



Consumer Perception and Satisfaction of Rail Transport Service in an Urban Centre: The Namibian Experience.



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Introduction and Background

Advances in technology have increased leisure time, improved travel experiences, reduced travelling costs and increased the promises of a bright future for the transport and travel industry

Never has the need to understand customer perceptions, expectations and needs fulfilment been so evident as it is in today's marketing era

Customer experience is a journey, consumers are willing to pay to attain a level of satisfaction with the service experience or encounter

High quality services are the cornerstone of successful business, which is why business strategies are implemented to expand not only the scope but the depth of service delivery across industries



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Problem Statement

Most transportation service providers have reached crossroads, where it is crucial for them to satisfy consumers by providing them with the best facilities while at the same time providing low cost transportation with amenities, hence, assessing consumers' perception of or attitudes towards transportation services is critical for competitive advantage.



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Main
Objective:

The objective of this study is to assess Namibian consumers' perceptions or attitudes towards the train transportation services provided by the main supplier of train transportation services in Namibia. Hence the study tests the following hypotheses:

hypotheses:

Hypothesis 1: There is a direct relationship between the reasons why people use train services and train service quality.

Hypothesis 2: There is a positive relationship between frequency of rail usage and price

Secondary Objectives

- To review related literature in the areas of service quality and customer centricity so as to explore the gap in the literature
- To assess the validity and the reliability of such Framework for achieving holistic customer centricity and satisfaction



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Literature
Review

-

Customer
Satisfaction

-

Customer
Perception and
Expectation

Since the early 1970s the volume of consumer satisfaction research has been impressive.

Numerous theoretical structures have been proposed to examine the antecedents of satisfaction and develop meaningful measures of the construct.

Most of these studies have used some variant of the disconfirmation paradigm which holds that satisfaction is related to the size and direction of the disconfirmation experience, where disconfirmation is related to the person's initial expectation (Churchill and Surprenant, 1982; Oliver, 1980, 1981, Semente, 2017).

This study utilised the Expectations Confirmation Theory and the Service Quality model to investigate the relationship between consumers' expectations and rail transportation service quality issues in Namibia



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Literature
Review
-
The
Expectations
Confirmation
Theory (ECT)

The ECT Model has been the dominant model in consumer satisfaction research. The model assumes consumers use pre-consumption expectations in a comparison with post consumption experiences of a product/service to form an attitude (perception) of satisfaction or dissatisfaction toward the product/service.

Expectations originate from beliefs about the level of performance that a product/service will provide (Jiang and Klein, 2009).

According to Jiang and Keim (2009, p.384), “the Expectation-confirmation theory (ECT), posits that satisfaction is determined by the interplay of prior expectations and perception of delivery

They also argue that researchers may apply the theory in a multitude of contexts where satisfaction is a variable of interest, either as the dependent, mediator, or moderator variable



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Application of The Expectations Confirmation Theory (ECT)

For instance, rail transport punctuality, along with scheduling, food quality, cost, frequency, baggage delivery, cabin service, and membership of alliances, usually seem to be the main elements of customer service in the transport industry (Weber and Sparks, 2004).

In general, dissatisfaction after using the products or service is the primary reason for customer complaints and withdraw.

In service industries such as transportation, a major requirement for success is to understand and satisfy customer needs and expectations; through creating, communicating and delivering customer value, and keeping promises



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Literature Review - Service Quality

Service quality can be defined as a consumer's overall impression of the efficiency of the organisation and its services (Park et al., 2004, Hoffman & Batson, 2010)

Most definitions of service quality depend on the context and therefore focus on meeting customers' needs and requirements and on how well the service delivered matches the customers' expectations

In the transportation industry, service quality is composed of various interactions between customers and employees who seek to influence customers' perceptions and the image of the carriers (Gursoy et al., 2005).

For railway passenger services, for instance, it is anticipated that pre-transit service quality should revolve around things such as, reliability of the website, discount offers, responsiveness to emergency situations, like cancelled tickets, and baggage allowance, and that all these have an influence on passenger satisfaction and loyalty

The technical quality dimension of the service concentrates on what the customer receives, focusing on the technical outcome of the process.

Hence, as stressed earlier, transportation service providers should strive to achieve these requirements by adding value to their service delivery in the areas of pre-transit services, in-transit services and post-transit/delivery services



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Literature Review continued...

-

Customer centric service

Hamprecht and Brunier (2011) say that customers today are demanding a more personalized service and look for an optimal customer service and experience

Firms need to engage in more customer relevant branch and electronic services through better integration of channels to raise dependability, reliability and aggression in serving clients

According to Makunike (2012) firms need to engage customers in developing customer service strategies and not only rely on what they think is best for the customer

Direct personal customer contact and customer advisory services in a branch provide opportunities for firms to achieve a high-quality, differentiated customer service and experience(Hamprecht & Brunier, 2011).

Customers in this century know what they want, and they will judge the company based on what they want



Sampling and Data
Collection:

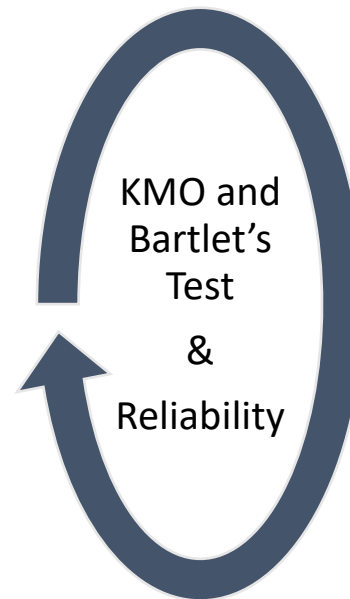
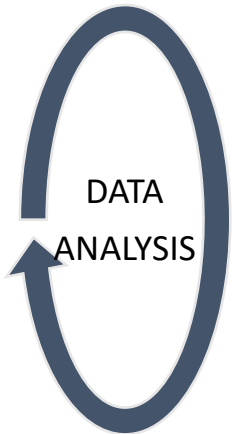
The study used a cross-sectional survey of 75 customers randomly intercepted as they walk by in the streets and at the train station.

It took 15 – 20 minutes to complete the questionnaire. The purpose of the study was explained to the respondents before the questionnaire was completed.

Three five-point Likert scales were used anchored by 1= strongly agree to 5 = strongly disagree; 1= Not important to 5 = Extremely important and 1 = Very good to 5 = Very bad



- Before conducting descriptive analyses and testing the research hypotheses, data were subjected to tests for sample adequacy, reliability and factor analysis
- A Socio-demographic representation of the respondents is provided at the end of this section



- The KMO of 0.859 shows that the sample was adequate for data collection or analysis, at a significant Bartlett p value of 0.000.
- The p value should be below 0.001 to increase confidence in data, and to show that there are no data errors or redundant variables.
- The acceptable KMO and Bartlett's test permits factor analysis to be conducted on this data.
- The alpha value of 0.870 confirms that the questions used in the study are reliable, important and measured the constructs of the study well

Table 3. Factor analysis

Construct	Measurement item	Factor loading
Reasons people do not prefer to use train services	Travels are infrequent	0.607
	Departures and arrivals are not punctual	0.644
	The travel times are unconventional	0.686
	The prices/fares are unattractively expensive	0.825
	Trains lack comfortability	0.759
	Train travels are largely unsafe	0.778
	The trains lack cleanliness	0.654
	<i>Seats are mostly unavailable</i>	<i>0.455</i>
	Train travels are inconvenient	0.658
	There is a lack of general information on train travels	0.713
Importance of service aspects	Frequent train travels	0.888
	Departures and arrivals should be punctual	0.949
	Availability of train travels	0.75
	Price affordability	0.79
	Travel speed	0.688
	Comfortability	0.917
	General safety	0.71
	Cleanliness	0.877
	Seat availability	0.901
	Convenience	0.867
Station services	0.887	

Factor Analysis - Continued

Rating of service quality	General customer service	0.971
	General information on train travels	0.827
	Customer service experience	0.904
	Availability of information on trips	0.811
	Availability of adequate waiting facilities	0.885
	Reliability of scheduled trips (time keeping)	0.881
	Frequency of trips	0.883
	Journey times	0.902
	Seat reservation services	0.927
	Hygienic environment	0.895
	Communication of emergency precautions	0.876
	Passenger safety and security	0.721
	Luggage safety and security	0.866
	Comfortability	0.852
	Meals	0.884
	Staff attitude	0.923
	Rate the booking facilities	0.935
	Convenience connectivity to other modes	0.82
	Passenger entertainment	0.903
	Provision for disabled passengers	0.757
Easiness of booking cancellations	0.857	
<p>Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations. Factor loadings less than 0.4 were suppressed. Based on Eigenvalues \geq 1.00 Total variance explained = 62.22%</p>		

Usage and Non-usage of Train Services

Table 6. Important factors when using rail services

Which of the following are important to you, when using railway services?	Mean	Standard deviation
<i>Frequent train travels</i>	<i>3.49</i>	<i>1.352</i>
Departures and arrivals should be punctual	4.38	0.936
Availability of train travels	4.00	1.022
Price affordability	4.18	1.029
Travel speed	3.50	1.131
Comfortability	4.11	0.970
<i>General safety</i>	<i>4.56</i>	<i>0.756</i>
Cleanliness	4.29	0.944
Seat availability	4.24	0.830
Convenience	3.89	1.039
Station services	4.07	1.043
Customer service	4.30	0.878
General information on Train travels	4.22	0.927
Overall aggregate	4.09	0.989

The Likert scale used for measuring factors important in using train services range from 1 – Not important, 2 – Somewhat important, 3 – Important, 4 – Very important, 5 – Extremely important.

Usage and Non-usage of Train Services

Table 5. Reasons for not using rail services

If No, which of the below could be the reason/s why you do not use railway services?	Mean	Standard deviation
<i>Train travels are infrequent</i>	<i>2.46</i>	<i>1.427</i>
Departures and arrivals are not punctual	2.48	1.299
The travel times are unconventional	3.15	1.167
<i>The prices/fares are unattractively expensive</i>	<i>3.70</i>	<i>1.489</i>
Trains lack comfortability	3.04	1.170
train travels are largely unsafe	3.31	1.339
The trains lack cleanliness	2.89	1.066
Seats are mostly unavailable	3.30	1.031
Train travels are inconvenient	2.71	1.150
There is a lack of general information on Train travels	2.52	1.405
Overall aggregate	2.956	1.254

The Likert scale used for measuring factors important in using train services range from 1 – Not important, 2 – Somewhat important, 3 – Important, 4 – Very important, 5 – Extremely important.



Hypothesis 1: There is a direct relationship between the reasons why people use train services and train service quality.

- At a p value of 0.000 the Pearson r value 0.836 shows that the relationship between 'Reasons people use rail services' and 'Train service quality' is significantly positive. Therefore there is a direct relationship between 'Reasons people use train services' and 'Train service quality'.

Hypothesis 2: There is a positive relationship between frequency of rail usage and price.

- At a p value of 0.000 the Pearson R value 0.788 shows that the relationship between 'Frequency of usage of rail services' and 'Train price or fare' is statistically significant implying respondents' usage of rail services is significantly affected by the train price or fare.

*The Pearson R value lies between 0 – 1, where a relationship is strong towards 1 and weak towards 0.

Table 7. Overall service quality

Rate TransNamib services on the below parameters.	Mean	Standard deviation
Customer service experience	2.71	1.017
Availability of information on trips	3.00	1.029
Availability of adequate waiting facilities	2.97	1.167
Reliability of scheduled trips (time keeping)	3.06	1.071
Frequencies of trips	2.97	1.014
Journey Time	3.41	1.073
Seat reservation services	2.52	1.202
Hygienic environment	2.80	1.052
Communication of Emergency Precautions	2.88	1.175
<i>Passenger safety and security</i>	2.18	1.058
Luggage safety and security	2.20	1.132
Comfortability	2.82	1.114
<i>Meals</i>	3.48	1.214
Staff attitude	2.76	1.182
Rate the booking facilities	2.51	1.147
Convenience connectivity to other modes	2.97	1.403
Passenger entertainment	3.26	1.336
Provision for disabled passengers	2.94	1.368
Easiness of booking cancellations	3.37	1.352
Overall aggregated	2.88	1.16

The Likert scale used for respondents' rating of services range from 1 – Very good, 2 – Good, 3 – Satisfactory, 4 – Bad, 5 – Very bad.

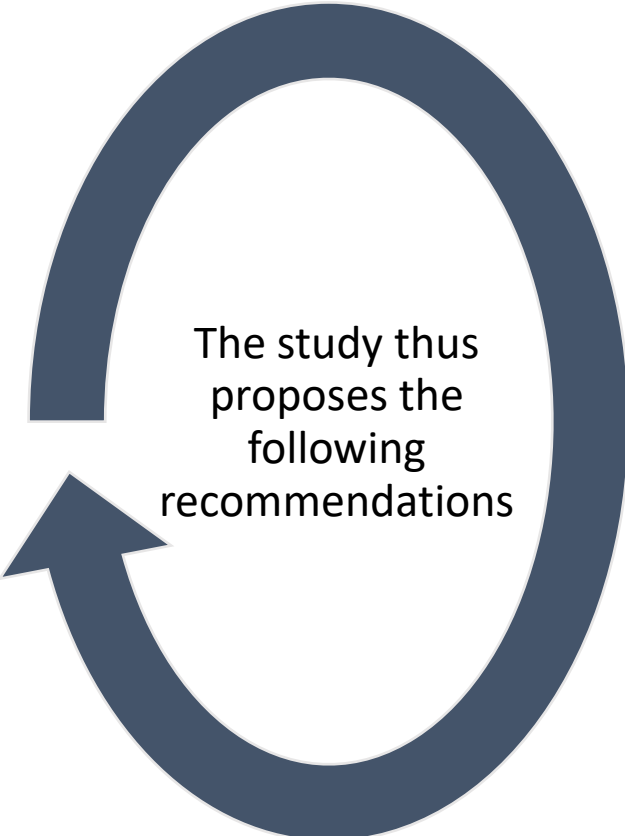
Table 10. Socio-Demographic statistics

Variable	Item	Frequency	Percentage
Age	Below 20	20	26.7
	21-30	23	30.7
	31-40	17	22.7
	41-50	11	14.7
	51 and above	4	5.2
	Total	75	100.0
Gender	MALE	35	46.7
	FEMALE	40	53.3
	Total	75	100.0
Occupation	UNEMPLOYED	17	22.7
	EMPLOYED	30	40.0
	STUDENT	20	26.7
	SELF-EMPLOYED	8	10.6
	Total	75	100.0
Education background	UNEDUCATED	6	8.0
	PRIMARY	4	5.3
	SECONDARY	21	28.0
	TERTIARY	44	58.7
	Total	75	100.0



Conclusions

- The main reasons customers do not use train services are train travel times being unconventional, trains lacking comfort, trains being largely unsafe, trains lacking cleanliness, seats mostly being unavailable, lack of general train travel information and to a greater extent train prices or fares. Infrequency of train travels and late departures or arrivals are less important reasons for not using train services, according to the mainly leisure-based customers.
- As far as what customers want in a train service, factors considered essential are general safety, punctual departure or arrival, availability of train travel, affordability, travel speed, comfort, cleanliness, seat availability, convenience, station services, customer services, general train travel information and frequent train travels.
- Indices that customers use to rate the service quality of trains are customer service experience, availability of information on trips, availability of adequate waiting facilities, reliability of scheduled trips, frequency of trips, journey times, seat reservation services, hygienic environment, communication of emergency precautions, comfort, meals, staff attitudes, booking facilities, connectivity to other modes of transport, entertainment, provision for disabled passengers, passenger safety or security and luggage safety or security.



The study thus
proposes the
following
recommendations

- a deliberate search for issues that consumers consider important in using train services,
- the discovery of consumer ratings of these variables in order to create a priority plan or strategy,
- periodic satisfaction surveys or assessments for continuous improvement and
- conduct service recovery plans whenever there are identified errors.



Limitations and Recommendations for Future Studies

- The study used a closed ended questionnaire which poses a challenge to the collection of non-numeric data such as feelings and opinions. Non-numeric or qualitative data may be required for such a study because it enables the respondents to fully express their feelings regarding train services.
- The use of qualitative techniques should be considered for future researches. Additionally, a consideration for future quantitative research studies of this nature should be to increase the size of the respondents' sample to make the study more robust.
- *Similar study in more or less the same industry(ies), for instance, AirNamibia,



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*Thank you for
listening...*

