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# An Assessment of the Relationship between Service Quality and Customer Satisfaction-A Case of a Public Passenger Road Transportation Company in Zambia.

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## *Abstract*

*Public passenger service transport in Zambia is a growing sector that urgently needs attention in terms of infrastructure and service quality. This is because the economy is growing and roads are getting congested especially in urban areas. Further, people are now depending much on road transport due to the poor services offered by railway transport and the huge costs and access limitation associated with air transport. The current study undertook to determine if there is a relation between quality service and customer satisfaction and if customers accessing public passenger service provided by the case company were satisfied. Consequently, the study used a descriptive and explanatory study design involving 390 respondents picked randomly over five week period. The data collected was analysed using descriptive statistics and multiple regression analysis since service quality was found to have five relevant dimensions. The study found that customers of the case service provider were satisfied with the service and that reliability, assurance and tangibility were the most significant variables leading to customer satisfaction.*

***Key Words:*** *Service, Quality, Dimension, Customer, Satisfaction.*

## Introduction

Transport service industry comprises of several modes which range from air, water, railways, pipeline and road transports. Pipelines are used to transport items which are liquids and gaseous in nature while air, water and roads are used to transport goods and passengers. Bus transport has grown in Zambia and contributes an average of 4% to GDP (Phiri & Mcwabe, 2013). The study is therefore focused only on long distance bus transport services (otherwise referred to as intercity travel) between the two Major cities of Kitwe and Lusaka in Zambia. An intercity bus carries passengers in significant distances between cities, towns or other populated areas, unlike a municipal bus, with frequent stops throughout a city or town. Intercity generally has a single stop at a centralized location within the city or town and travels long distances of about 60 kilometers to 250 kilometers without stopping at all.

Bus operations in Zambia are mainly controlled by the government agency known as Road Transport and Safety Agency (RTSA) which issues road and carrier licenses for passenger transport operations specifying the routes and associated information (Road Transport and Safety Agency, 2010).

Like other forms of transport, individual operators dominate passenger bus transport industry in Zambia. This is because after the liberalization of the economy and the privatization of the United Bus Company of Zambia (UBZ) in 1993 many individuals were encouraged to participate in bus transport services by removing impediments in the sector. The very nature of bus transport business makes the industry an ideal target for government and inter-governmental regulations. As a result, the transport industry is amongst the highly regulated industries in the world (Fimbo, 2008). Consequently, companies counter the regulations by developing and maintaining competitive advantage through service differentiation.

In transport service, customer service is determined by many various factors such as reliability, communication, consistency and convenience which in turn may lead to customer satisfaction. Customer satisfaction is important to bus transport service providers as it increases customer value and customer loyalty (Fuentes, Servera, Berenguer, & Saura, 2008).

**An Overview of Service Quality in Transportation**

In this modern world many bus transport service providers face difficulties in areas of bus scheduling; many services are run to a specific time table giving specific times of departure and arrival at stations on the route. These often are difficult to maintain in the event of traffic congestion, breakdowns, on/off bus incidents or bad weather (Walter, 2016), hence service quality becomes a tool that could aid good service provision.

Service quality is a comparison of expectations with performance. A business with high service quality will meet customer needs whilst remaining economically competitive. This aim may be achieved by understanding and improving operational processes, identifying problems quickly and measuring customer satisfaction and other performance outcomes. According to Agyapong (2011), from the business point of view service quality is an achievement in customer service. Customers form service expectations from past service experiences, word of mouth and advertisements. In general, customers compare perceived service with expected service; in which case if the former fall short of the latter the customers are disappointed. The subjective aspect of customer service depends on the conformity of the expected benefits with perceived results (Parasuraman, 2000).

Gaps or shortfall may occur during service provision and the common service gaps that may exist during service provision between a firm and its customers is the gap between the company and the customer. According to Zeithaml, Parasuraman, & Berry (1990), this gap occurs when managers do not know their customers' needs. The other gaps that occurs include the difference between management's perception of customer expectations and actual service specification which is also called the design gap. The other gap that might occur in service quality provision is the market communication gap. This gap occurs when the service provider makes promises about the services through communication tools which raises the customer's expectations. Finally the other gap that can occur is the customer gap which may also be called the service quality gap. This gap is of major concern to both the customer and the provider or supplier as it is the major aspect of service quality that needs to be measured. The quality gap is the difference between customer's expectations and their perceptions of service quality.

**Problem Analysis and study objectives**

Improvements in road infrastructure, moderate regulation of tariffs, removal of major restrictions of motor vehicle ownership and elimination of entry barriers have provided an incentive for private sector involvement in the transport market in most countries (Walter, 2016). On the other hand, there is a

challenge among transport operators to seek to improve other dimensions pertaining quality of the transport service they provide in order to attract new customers and retain old ones. In the last six years the case company has been transporting close to 400 passengers per day between Kitwe and Lusaka thereby allocating about 10% to 20% of its annual budget to reduce travel time, improve reliability, comfort, safety and security for its passengers to enhance customer satisfaction (Company Report, 200). Despite spending such a percentage of its budget on improving service quality, the company has recorded a reduction in the number of repeat customers especially on the time buses which sometimes have to start off with about 35 passengers on board instead of the 65 passengers on average giving a loss of about k 75,000 per month (equivalent to $7,600). Further verifications from the company reports for 2014, 2015 and 2016, revealed a steady 20% reduction in the number of repeat customers. From the customer's perspective, the proof of a service is its flawless performance (Parasuraman, Berry, & Zeithaml, 1991). Therefore the reduction in the number of repeat customers indicates flaws in the service. Hence, the study undertook to establish if there is a relationship between service quality given by its dimensions and customer satisfaction as well as the major service quality dimension that influences customer satisfaction if the customers are satisfied.

## Literature Review

Service quality is defined a service as any act of performance that one can offer to another that is essentially intangible and does not result in ownership of anything (Kotler, 2008). Service quality is a term which describes a comparison of expectations with performance (Rafid, & Jaafar, 2007). Service quality, according to Sridhar (2001) service quality is meeting the customer's expectations. Its production may or may not be tied to a physical product. A service is an "economic activity offered by one party to another" (Philips & Baumgartner, 2002). They further laments that it is an intangible product. Gronroos (2000) suggested further that services are a series of processes and procedures that leads to an outcome, which will give solutions to customer's problems, during partly simultaneous production and consumption processes.

Services cannot be seen, felt, tasted or touched as tangible products, which can be readily displayed and easily transferred to customers (Zeithaml & Bitner, 2000). Many business firms always try to make their intangible offer as tangible as possible, while manufactures try to create an image for their products instead of focusing on the tangible aspects of their product in advertising (Fitzsimmons & Fitzsimmons, 2006). This is because the appearance of the surroundings, tools or equipment used and their service ability are the main indicators of quality to customers, since they aid to "tangibilize" the service. A delay may cause dissatisfaction with the service and customers may show lack of appreciation of the effort made by service employees (Walter, 2016). The kind of personal contact required is referred to as "interactive consumption" and "interactive process" in the definition of services it includes physical environment, i.e. station facility, mood of customers, behavior of personnel and customer's needs. Most services that have high labor content are heterogeneous. This simply means that their performance varies widely depending on the providers psychological, motivational and other factors which impinge on an employee's ability or readiness to perform his/her duties accurately. Zeithaml & Bitner (2000) added tha behavior of a service provider cannot remain constant over time; hence there is no consistency in the performance of a service.

### Measuring service quality

Service quality is more difficult to measure than the quality of goods. Today, researchers on service quality widely accept and apply two service theories among the various service quality opinions. One is the Gronroos' Technical and Functional Quality framework. The other is the SERVQUAL model by Parasuraman, Zeithaml and Berry in the 1990s. The SERVQUAL measuring tool has been used by several researchers to examine numerous service industries such as Banks (Oyetunji, 2014); Education (Samanhyia, 2014) and Health (Aikins, 2014). Gronroos (2000) argued that in the 1990s, the two-dimension model of service quality (technical quality and functional quality) was used to describe and measure the service quality. In this model, technical quality focuses on the outcome of what is the service

provided and functional quality takes into account how it is delivered. Parasuraman, Berry & Zeithaml (1991) discussed ten (10) service quality dimensions that customers use to judge the quality of the service offered were reviewed. The ten dimensions are not necessarily independent of each other. There could be some overlap between the categories. As a result of a further study, Parasuraman (2000) reduced the ten dimensions and combined them into five dimensions of quality: tangibles, reliability, responsiveness, assurance (including competence, courtesy, credibility, security) and empathy (including access, communication and understanding).

Bebko (2000) defined reliability as "the ability to perform the promised service dependably and accurately". Reliability of a service as the ability of personnel to perform the desired service dependably, accurately and consistently in order to meet customers' expectations. Parasuraman, Berry & Zeithaml (1991) defined responsiveness as the willingness of the service providers to assist the customer and deliver prompt services. It shows how reactive an organization is towards its customers (Cronin & Taylor, 1992). Assurance can be stated as "employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence". Assurance can also be described as a function of other dimensions such as reliability, tangibility, and responsiveness. Curry & Sinclair (2002) defined sympathy as the caring, of individualized attention that the firm provides its customer. Allen (2008) summarised the dimensions of quality in the book 'Quality Management, the dimensions were summarized as shown below:

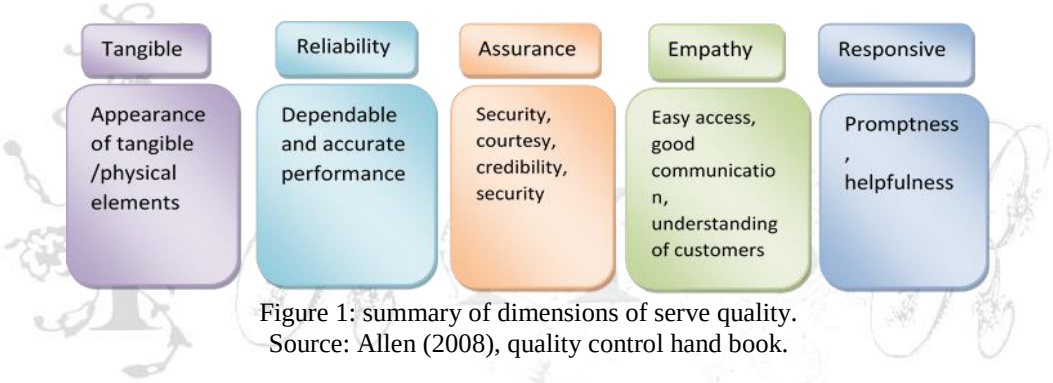


Figure 1: summary of dimensions of serve quality.
Source: Allen (2008), quality control hand book.

Finally, another measure of service quality was discussed by Parasuraman, Berry & Zeithaml (1991) through the ServQual model. SERVQUAL is based on the "GAP model" of service quality, which facilitates quantification of the gap between customers' expectations of a service and their perceptions of the actual service delivered

**Customer satisfaction**

A study by Channoi (2014) on service quality determined that service quality, corporate image and customer perceived value are three significant descriptors of customer satisfaction. Lovelock & Wright (2002) defined customer satisfaction as a sort of emotional reaction that arose from an actual experience. According to Oliver (1997), customer satisfaction is defined as a judgment that a product or service provided a pleasurable level of consumption-related fulfilment. Brady & Cronin (2001) identified customer satisfaction as the link between quality and post-purchase evaluation and firms quite often use customer satisfaction as measure of product or service performance. Satisfaction is either defined as an overall judgment of satisfaction or decomposed into satisfaction with performance or quality attributes (Brady and Cronin, 2001). The level of satisfaction increases when the quality of service exceeds the wants, needs and expectations of the customer. Customer satisfaction takes place in two situations. One is the result of a product or actual service meeting the customer's expectations. The other is the result exceeds the expectations. Dissatisfaction will occur when the actual service is below the expected level and service quality is seen as an antecedent of customer satisfaction (Niveen, 2013). Al Karim (2014) studied the

factors affecting customer satisfaction on service quality. Factor analysis was used to measure the determinants of service quality. The findings showed customer satisfaction have significant effect on Reliability, Empathy, Assurance and Responsiveness but not on Tangibles. Deneke, Million, Mebratu, Teshome & Teferi (2016) studied the impact of service quality on customer satisfaction and the result of the study showed that tangibility, reliability, responsiveness, assurance and empathy significantly and positively influenced customer attitudes in terms of satisfaction.

Kumar, Anand & Srivastava (2016) studied customer satisfaction in passenger service in Ethiopia and found that most passengers in the data collection sites were complaining about the lack of basic facilities in the bus stations. In addition, they stressed that even if the basic facilities were present, they are charged for using them (especially toilets). Passengers claim that buses do not depart on time from stations. The worst case all passengers in the bus stations stated was that buses carry beyond the specified capacity and also tariff set by the government is not usually put in place. On the other hand, some drivers and assistants lack professional ethics in serving customers.

An empirical study by Krishna (2014) in Agra district in Pradesh in India found that all the passengers surveyed were not satisfied with the passenger transport service offered by the state entity in the district. This is because the busses were not clean and were congested and the associated facilities were not appropriate. A study on service quality of public passenger service vehicles in South Africa, Clark & Baker (2004) found that bus users were positive about the service quality in terms of reliability, comfort, safety and affordability than those who used smaller taxis.

**Study Theoretical and Conceptual Framework**

The relationship between the customer/consumer and the company environment, product or service is satisfaction which is an overall psychological state that reflects the evaluation as reviewed by customer satisfaction theory. Satisfaction usually involve one of the following three psychological elements: Cognitive (thinking/evaluation), Affective (emotional/feeling), and behavioral. Other theories reviewed include; Expectancy disconfirmation theory proposed in general terms, that consumption of or experience with the product or service produces a level of perceived quality that is influenced by expectations. Assimilation-Contrast theory suggests that if performance is within a customer's latitude (range) of acceptance, even though it may fall short of expectation the discrepancy will be disregarded. Consistency theories suggest that when the expectations and the actual product performance do not match the consumer will feel some degree of tension. In order to relieve this tension the consumer will make adjustments either in expectations or in the perceptions of the product's actual performance. The researchers therefore designed the following concept based on the reviewed theories:

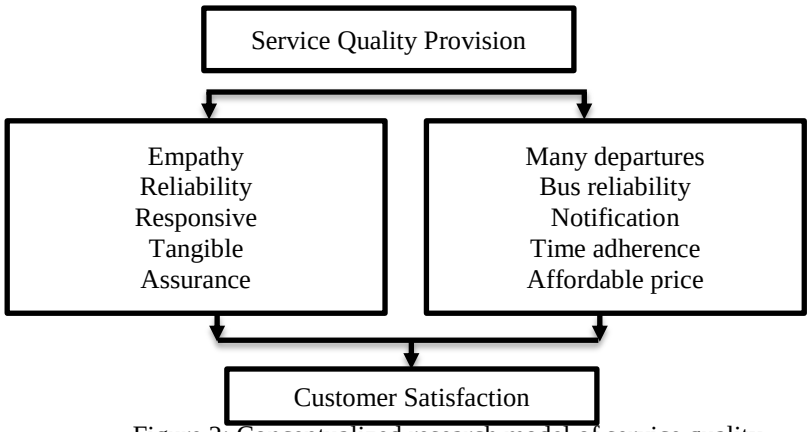


Figure 2: Conceptualized research model of service quality
Source: Authors, 2017.

The model shows that satisfying customers will be achieved through provision of service quality which in transportation will result in increased number of departures, bus reliability and availability, more and timely notifications to customers and adhering to set times. Customer satisfaction measures how well a company's products or services meet or exceed customer expectations. This can be summarized as follows:

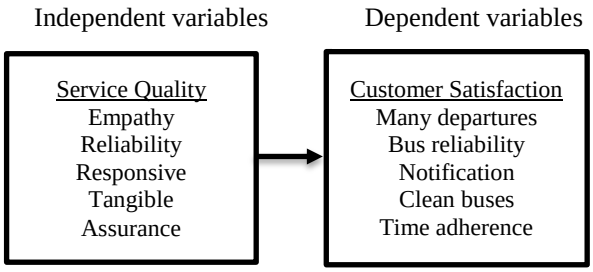


Figure 3: Hypothetical perspective of service quality.
Source: Authors, 2017.

The model above shows the relationship that exit within the spheres of service quality dimensions and passenger satisfaction. A substantial improvement in specific quality dimension will improve the quality of service being provided; this eventually results in enhanced customer satisfaction and loyalty. Satisfied customers can help increase market share and also give a firm competitive advantage over its competitors (Kothari, 2004)

**Concept Operationalization**

Many departures means more buses leaving the terminus in a given time. This would enable customers to depend on the service and develop some trust in time management. Bus reliability is the probability that a vehicle will perform according to expectation or the probability that the bus will move from one destination to another without developing any fault within a specified time and under stated conditions. Notification is modelled to represent the information that is given to customers before, during and after the service provision in order to assure the customers on what is happening at every stage of service provision. Lastly, time adherence simply means sticking to the time table that has been set to ensure that customers are not inconvenienced.

## Hypothesis Development

The following hypotheses were thus developed:

H1o: Service empathy has no influence on customer notification
H11: Service empathy has an influence on customer notification

H2o: Service reliability has no influence on bus reliability
H21: Service reliability has an influence on bus reliability

H3o: Service responsiveness has no influence on notification and departures
H31: Service responsiveness has an influence on notification and departures

H4o: Service tangibility has no influence on bus and station appearance
H41: Service tangibility has an influence on bus and station appearance

H5o: Service assurance has no influence on adherence to time

H51: Service assurance has an influence on adherence to time

## Methodology

The research followed a combination of a descriptive and explanatory research designs studying the causal of one variable over the other. To gain insight required to evaluate bus transport service quality provision and passenger satisfaction explanatory research was adopted.

The relevant population for the study were all the buses dispatched from Kitwe and Lusaka every day. The average bus capacity was 65 which came to 390 passengers. However, when studying a social problem, it is difficult to study the whole universe under investigation. It is both costly, time consuming and complex as well as financially not viable (Maric, Marinkovic, Dimitrovski, 2016). It is therefore convenient to pick up a sample out of the universe to be covered by the study. The researchers therefore picked a sample to work with. The random sampling technique was used to select buses and passengers on board. Three time buses and three non-time buses were sampled.

Therefore, the researchers sampled customer respondents using Yamane's formula given by:

$$n = \frac{N}{1 + N(e)^2} \text{.....equation 1}$$

Where n = sample size
N = population
e = margin of error set at 10%

The company sends out about six (6) buses on average both from Kitwe and Lusaka whose average capacity is 65passengers seated. Therefore, using the formula on the 65 seater bus, the n value were calculated as follows:

Using equation 1…n = N/[1+N(e)2 ] =65/[1+65(10%)2] = 39

The researchers hence undertook to sample one (1) buses from Kitwe and the same number from Lusaka over five week period in order to involve three hundred and ninety (390) passengers from the five buses on either side. The researchers collected the data using semi structured questionnaires triangulated by pre-questionnaire administration interview.

Further, the researchers used the interview technique to obtain the required information from the company's staff to validate the bus schedules and operations. The researchers aimed at analyzing the collected data using descriptive statistics correlation matrix and multiple regression in the Statistical Package for Social Science (SPSS) software.

## Results and Discussion

The researchers managed to obtain 164 responses from the 390 targeted customers. This represents 42% response rate.

The figure 4 shows that almost 57.3% of the respondents were male against 42.7% for female. Moreover, the percentage of Zambian respondents was 95.1%. With regard to their occupation, it was been found that 17.7% passengers were students, private business people were 31.1%, Government employees 17.1%. Professionals who participated in the study were 14%; Employees from different organizations were 11.6% while other respondents whose occupation was not mentioned in the specified category were 8.5%.

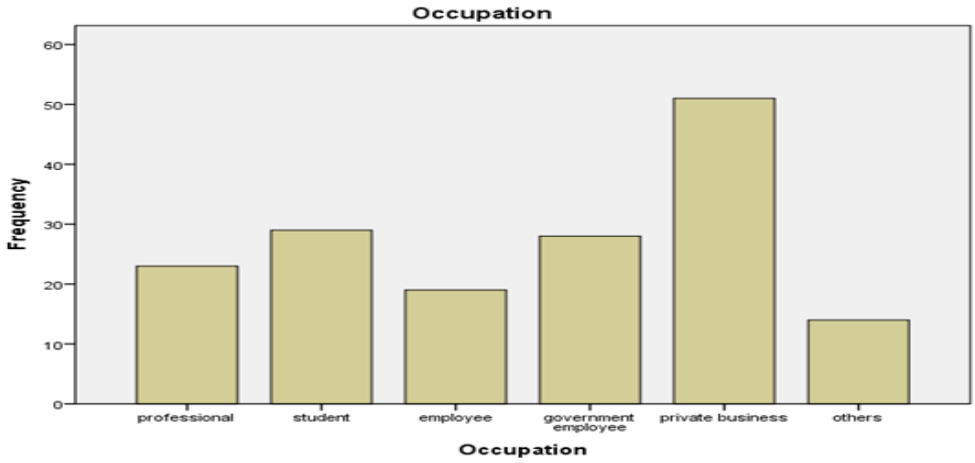


Figure 4: Categories of customer respondents
Source: Authors, 2017.

**How Customers Evaluate the Services provided by the Transport Company**

**Reliability**

Table 1 below shows four items that were used to measure reliability and these are, provide services as required which had a mean score of 3.5488, handling of passengers problems with a mean score 3.6768, performing services at the required time with a mean score of 3.5061 and provide services at the promised time which had a mean score of 3.4146. The rate of the respondents on this dimension ranged from 3.4146 and 3.6768 which on average is equivalent to 70.1%. The standard deviation ranged from 0.831 to 0.899. Therefore, the skew and kurtosis ranged from -0.54 to +0.54 meaning that the data did not deviate much from normality.

Table 1: Reliability dimension of service quality

| | | Provide services as required | Handling of passengers problems | Performing services at the required time | Provide services at the promised time |
|---|---|---|---|---|---|
| N | Valid | 164.00 | 164.00 | 164.00 | 164.00 |
| | Missing | 0.00 | 0.00 | 0.00 | 0.00 |
| Mean | | 3.55 | 3.68 | 3.51 | 3.41 |
| Std. Error of Mean | | 0.06 | 0.07 | 0.07 | 0.07 |
| Median | | 4.00 | 4.00 | 4.00 | 3.00 |
| Mode | | 3.00 | 4.00 | 4.00 | 3.00 |
| Std. Deviation | | 0.83 | 0.84 | 0.88 | 0.90 |
| Skewness | | -0.29 | -0.54 | -0.37 | -0.05 |
| Std. Error of Skewness | | 0.19 | 0.19 | 0.19 | 0.19 |
| Kurtosis | | 0.49 | 0.44 | 0.32 | -0.33 |

Source: SPSS Output

**Responsiveness**

Table 2: Responsiveness dimension of service quality.

| | | Maintains free error records | Keep passengers informed when services will be performed | Prompt services to customers | Willingness to respond to passengers | Willingness to help customers |
|---|---|---|---|---|---|---|
| N | Valid | 164.00 | 164.00 | 164.00 | 164.00 | 164.00 |
| | Missing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mean | | 3.55 | 3.55 | 3.60 | 3.74 | 3.73 |
| Std. Error of Mean | | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Median | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Mode | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Std. Deviation | | 0.91 | 0.95 | 0.88 | 0.88 | 0.92 |
| Variance | | 0.83 | 0.90 | 0.78 | 0.78 | 0.84 |
| Skewness | | -0.37 | -0.71 | -0.37 | -0.50 | -0.79 |
| Std. Error of Skewness | | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| Kurtosis | | -0.26 | 0.39 | 0.20 | 0.14 | 0.67 |
| Std. Error of Kurtosis | | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |

Source: SPSS Output

The table 2 above shows the items that were used to measure responsiveness which is also a dimension of service quality. The items were, maintaining error free records, this item had a mean score of 3.5488, keeping passengers informed about when the service will be performed which had a mean score of 3.5549, providing prompt services scored a mean of 3.6037, willingness to respond to customers scored a mean of 3.7349 and willingness to help passengers scored a mean of 3.7256. The table shows a mean range of 3.548 to 3.734 and the average mean score was equivalent to 62.7%. The skew and kurtosis of all items ranged from -0.8 to +0.8 indicating that the data did not deviate much from normality.

**Assurance**

Assurance as a service quality dimension was measured by three items which are indicated in the table 3 below. The first item which was, do employees instill confidence in customers, recorded a mean score of 3.5671. The second item used is making customers feel safe of their transaction which scored a mean of 3.8049, and finally the last one on this dimension was employees' knowledge to answer passengers which had a mean score of 3.5610. The average percentage was equivalent to 73%. The skew and kurtosis of all the aspects ranged from -0.7 to +0.2 indicating a slight skew to the left but within normality.

Table 3: Assurance dimension of service quality

| | | Employees instills confidence in customers | Making customers feel safe of the transactions | Employees have the knowledge to answer passengers |
|---|---|---|---|---|
| N | Valid | 164.00 | 164.00 | 164.00 |
| | Missing | 0.00 | 0.00 | 0.00 |
| Mean | | 3.57 | 3.80 | 3.56 |
| Std. Error of Mean | | 0.07 | 0.08 | 0.08 |
| Median | | 4.00 | 4.00 | 4.00 |
| Mode | | 4.00 | 4.00 | 4.00 |
| Std. Deviation | | 0.96 | 0.98 | 0.96 |
| Variance | | 0.92 | 0.96 | 0.92 |
| Skewness | | -0.43 | -0.56 | -0.66 |
| Std. Error of Skewness | | 0.19 | 0.19 | 0.19 |
| Kurtosis | | -0.11 | -0.29 | 0.12 |

Source: SPSS Output

**Empathy**

The mean scores for the items used were 3.4939 for giving personal attention to passengers, a mean score of 3.3720 for convenient business hours and 3.2683 mean score for employees who are consistently courteous. This quality dimension was rated lowest with an average percentage of 67.6%. The skew and kurtosis of all the data items used ranged from -0.6 to +0.1 indicating a skew to the left.

Table 4: Empathy dimension of service quality

| | | Give passengers personal attention | Convenient business hours | Employees who are consistently courteous |
|---|---|---|---|---|
| N | Valid | 164.00 | 164.00 | 164.00 |
| | Missing | 0.00 | 0.00 | 0.00 |
| Mean | | 3.49 | 3.37 | 3.27 |
| Std. Error of Mean | | 0.07 | 0.07 | 0.07 |
| Median | | 3.00 | 3.00 | 3.00 |
| Mode | | 3.00 | 4.00 | 3.00 |
| Std. Deviation | | 0.95 | 0.90 | 0.96 |
| Variance | | 0.90 | 0.81 | 0.92 |
| Skewness | | -0.09 | -0.20 | -0.44 |
| Std. Error of Skewness | | 0.19 | 0.19 | 0.19 |
| Kurtosis | | -0.53 | -0.46 | 0.05 |

Source: SPSS Output 2017

**Tangibility**

The items used were, visually appealing facilities and comfort of buses whose mean scores were 3.6402 and 3.2134 respectively. The average percentage of this dimension was 68.5%.

Table 5: Tangibility dimension of service quality

| | | How comfort are the buses | Visually appealing facilities |
|---|---|---|---|
| N | Valid | 164.00 | 164.00 |
| | Missing | 0.00 | 0.00 |
| Mean | | 3.64 | 3.21 |
| Std. Error of Mean | | 0.07 | 0.07 |
| Median | | 4.00 | 3.00 |
| Mode | | 4.00 | 3.00 |
| Std. Deviation | | 0.93 | 0.91 |
| Variance | | 0.86 | 0.82 |
| Skewness | | -0.49 | -0.39 |
| Std. Error of Skewness | | 0.19 | 0.19 |
| Kurtosis | | 0.23 | 0.01 |

Source: SPSS Output 2017

The skew and kurtosis of both aspects used ranged from -0.5 to +0.3 which did not deviate much from normality.

**Customer Satisfaction**

Customer satisfaction was measured on a 5-point Likert scale with three different statements which considered the overall satisfaction status of the customer, willingness to use the service provider again and intent to recommend someone loved to use the service. This is consistent with the research in 2016 (Maric, Marinkovic, Dimitrovski, 2016) where they researched on service quality in hotels and found that customer care contributes to creating sustainable competitive attitude. Satisfied and loyal consumers, who feel that a given hotel fulfils their demands, are usually willing to stay in it in the future as well, and also recommend it to their friends and acquaintances.

The results in table 6 shows that the customers' perceptions regarding these aspects were on average 3.658, 3.878 and 3.9268 respectively. Therefore, the average mean score was 3.82, which is equivalent to (77%) which indicates some level of satisfaction. The skew and kurtosis of all the aspects ranged from -0.6 to +0.4 indicating normality in the data. The table 6 below shows the descriptive statistics from this aspect.

Table 6: Measuring customer satisfaction.

| | | Are you satified with the service provided | Would you travel using this provider again | Would you recommend your loved ones to use this provider |
|---|---|---|---|---|
| N | Valid | 164.00 | 164.00 | 164.00 |
| | Missing | 0.00 | 0.00 | 0.00 |
| Mean | | 3.66 | 3.88 | 3.93 |
| Std. Error of Mean | | 0.06 | 0.07 | 0.07 |
| Median | | 4.00 | 4.00 | 4.00 |
| Mode | | 4.00 | 4.00 | 4.00 |
| Std. Deviation | | 0.80 | 0.92 | 0.88 |
| Variance | | 0.64 | 0.84 | 0.77 |
| Skewness | | -0.31 | -0.52 | -0.41 |
| Kurtosis | | -0.15 | 0.24 | 0.31 |

Source: SPSS Output

**Correlation Matrix**

The researchers performed a correlation analysis to determine if there was a relationship between customer satisfaction and service quality dimensions and the nature of the relationship.

The result shows a positive relation significant from the two tail as shown in the coded table 7 below:

Table 7: Correlation of service quality dimensions and customer satisfaction

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| A | 1.00 | 0.40 | 0.35 | 0.43 | 0.33 | 0.49 |
| B | 0.40 | 1.00 | 0.49 | 0.48 | 0.34 | 0.33 |
| C | 0.35 | 0.49 | 1.00 | 0.55 | 0.40 | 0.38 |
| D | 0.43 | 0.48 | 0.55 | 1.00 | 0.45 | 0.39 |
| E | 0.33 | 0.34 | 0.40 | 0.45 | 1.00 | 0.55 |
| F | 0.49 | 0.33 | 0.38 | 0.39 | 0.55 | 1.00 |

Source: SPSS Output 2017.

Key

| Satisfaction | Reliability | Responsiveness | Assurance | Empathy | Tangibles |
|---|---|---|---|---|---|
| A | B | C | D | E | F |

Table 7 shows that all the dimensions of service quality are positively related to customer satisfaction. The table further shows that a combination of responsiveness and assurance are strongly related and would lead to customer satisfaction. The same indication can be seen between tangibility and empathy. This shows that appealing facilities must go with consideration for the customers.

**Regression Analysis**

Finally, the researchers performed a multiple regression analysis to determine if there is a significant relationship between service quality and customer satisfaction. The ANOVA table 8 below shows a significant relation between the two as shown below:

Table 8: Analysis of Variance

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 31.429 | 6 | 5.238 | 17.542 | .000[b] |
| | Residual | 46.88 | 157 | 0.299 | | |
| | Total | 78.309 | 163 | | | |
| a. Dependent Variable: Satisfaction | | | | | | |
| b. Predictors: (Constant), Empathy, reliability, Responsiveness, Assurance, Tangibles | | | | | | |

Source: SPSS Output, 2017.

To determine the most significant variables, table 9 below shows the strength of each variable:

Table 9: Regression analysis

| Model | | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.82 | 0.33 | | 2.45 | 0.02 |
| | Reliability | 0.17 | 0.08 | 0.16 | 2.11 | 0.04 |
| | Responsiveness | -0.02 | 0.09 | -0.02 | -0.19 | 0.85 |
| | Assurance | 0.17 | 0.07 | 0.19 | 2.34 | 0.02 |
| | Empathy | -0.01 | 0.08 | -0.01 | -0.17 | 0.86 |
| | Tangibles | 0.21 | 0.08 | 0.23 | 2.74 | 0.01 |
| a. Dependent Variable: Satisfaction | | | | | | |

Source: SPSS Output, 2017.

The results indicates that the Responsiveness and Empathy dimensions of service quality in this research were found to have less significant effect on customer satisfaction. The remaining three dimensions (Reliability, Assurance and Tangibility) proved to have significant effect on customer satisfaction. In other words, since the observed significance level is less than 0.05, it indicates that the mentioned service quality dimensions are good predictors of customer satisfaction of intercity bus transport service offered by the case company. Therefore, the regression analysis shows that if no initiatives are taken to improve the level of the identified variables (i.e. Reliability, Assurance and Tangibles), the level of customer satisfaction would decrease.

The implication of this result is as follows:

$H1_0$: Service empathy has no influence on customer satisfaction-no sufficient reasons found to reject hypothesis.
$H2_1$: Service reliability has an influence on bus reliability was supported with a p-value of 0.04
H3o: Service responsiveness has no influence on notification and departures-no sufficient reasons found to reject hypothesis
$H4_1$: Service tangibility has an influence on bus and station appearance was supported with a p-value of 0.01
$H5_1$: Service assurance has an influence on adherence to time was supported with a p-value of 0.02

## Discussion

The implication of this study is that customers of passenger service transporters specifically for the case company are satisfied with the service provision so far. Further, these customers will be happier if the service is reliable both in terms of equipment and the actual service. This is because a reliable service helps the customers to plan their travel schedules well since most of the users are businessmen and women.

Additionally, they need assurance that they buses will be clean, move on time, mechanically serviced and road-worth. This gives them inner motivation and trust to use the service. Finally, the service provider will satisfy the customers more if the bus stations appear well presentable with neat buses both inside and outside, as well as all other facilities associated with the service.

This implies that a combination of reliability, responsiveness and tangibility are enough to show the customer that the service provider is customer focused and cares about the customer's welfare.

## Conclusions and Recommendations

It can be concluded that customers of this transport provider are satisfied with the service and that reliability, assurance and tangibility are the most significant variables.

It is therefore recommended that the service provider keeps modernising the bus stations and use latest technology buses to transport the passengers. The provider should begin to use online reservation and ticketing system as a way of improving assurance and reliability.

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