop, D., Badami, M., & ElGeneidy, A. (2018). What influences satisfaction and loyalty in public transit? A critical review of the literature. *Transport Reviews*, 38(1), 52-72.
3. De Oña, J., Estévez, E., & de Oña, R. (2020). Perception of Public Transport Quality of Service among Regular Private Vehicle Users in Madrid, Spain. *Transportation Research Record*, 2674(2), 213–224. <https://doi.org/10.1177/0361198120907095>.
4. Xiaoyun Cheng, Yu Cao, Kun Huang, Yuejiao Wang, "Modeling the Satisfaction of Bus Traffic Transfer Service Quality at a High-Speed Railway Station", *Journal of Advanced Transportation*, vol. 2018, Article ID 7051789, 12 pages, 2018. <https://doi.org/10.1155/2018/7051789>.
5. Morton, C, Caulfield, B and Anable, J orcid.org/0000-0002-4259-1641 (2016) Customer perceptions of quality of service in public transport: Evidence for bus transit in Scotland. *Case Studies on Transport Policy*, 4 (3). pp. 199-207. ISSN 2213-624X <https://doi.org/10.1016/j.cstp.2016.03.002>.
6. Mohammad Nizamuddin Abdul Rahim¹, Zuraimi Abdul Aziz², Abdul Aziz Mat Hassan³, Mohd Fathi Abu Yazid⁴, Muhammad Ashlyzan Razik⁵, Zamri Miskam⁶, Nora'ani Mustapha⁷; Factors Influencing Passengers' Preference towards Public Bus Transportation from Kelantan to Northern Region. *Turkish Journal of Computer and Mathematics Education* Vol. 12 No3 (2021), 2572-2583. <https://turcomat.org/index.php/turkbilmate/article/download/1257/1036/2320>.
7. Raj, Jeevan & Shetty, Neekshitha. (2021). Consumer Perception on public transport. *Aegaeum*. VOLUME 9. 204-221.
8. Sinha, Shalini & Swamy, H.M. & Modi, Khelan. (2020). User Perceptions of Public Transport Service Quality. *Transportation Research Procedia*. 48. 3310-3323. 10.1016/j.trpro.2020.08.121.
9. Sanjay Singh (2016) ASSESSMENT OF PASSENGER SATISFACTION WITH PUBLIC BUS TRANSPORT SERVICES: A CASE STUDY OF LUCKNOW CITY; (INDIA) *Studies in Business and Economics* no. 11(3)/2016. <https://sciencedirect.com/pdf/10.1515/sbe-2016-0039>.
10. Naveen Bangalore Ramu; Anjula Gurtoo (2019) Transport Service Quality And Perceived Service Value: An International Comparative Survey In European And Indian Context *International Journal of Comparative Management*, 2019 Vol.2 No.1, pp.7 – 32. <https://www.inderscience.com/info/inarticle.php?artid=100127>.
11. Mahesh L Choudhari (2020), *European Transport \ Trasporti Europei* (2020) Issue 79, Paper n° 7, ISSN 1825-3997, <http://www.istiee.unict.it/sites/default/files/files/Paper%207%20n%2079.pdf>.

