

Title of the paper: Measuring Service quality of Public transport operator in Pune City, Maharashtra India uses the critical incident technique

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Abstract

This study explores the service quality of public Transporters from user's viewpoints using different techniques such as, the critical incident technique (critical incident technique), e-mail inquiries, and unstructured interviews. The researcher recruited 48 participants, 24 female and 24 male who are the frequent public Transport users. Different participants were asked to report positive and negative incidents or situations in relation to the services provided by their public Transporters mainly considering geographical area of Pune 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. 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 Public transport users outside the Pune. Another possibility could be could be looking the size of the Public transporters and their serving population.[1].

Key words: Service, quality, Transport, CIT, SERVQUAL.

I- INTRODUCTION

Public transport commonly uses 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 is restricted to certain areas of Public transporter's operational functions. In addition, Public transporter's staff attitudes or behavior 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 the critical incident technique was 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-centered studies.

The use of the critical incident technique has been evaluated by study of the service quality of public transport with, gathering data through e-mail inquiries, and unstructured interviews. 48 frequent public transport users were responding in this study. A total of 24 women and 24 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 [1] Nagar road, Pimpri, Sangvi, Camp, Hadapsar, Satara road, and Main city of Pune. The incidents were 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) [8].

II- DATA COLLECTION

There are 2 steps in data collection process, 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. [8].

Total 48 participants has considered for the study includes a retired college professor, graduate students, civil servants, chemical researcher, university non-academic staff, and young parents. Of the 48 participants that took part, there were 19 positive and 16 negative incidents [8], Some of the participants had no positive or Negative incidents recorded. The details are displayed as in Table 1.

Table 1: The participant profile[1]

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

III- 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. There are 7 dimensions, which 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/Taxicondition 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. [1].

Table 2: Classification of the domains obtained [2]

Tangible	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
Reliability	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
Responsiveness	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
Competence	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	
Table 2: Classification of the domains obtained [1]			
Courtesy	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
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	

IV- FINDINGS AND DISCUSSIONS

Total 47 incidents were recorded which shows that, 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: [1] "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.[1]

There are some negative incidents in the opposite category, which 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 [1] "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 [1] 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.[1].

Table 3: The positive and negative of each category[1]

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%)

V- CONCLUSION

This study was conducted with 48 participants who are regular users at Bus services. All the data were collected through 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.[1]. 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. [1]. Different further research areas which can be considered are, first, this study should be expanded to a larger study population and/or compare other public transport users outside the Pune city. The second is to determine whether age would be a factor for receiving positive and/or negative services.[1].

REFERENCE

- [1] <http://scienceandnature.org>.
- [2] Arvidsson, B. & Fridlund, B. (2005). Factors influencing nurse supervisor competence: a critical incident analysis. *Journal of Nursing Management*, **13**(3), 231-237.
- [3] Buckley, T.A., Short, T.G., Rowbottom, Y.M. & Oh, T.E. (1997). Critical incident reporting in the intensive care unit. *Anaesthesia*, **52**(2), 403-409.
- [4] Chaudhrya, A. & Al-Sagheer, L. (2011). Information behavior of journalists: Analysis of critical incidents for information finding and use.

The International Information & Library Review, **43**(4), 178-183.

[5] Kemppainen, J.K. (2000). The critical incident technique and nursing care quality research. Journal of Advanced Nursing, **32**(5), 1264-1271.

[6] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, **64**(1), 12-40.

[7] Urquhart, C., Light, A., Thomas, R., Barker, A., Yeoman, A., Cooper, J. et al. (2003). Critical incident technique and explicitation interviewing in studies of information behavior. Library & Information Science Research, **26**(1), 63-88

[8] <http://www.informationr.net/>.

Brief about Author



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