



## AN EXPLORATORY STUDY TO EVALUATE THE PERCEPTIONS OF PUBLIC TRANSPORT USERS IN AHMEDNAGAR CITY WITH THE CRITICAL INCIDENT MODEL

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### ABSTRACT

**Introduction.** The purpose of this study is to explore the service quality of public transporters from user's viewpoints using the critical incident technique (critical incident technique), e-mail inquiries, and unstructured interviews.

**Methods.** The researcher recruited 12 participants, 6 female and 6 male who are the frequent public transport users. Participants were asked to report positive and negative incidents or situations in relation to the services provided by their public transporters, geographically located in Ahmednagar city of Maharashtra, India. This study utilized the conceptual themes of SERVQUAL, a model that has been used by many service industries for evaluating their public services. Data were collected and analyzed from e-mail inquiries and unstructured interviews.

**Results.** Findings revealed that the positive incidents were slightly higher than the negative events. Also women transport users had more positive experiences than men. Further investigations of this study are provided.

**Conclusion.** This study revealed that even though the participants reside in different areas, their positive and negative incidents reveal similar situations. Further research would be expanded to a larger study population and/or compare other public transport users outside the Ahmednagar. Another possibility could be looking the size of the public transporters and their serving population.

**KEYWORDS:** Public transporters,

### INTRODUCTION

Public transport commonly use benchmark surveys and questionnaires to evaluate their operational services. These surveys typically were delivered quarterly with a set of questions and with a very limited number of open-ended questions. This direct approach study most likely are restricted to certain areas of Public transporter's operational functions. In addition, Public transporter's staff attitudes or behaviour and the facilities related concerns would also be less likely to be revealed. Therefore, instead of using the "traditional" approach, this study uses critical incident technique to gain insights of Public transport services. The critical incident technique relies upon on actual events which offer insights of the subjects. Past literature revealed that critical incident technique were primarily used to study health services related topics such as nursing care quality research (Kemppainen, 2000), health professional's ethics (Arvidsson and Fridlund, 2005), and intensive care unit services (Buckley, *et al.*, 1997). These studies verified that critical incident technique is an effective research approach for user-centred studies.

This study evaluates the service quality of public transport with the use of critical incident technique, gathering data through e-mail inquiries, and unstructured interviews. 12

frequent public transport users were recruited in this study. A total of 6 women and 6 men volunteers participated in this study; their ages were ranging from 20 to 80 years old. Participants were interviewed and asked to report positive and negative incidents or situations in relation to the services provided by their public transporters geographically located in Savedi, Nagapur, Bhingar, Camp, Kedgaon, Nepti road, and Main city of Ahmednagar. The incidents are grouped, categorized, and then assessed with the use of the conceptual themes of SERVQUAL. The instrument consists of six dimensions: tangible, reliabilities, responsiveness, competence, courtesy, and security. The SERVQUAL has been used by many public transport for evaluating their public services (Parasuraman, Zeithaml and Berry, 1988).

### DATA COLLECTION

The process of data collection comprises two steps. First, the researcher sent out a message to participants, requesting them to record not more than five incidents in relation to both negative and positive examples of Public transport services they received recently or in the past. All participants were given an explanation for this study and as well, were provided examples of standard critical incidents. The responses were collected and compiled within three days. Second, the

incidents were categorized into various dimensions utilizing the SERVQUAL model. The 12 participants in this study were comprised of; a retired college professor, graduate students, civil servants, chemical researcher, university non-

academic staff, and young parents. Of the 12 participants that took part, there were 25 positive and 22 negative incidents. The details are displayed as in Table 1.

**Table 1:** The participant profile

Participant	Sex	Age group			Number of incidents	
		20-40	41-60	61-80	Positive	Negative
1	Female			X	1	1
2	Female		X		1	4
3	Female		X		2	0
4	Male		X		2	2
5	Male	X			0	1
6	Female	X			5	0
7	Male	X			3	3
8	Male		X		5	5
9	Female		X		1	2
10	Male		X		3	4
11	Female	X			1	0
12	Male			X	1	0
<b>Total incidents</b>					<b>25</b>	<b>22</b>

**CLASSIFICATION OF CRITICAL INCIDENTS**

This SERVQUAL model contains twenty-two items with seven dimensions, which was developed by Parasuraman, Zeithaml, and Berry in 1988 for measuring the service quality from consumers' perspectives. Many public transporters adopt this model to measure the quality of their services. The seven dimensions are tangibles, reliability, responsiveness, competence, courtesy, credibility, and security. In 2003, Satoh and Nagats extracted this model to five factors: Effect of service (personal), Bus stop as a place, reliability, collection and access, effect of service (organizational). In this study, the incidents are adapted from SERVQUAL model, as well as the Satoh and Nagats models, categorizing the incidents as the following domains:

**Tangible, effect of service** Public transport staff attitudes, Bus/Taxi condition and comfort

**Reliability, the promised service;** dependably and accurately

**Responsiveness** The willingness to assist and provide prompt service to Public transport users

**Competence** Possession of the required skills and knowledge to perform the service

**Courtesy** Respect and consideration of contact personnel

**Credibility** Trustworthiness and honesty of the Public transport staff

**Security, Bus stop as a place:** No risk

After the classification by two coders and the examination of the validity of the inter-coding (the degree of the agreement between two coders is over 95%), the collected critical incidents were finally grouped in seven categories located in Table 2 with the related incidents collected from the participants.

**Table 2:** Classification of the domains obtained

Category	Critical incidents	Number of critical incidents	
		Positive	Negative
<b>Tangible</b>	Easy access and convenient: Bus stand	1	
	The Bus Time table was user-friendly, easily to locate the Route that user needed	1	
	The Bus stand are always clean	1	
	Transporter staff reluctantly offered help, unapproachable		1
	Transporter staff had a high level of tolerating patience.	1	
	Transporters were lenient to all	1	
	The toilets were clean, and neat	1	
	The Bus/Taxi was equipped with modern tech.	1	
	The seats in the bus were comfortable.	1	
	The ticket booking and reservation section was easy to use	1	
	The Online booking service is great! I can book ticket any time on any route.	1	
	The transporter encourages teens to be a volunteer	1	
	Regular travelers offered discounted fares		1
	There are many new buses for my family	1	
	There was no family restroom at bus stops - inconvenient for parents		1
The waiting seats were inadequate		1	
The parking lot was not conveniently located		1	
<b>Reliability</b>	Staff did not check in Bus properly before start of journey.		1
	Staff was unable to explain timing of next trips which was indicated on the timetables		1
	Staff did not returned change.		1
<b>Responsiveness</b>	Staff immediately replaced punctured tyres.	1	
	The staff was resourceful in assisting for a specific routes and most of the time, would provide suggestions on the related address where passengers wish to go	1	
	Route boards were not proper and not readable		1
	The staff members were helpful to my enquiries.	1	
	Passengers had to wait at the enquiry counter for a long period of time before getting help		1
<b>Competence</b>	Staff assisted me to get a proper Bus.	1	
	It only took 2 minutes to book a ticket.	1	
	Staff have knowledge of how to locate specific address for a new passenger.	1	
	Staff checked out materials to users in a timely manner	1	
	Staff renewed my monthly pass quickly	1	
	The enquiry clerks are very knowledgeable.	1	
<b>Courtesy</b>	Transport manager did not respect staff (negative environment)		1
	Received "intrusive advertisements" when waiting for bus.		1
	On the bus stand there was someone with a criminal background.		1
	The Stand in charge was welcoming to my daughter and bent down to speak to her at her level	1	
	Some Passengers talked very loudly- staff should have asked them to use quiet voices		1

Perceptions of public transport users in Ahmednagar city with the critical incident model

Credibility	Vendors were shouting and irritating to passengers.		1
	There were no security personnel on stand		1
	The staff doesn't have change sometimes and I ended up paying overdue.		1
	I was unable to get extra seat for my husband without advance booking.		1
	When I asked for multiple routes buses for a planned vacations, I have been told to check website.		1
Security	Co passengers were uncultured and smoking.		1
	I travel with a wheeler chair, staff always assist me to get on my car and see me take off before he/she goes back to the bus.	1	
	The Bus stand was surrounded by begging homeless people		1
	Manager was continuously cussing at the public platforms.		1
	During festival days, the entrance of the bus stand is always powered by security personnel.	1	
Passengers were well-behaved and respected other users		1	
<b>Total</b>		<b>25</b> <b>(53.19%)</b>	<b>22 (43.81%)</b>

### FINDINGS AND DISCUSSIONS

Of 47 recorded incidents, convenient issues accounted for more than one-third of all incidents, approximately 36.17% which represented 48% of the positive related critical incidents and 22.73% of the negative ones. Examples of positive incidents: "The bus timetable was user-friendly, easy to locate the route that the passengers needed," "The Bus/Taxi was equipped with modern technology "and "The seats in the bus/Taxi were comfortable." Examples of negative incidents: "The Bus stand was surrounded by begging homeless people," and "Transport manager did not respect staff." Based on these responses, the reliability of the public transporter is rated as negative. There is no positive incident recorded in this category. The competence category recorded five incidents, suggested that staff possess the required skills and knowledge to provide adequate services.

The number of negative incidents in the courtesy category reveals that there is a lack of respect and consideration of passengers. There were only 20% positive responses in this category. Examples of incidents that were given by participants are "On the bus stand there was someone with a criminal background," or "Some Passengers talked very loudly- staff should have asked them to use quiet voices." The category of security covering the "Bus stand as a place, no risk" seems to be an area of problems: "The Bus stand was surrounded by begging homeless people who asked for money and "Manager was continuously cussing in front of the platform." The data also suggested that women received more positive experience at the public transport than men.

**Table 3:** The positive and negative of each category

Categories	Positive (N = 25)	Negative (N = 22)
Tangible	12 (48%)	5 (22.73%)
Reliability	0 (0%)	3 (13.64%)
Responsiveness	3 (12%)	2 (9.1%)
Competence	6 (24%)	0 (0%)
Courtesy	1 (4%)	4 (18.18%)
Credibility	0 (0%)	5 (22.73%)
Security	3 (12%)	3 (13.64%)

### CONCLUSION

This study was conducted with 12 participants who are regular users at Bus services. The data were collected either via e-mail inquiries or by face-to-face unstructured interviews. Even though the participants reside in different areas, their positive and negative incidents reveal similar situations. This exploratory study demonstrates the strengths

and weaknesses of public transport services in general. However, the fact is that only twelve participants are in this study, the results thus cannot make a generalization yet serve as a platform for further investigations on this issue. Several areas are suggested for further research. First, this study should be expanded to a larger study population and/or compare other public transport users outside the Ahmednagar

city. Secondly, to determine whether age would be a factor for receiving positive and/or negative services.

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