

**EFFECTS OF SERVICE QUALITY ON PASSENGER LOYALTY IN ADAMAWA
SUNSHINE TRANSPORT COMPANY LIMITED, NIGERIA**

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JUNE, 2019

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SUNSHINE TRANSPORT COMPANY LIMITED, NIGERIA**

BY

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**A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT
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ADAMA UNIVERSITY OF TECHNOLOGY, YOLA**

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JUNE, 2019

DECLARATION

I hereby declare that this thesis was written by me and it is a record of my own research work. It has not been presented before in any previous application for a higher degree. All references cited have been duly acknowledged.

TUMBA, Joseph

Date

DEDICATION

This thesis is dedicated to God Almighty and my entire family.

APPROVAL PAGE

This thesis entitled “**Effects of Service Quality on Passenger Loyalty in Adamawa Sunshine Transport Company Limited, Nigeria**” meets the regulations governing the award of Master of Science (M.Sc) Degree in Management Technology of the ModibboAdama University of Technology, Yola and is approved for its contribution to knowledge and literary presentation.

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ABSTRACT

The long-term survival and competitiveness of Adamawa Sun Shine Transport Company is strongly connected to the quality of service offered by the organization and its ability to satisfy and to build long-term relationships with customers. This study examines the effect of service quality on passenger loyalty in Adamawa Sunshine Transport Company. A cross-sectional survey research design was chosen in the collection of the primary data, using a structured questionnaire. Convenience sampling was also adopted to draw a sample of 436 respondents. The data collected was analyzed using multiple regression analysis. The findings of this study largely support the hypothesized effect proposed in the conceptual framework. The results specifically revealed that tangibility, reliability, responsiveness, and assurance significantly affected passengers loyalty. Empathy as one of the dimensions of service quality had no significant effect on passenger loyalty. On the basis of the findings of this study, it is concluded that service quality has an effect on loyalty to the Adamawa sunshine transport company. Thus, improvement of service quality is an adjuvant factor in sustainable differentiation and competitiveness in the industry. Therefore, the study recommended that Adamawa State Sunshine Transport should develop and implement market-oriented service strategies to identify passenger 'needs and expectations in order to serve them better.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Service Quality is increasingly becoming a strategic issue in the world (Khairani & Hati, 2017). Reason for the successes in the industry since 1970s to date is the realization of the quality concept that should emanate from the requirements and expectations of the customers (Rabbani, Qadri & Ishfaq, 2016). This perception has played a vital role in bringing about success. Recently, service quality has grown to be more vital than in the past years because the suppliers of services have understood that they have to offer client-perceived value, that is, if the organization wants to continue operating. As competition worldwide increases, clients have more choice to select from and indeed service quality becomes their main concern as they pay cash, particularly as they attempt to get the best value for their money as well as the satisfaction for each unit of money paid.

In many countries, there is increased investments in public transport systems to make them more competitive against other means of transport, most notably private cars. New services have been developed and old ones have been upgraded (Murambi & Bwisa, 2014). However, an increase in supply (qualitatively or quantitatively) will not automatically lead to a corresponding increase in demand and in satisfaction (Fujii & Kitamura 2003, Mackett & Edwards 1998). As investment actually brings about the obtainable and the prospective clients imagine, knowledge of fulfillment and service overall performance should offer policymakers and managers (at the operational level in municipal transport) with valuable information. Several prior studies have indicated that customer loyalty is important for firms to increase their competitive edge and performance (Khatibi, Ismail, & Thyagarajan 2002). Kotler and Singh (1981) reason that customer loyalty is the basis for sustainable competitiveness in service industries especially transport. Nevertheless, the assessment of customer loyalty in the transportation context is relatively new in Nigeria. The most effective means to gain customer loyalty are to satisfy and deliver high value through admirable services and products.

Customer Loyalty has a significant function in an organization because gaining clients loyalty means sustaining the life-line of the organization. The longer a loyal customer of a product/service, the greater the profits derived by an enterprise (Griffin, 2002). Client loyalty is significant to the survival of the organization, particularly transport company (Murambi & Bwisa, 2014). Therefore, the transport organization must

incessantly maintain and improve the quality of service that will gain the loyalty of customers. To develop and gain client loyalty by an organization, they must have developed a cordial relationship with their client so that the organization can better comprehend the needs and wants, desires and expectations of its clients. In putting the client at the center of business doings, the organization is expected to pay attention and to give priority to customers in all activities and programs carried out. Customer is considered as a targeted of preference.

The expectation is to feel satisfied, contented, and ultimately become loyal to the organization (Tjiptono, 2002). It can be argued that client loyalty expresses futurebehaviour linked to the product/service or to the firm. In other words, loyalty is simply as a customer's positive attitude or feeling towards the service provider. Satisfied customers develop a positive feeling such that they would want to use the service of the same company again in the future. Furthermore, they encourage others to use the services from that particular service provider. Finally, customer satisfaction and loyalty always follow the service quality which is one of the most frequently used variables to measure the success of marketing (Murambi & Bwisa, 2014). Therefore, this study examines the effects of service quality on customer loyalty in Adamawa Sunshine Transport Company.

1.2 Statement of the Problem

Road transport is the dominant transport mode in Adamawa, as elsewhere in Nigeria. The conditions of the vehicles, qualification, and experience of the drivers, traffic officers, weighing bridge officials, state of the roads, the experience of the drivers and the different qualities of comfort enjoyed aboard the various vehicles are the main problems that influence service quality of transport service in Adamawa State Transport Company (Sunshine Express).

Adamawa State Transport Company is staffed by officers temporarily seconded from various Government ministries and agencies. The lack of a permanent staff is a constraint towards developing the company's professional and technical capacity. Moreover, as a state company, Adamawa State Transport Company enjoys limited managerial autonomy and hence, it cannot operate as a fully-fledged transport business with commercial orientation. In practice, it functions as a unit of the state government with the resulting limitations in terms of commercial responsiveness and efficiency.

Related past studies on the public transport industry, comment on a number of each. Barabino, Deiana and Tilocca (2012) conducted a study on measuring service quality in urban bus transport: a modified SERVQUAL approach. Too and Earl (2010) conducted a study on Public Transport Service Quality and Sustainable Development: a Community Stakeholder Perspective which focuses only on four dimensions of service quality (tangibility, responsiveness, reliability, assurance) instead of five dimensions. This study, therefore, uses five dimensions (tangibility, responsiveness, reliability, assurance, and empathy) by adding empathy to expand on the existing literature. Babbar and Koufteros (2008) examined the human element in transaction section service quality in the United States; Saha and Theingi (2009) studied service quality, satisfaction and behavioral intentions of low-cost transport in Nigeria with little emphases on passenger loyalty. Additionally, studies on the other means of transportation that have been conducted by researchers in foreign and domestic transport service might not be applicable to Adamawa Sunshine Transport Company due to the differences in location, cultures, and norms. Winsted (2001) also has indicated that consumers have differed on service evaluations based on their respective locations, cultures as well as norms. Past studies such as Ganiyu, (2017); Juhari, Bhatti, and Piaralal, (2016), Khairani, and Hati, (2017); Pantouvakis and Lymperpoulos, (2008) have examined service quality in transportation sector mainly focusing on service quality dimension. Parasuraman, (1985) discussed tangibility, assurance, responsiveness, reliability and empathy in retail industry with little emphasis on the public (mass) transport service industry especially, Adamawa Sunshine Transport Company. Therefore, based on these gaps in knowledge the study examined the effects of service quality on passenger loyalty in Adamawa sunshine transport company.

1.3 Research Questions

The following are the research questions to be answered;

- i. What is the effect of tangibility on passenger loyalty in Adamawa Sunshine Transport Company?
- ii. Is there any effect of Responsiveness on passenger loyalty in Adamawa Sunshine Transport Company?
- iii. What is the effect of reliability on passenger loyalty in Adamawa Sunshine Transport Company?
- iv. What is the effect of assurance on passenger loyalty in Adamawa Sunshine Transport Company?

- v. What is the effect of empathy on passenger loyalty in Adamawa Sunshine Transport Company?

1.4 Objectives of the Study

The main objective of the study is to examine the effect of service quality on passenger loyalty in Adamawa Sunshine Transport Company. Specifically, the study intends to:

- i. Examine the effect of tangibility on passenger loyalty in Adamawa Sunshine Transport Company.
- ii. Assess the effect of responsiveness on passenger loyalty in Adamawa sunshine transport company.
- iii. Evaluate the effect of reliability on passenger loyalty in Adamawa Sunshine Transport Company.
- iv. Examine the effect of assurance on passenger loyalty in Adamawa Sunshine Transport Company.
- v. Assess the effect of empathy on passenger loyalty in Adamawa Sunshine Transport Company.

1.5 Research Hypotheses

The following are hypotheses for the study;

- i. H₁:- Tangibility of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- ii. H₂:- Responsiveness of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- iii. H₃:- Reliability of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- iv. H₄:- Assurance of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- v. H₅:- Empathy of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

1.6 Significance of the Study

For the Adamawa Sunshine Transport Company, this study will help to cultivate better understanding and knowledge on the passenger loyalty between service qualities with tangibility, responsiveness, empathy, reliability and assurance. Besides, this study will help to determine the contributing variable which has the most significant relationship on service quality. It also helps Adamawa Sunshine Transport Company to identify the real needs and wants of the passengers in putting effort to acquire as well as retain the customer quality. Furthermore, this study helps the sunshine company by providing useful information set appropriate policy in making sure that the customer experiences a maximum level of satisfaction. This study contributes to further research, organizational perspective and individual perspective (passenger). The certainty and reliability of the result are able to act as a guideline for future research in the transport industry.

1.7 Scope of the Study

The study examined the effect of service quality on passenger loyalty, in Adamawa Sunshine Transport Company. The study covers five dimensions of service quality. The study will be carried out in Adamawa State and it will cover Adamawa Sunshine Transport Company. The study was carried out for a period of nine months (9) from October 2017 to May 2018.

1.8 Limitations of the Study

There are several limitations that have been identified to aid the researcher process of conducting this study,

1. The researcher has only prepared an English version of the questionnaire to the respondents. Thus, it has caused difficulties to some of the respondents who are unable to fully understand certain questions that have been asked by the researcher due to low level of literacy in English. Thus, they would rather go by their intuitions to answer it which can cause bias.
2. There are some factors that have not been included in the study but they are significant to the study as well. In this study, the researcher only focuses on examining the non-price factors. Price is an important factor in public(mass) transport service like Adamawa State Sunshine Transport Company where passengers are widely based on the price to judge on the service quality.

3. The questionnaire was designed in a close-ended manner which require the respondent to tick the answer that would represent their thoughts or loyalty level. Although it was good as the respondents could easily and conveniently answer the questionnaire, the researcher was able to analyze and interpret the data easily due to the constraint of time and resources.

However, this limits the researchers to gain more in-depth understanding and feedback from the passengers towards Adamawa State Sunshine Transport Company, which indirectly affect the accuracy and reliability of the result. If the questionnaire was designed in an open-ended manner, the researcher would have been able to find out what is the respondent's minds. Concurrently, better accuracy of result could be obtained. However, the passengers will feel troublesome by this kind of questionnaire which would require them to take a longer time to answer.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section covers a review of related literature, under the following conceptual issues: theoretical framework, empirical review and conceptual framework that relate to service quality and passenger loyalty.

2.2 Conceptual Issues

2.2.1 Service quality

Service quality is a construct that has stimulated significant interest and debate in the service marketing literature due to the complications in both defining and measuring it, with no general consensus emerging from them. As a result, many scholars have labeled service quality as an ‘elusive’ and ‘indistinct’ concept that is problematic to operationalize and measure (Parasuraman, Zeithamal & Berry, 1988; Bolton, Drew, 1991; Cronin, Taylor, 1992). Service quality is the appraisal that customers make between their expectations and perceptions of the service received (Parasuraman *et al.*, 1988). According to Lewis and Booms (1983), service quality is a company’s ability to deliver a service in a way that meets and exceeds customer expectations. Roberta, Pascale, and Amal (2006) stated that consumers use intrinsic and extrinsic signals when forming opinions about product or service quality. That evaluation is often based on extrinsic attributes (such as packaging, advertising, etc.) and intrinsic features (color, size, flavor or aroma, etc.). Athiyaman (1997) mentioned that perceived service quality is the totality assessment of the superior quality or inferior quality of a product or service provided to the client.

2.2.2 Dimensions of service quality

Technical, functional, and reputational quality are attributes that customers consider as being important in the evaluation of quality according to Gronoos (1994). On the other hand, Lehtinen and Lehtinen (1982) considered interactive, physical, and corporate quality as the basis for customer evaluation of the expected quality while Hedvall and Paltschik (1989) focused on the willingness and ability to serve and the physical and psychological access to the service. In conceptualizing the basic service quality model, Parasuraman *et al.* (1985) identified 10 key determinants of service quality as perceived by the service provider and the consumer. Reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding,

familiarity, and tangibility are essential to formulate a service quality framework, The research studies conducted by Parasuraman *et al.* (1988) identified ten dimensions associated with service quality. The dimensions were later reduced to five dimensions. The dimensions identified include reliability, assurance, tangibles, empathy, and responsiveness (Zeithaml, Parasuraman. & Breyy 1988; Parasuraman *et al.*, 1988), and are discussed briefly.

Reliability refers to the extent to which the service provider (the dealership) delivers on the promises made to the customer (O'Neill & Palmer, 2003). Dealerships are known to contact the customer, promising that the vehicle will be ready for collection at a specific time. Reliability is regarded as the most important dimension of service quality (Zeithaml *et al.*, 1988). Assurance is the degree of confidence and trust which the provider of service is able to engender in the customer, based on the interactions between the parties (Zeithaml *et al.*, 1988; O'Neill and Palmer, 2003). Tangibles can be defined as a measures of satisfaction identified with the physical cues that are part of the service delivery process (Zeithaml *et al.*, 1988; O'Neill and Palmer, 2003). They are used to communicate with the customer about the service that can be expected. Tangibles can, therefore, be identified with the attractiveness of the process of service delivery. In public, this can be identified with the general outlook of the cabin crew, the appearance of planes, the neatness and cleanliness of the seats.

Empathy refers to the manner of treating customers such that they feel important to the organization, and that their needs are important to the organization, such that they receive caring, individualized attention (Zeithaml *et al.*, 1988; O'Neill and Palmer, 2003). In the case of the Sunshine Transport, this can be seen in the interactions between the organization and the passengers, and the nature of this interaction. Responsiveness can be defined as the willingness on the part of the service provider to deliver assistance to the customer (Zeitham *et al.*, 1988; O'Neill and Palmer, 2003). In the case of the Adamawa Sun Shine Transport, this refers to the extent to which employees and staff are willing to assist passengers in making their experience of the Sunshine Transport the most memorable and enjoyable. This may include, but not limited to; following up the customer to remind them of changes. While service quality has been identified consistently as being relevant in service industries (Kang & James, 2004; Grönroos, 2001; Asubonteng *et al.*, 1996), there is no agreement on the specific dimensions or on the number of dimensions associated with service quality. There is slight concurrence on the precise nature and content of service quality dimensions, (Kang, 2006). It has also been suggested that

service quality comprises between one and eight dimensions (Chowdhary & Prakash, 2007; O'Neill & Palmer, 2003).

2.2.3 Measuring service quality

Service quality is a measure of how well the delivered level of service matches customer expectations. When a service delivers high-quality service, it must conform to customer expectations on a consistent basis over time (Lewis & Booms 1983). Gronoos (1982), Lehtinen and Lehtinen (1982) acknowledged three ideas in service quality. These ideas were; service quality is more complicated for the client to assess than product quality; service quality perceptions comes from a judgment of client expectations with real service performance; and lastly that quality assessment is not made exclusively on the upshot of a service, but also on assessments of the process of delivery of the service.

2.2.4 Criticisms of SERVQUAL

The SERVQUAL tool for assessing service quality has been associated with numeral criticism. Most studies do not hold the five-factor dimensions of SERVQUAL put forward by Parasuraman *et al.* (1988), and administering expectation items are also considered unnecessary (Carman, 1990; Babakus & Boller, 1992). Moreover, Cronin and Taylor (1992) have formed their own performance-based appraisal, the SERVPERF. In fact, the SERVPERF scale is the unbalance perceptions machinery of SERVQUAL, which is made up of 22 perception items. In their empirical study in four organizations, Cronin and Taylor (1992) discovered that unweighted SERVPERF measure performance is more superior to any other measure of service quality and that it has the capacity to offer more precise service quality measure than SERVQUAL. They argued that current performance best reflects a customer's perception of service quality and that expectations are not part of this concept. Despite the criticisms, SERVQUAL has been used to measure service quality in a variety of contexts, including hospitals Bakar *et al.*, (2008), universities Galloway, (1998), police services Donnelly *et al.*, (2006), banks Kangis and Passa, (1997), Travel Agencies (Luk, 1997) and public utilities (Babakus & Boller, 1992). The wide array of application of such an instrument as SERVQUAL spells confidence in its utilization technique for measuring service quality in various business sectors and service industries.

Although some studies did fail to support its structure, Parasuraman *et al.* (1993) safeguarded the use of diverse dimensions, based on conceptual and practical grounds. Parsuraman *et al.* (1988) distinguished that though it may be essential to revise or change

some of the items, the SERVQUAL scale is appropriate in a broad range of business services. However, Parasuraman *et al.* (1991) cautioned that the addition/deletion of items and/or dimensions may result in the loss of the scale's integrity.

2.2.5 Passenger satisfaction

Performance of business in terms of product/services quality leads to customer satisfaction (Huang & Feng, 2009). There are about two essential conceptualizations of customer satisfaction: transaction definite (specific) and collective (cumulative) (Boulding, Kalra, Stealin, & Zeithaml, 1993). Transaction specific satisfaction relates to a particular product or service encounter, while cumulative satisfaction is the general evaluation of the entire service encounter process. In simple terms, customer satisfaction is a way of cultivating and meeting customer preference and expectations in order to enhance value creation. Bearden and Teel (1983) see customer satisfaction as a different type of consumer approach that relates to how customers like or dislike services after using or acknowledge it. According to Dewulf, Odekerk- en-Schroder, and Iacobucci (2010), customer satisfaction is the state of the consumers' mind with the product/service of a company and their appraisal of their working relationship with the enterprise. Parker and Mathews (2001) view customer satisfaction, as a process, and an outcome of the consumption experience. From this viewpoint, customer satisfaction as a process is a comparative appraisal between the service delivered and prior expectations. The outcome approach, on the other hand, is the end-state satisfaction emanating from the consumption experience.

Passenger satisfaction has become a key intermediary objective in service operations due to the benefits it brings to organizations (Ranaweera & Prabhu, 2003). The significance of customer satisfaction is generated from the overall accepted idea that for an organization to be victorious and profitable, it must satisfy customers (Shin and Elliott, 2001). Previous research has demonstrated that satisfaction is strongly associated with repurchase intentions (Cronin & Taylor, 1992; Fornell, 1992). Customer satisfaction also serves as an exit barrier, helping a firm to retain its customers (Fornell, 1992; Halstead & Page, 1992). Several studies have concluded that it costs more to gain a new customer than it does to retain an existing one (Blodgett, Wakefield, & Barners, 1995; Gummesson, 1994). Moreover, customer satisfaction also results in positive word-of-mouth publicity that creates precious indirect advertising for industries (Halstead & Page, 1992; Fornell, 1992).

In many industries, having satisfied customers also means that organization receives fewer complaints (Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Spreng, Harrell, & Mackoy, 1995), hence reducing costs in handling failures. Researchers also maintain that satisfied customers are willing to pay more for the benefits they receive and are more likely to be tolerant of an increase in price (Fornell *et al.*, 1996; Anderson, Fornell, & Lehmann, 1994). Shin and Elliott (2001) concluded that, through satisfying customers, organizations could improve profitability by expanding their business and gaining a higher market share and referral business.

Passenger Satisfaction has incessantly gained rising consideration in gauging products or service performance. In the simpler way it means customers' assessment of their buying and utilization experience with a product or service in order to meet their needs and requirements (Chen, Chang, Hsu, & Yang, 2011). Cadotte, Woodruff, and Jenkins (1987) defined customer satisfaction as the exciting reaction of the customers. Helms and Mayo (2008) defined customer satisfaction or dissatisfaction as the descent from the customers' knowledge with a service and the assessment of that experience to a given average. In the literature of marketing, satisfaction service can be grouped as an arousing feeling by the consumers after experiencing a certain service which as a result leads to consumer overall attitude towards buying the service (Oliver, 1981). Hence, customer exciting reaction, feeling, and personal experience will determine the satisfaction and dissatisfaction of the service offered.

Additionally, Gronroos (1984) indicated that satisfaction of passengers can be measured through the contacts with the employees of the organization, such as physical and technical resources and meals. Service quality is more noticeable and passengers may use it as a source to measuring the overall quality of service provided. Service rendered by the employees is the most perceptible for the clients (Rhoades & Waguespack, 1999). According to Lorenzoni and Lewis (2004), the key to meeting the demands and in maintaining the client is by understanding the clients fulfillment and viewing their participation and eagerness in the supply of client services.

There are empirical researchers who have acknowledged service quality, outlook, disconfirmation, performance, desires, and fairness as an important background to customer satisfaction (Kaushik, Kaushik & Taneja, 2008). Carman (1990) mentioned that customer satisfaction is promoted when the service provided by the firm surpasses their needs. So also, Woodside, Wilson, and Milner (1992) indicated that the clients of services organization are likely to stay with the same service supplier (industry) if they are satisfied

with the services offered to them on a constant basis. Customers who are satisfied with the service supplier could recommend the supplier to other clients. (Lam, Shanker, Erramilli & Murthy, 2004). In a chain of service-profit, Heskett, Jones, Loveman, Sasser, and Schesinger (1994) argued that a low level of customer satisfaction will result to lower client retention level and fewer referrals, which translate to lower profitability and slowdown growth and reduce the industry revenue.

2.2.6 Passenger loyalty

Passenger loyalty is the passenger's mindset regarding the company, its products, and service, which generate a favorable attitude toward a business organization, a commitment to repurchase the company's product (or services) and a tendency to recommend the product (or services) to others (Pearson, 1996). According to Ahmad (2007), service marketing academics do support the assessment of customer loyalty from three perspectives: behavioural loyalty, attitudinal loyalty, and a composite approach of the two. From a behavioural perspective, loyalty is usually defined in terms of a purchase measure over a specific time period (Ahmad, 2007). While empirical evidence for behavioural loyalty is strong and extensive, it is somewhat ambiguous for attitudinal loyalty (Uncles, Dowling, Hammond, 1998). Attitudinal loyalty has been viewed as the tendency to continue a relationship with an organization which is demonstrated through repurchase intentions (Czepiel, & Gilmore, 1987). According to Ahmad (2007), attitudinal loyalty is the consumer's psychological attachment to a particular organization and or its product/service.

Notwithstanding the popularity and advantages associated with the attitudinal components of loyalty, Jacoby and Chestnut (1978,) argued that when loyalty is limited to either behaviour or attitude only, it seems imperfect. Moreover, a focus of attention on either (behavioural or attitudinal) may fail to address the causal interrelationship between a consumer's brand attitude and behaviour (Oliver, 1997). Drawing their conclusion from the above-stated claims, Dick and Basu (1994) argued that while there are merits in both conceptualizations of loyalty (either behavioural or attitudinal), a complete understanding is only achieved when consumers' attitudes and behaviours are both examined through a composite approach. Complex loyalty, according to Dick and Basu (1994) is the incorporation of attitudinal and behavioural measures of customers to attend to some of the lapses connected with accepting behavioural or attitudinal dealings single-handedly. The main drawback of the complex loyalty approach is that they enumerate scores

consumed in determining behavioural and attitudinal machinery that may have different dimensions (Chi, 2005). Therefore, loyalty has mainly fluctuated between unidimensional and two-dimensional viewpoints (Bennett & Liliana, 2002). However, consensus on whether it has two or three dimensions is lacking, and the measurement of these dimensions has been inconsistent (Jones & Shirly, 2007).

Passenger loyalty is viewed as an important indicator of business success (Oliver, 1999). Many previous studies have discussed the relationships between service quality and customer loyalty. Researchers have indicated that a positive relationship exists between service quality and customer loyalty (Zeithaml *et al.*, 1996; Ruyter *et al.*, 1998; Sivadas and Baker-Prewitt, 2000; Wong and Sohal, 2003; Aydin and Özer, 2005). Lee and Lin's (2005) research found that customer perceptions of e-service quality affect online shopping. Lu and Seock's (2008) empirical study found that grey consumers' perception of service quality affects store loyalty behaviour.

2.2.6.1 Loyalty measurement

Loyalty has evolved through several conceptual and operational interpretations. The most widely accepted of these definitions are multi-dimensional in nature, incorporating the attitudinal and behavioural measures of commitment and repeat purchase (Day 1969, Jacoby 1971, Muncy 1983, Selinet *al.* 1988). There are three distinct approaches to loyalty measurement: (i) Behavioural Measures of Brand Loyalty; according to this approach, brand loyalty studies are operationalized through the behavioural interpretation of loyalty as a form of repeat purchasing of a particular brand over time (Brown 1952, Cunningham 1956, Frank 1962, Tucker 1964, Sheth 1968). These behavioural definitions are categorised into groups (Jacoby & Chesnut 1978): The sequence in which the brands are purchased (Brown 1952, Cunningham 1956, Lawrence 1969); the proportion of purchase devoted to a given brand (Cunningham 1956, Lipstien 1959, McCann 1974, Charlton & Ethrenberg 1976).

Another is the definitions that reflect the probability of purchase, this type of operationalization reflects a stochastic model of consumer behaviour (Assael 1987); it does not predict one specific course of action. Rather the prediction is always in probability terms. Frank (1962) looked at the notion of repeat purchase probability where loyalty was defined as the relative frequency of purchase of a specific brand from a prior set of purchases. Those definitions are synthesized or they combine several behavioural criteria. Burfordet *al.* (1971) have developed a loyalty index based on several

behavioural components such as the fraction of loyalty object expenditure within the product class budget, the number of switches from the loyalty object, the number of brands available and those patronized. There are many different factors that are involved in purchase situations. Many products and services are available in different forms, varieties, quality and price. Howard and Sheth (1969) stated that buying behaviour is a process that produces repetitive choice decisions for goods and services and those consumers establish their own buying cycles that determine the purchase frequency of these goods and services. Purchase behaviour is affected by pre-purchase needs and attitudes, previous use experience and external factors such as advertising and promotion, retail availability, word-of-mouth effects, personal selling efforts and variation in product formulation and pricing (Ehrenberg 1972).

Zeithaml, Parasuraman, and Berry (1990) pointed out that there are many behavioural intentions measures that are missed from past service quality studies. These behavioural intentions include a willingness to pay a premium price and to remain loyal even when prices go up. Singh (1990) added also, the customers' complaint intentions especially when they have problems with a company's service. Therefore, consumers must take decisions on many aspects of purchasing, including whether to buy or not; from where to carry out their purchasing activities; what quantity and at what price they are willing to pay. Broadly speaking, customer loyalty is the feeling of attachment to or affection for a company's people, products or services. Thomas and Sasser (1995) believed that there are alternative measurements which can be grouped into three major categories: first is the intent to repurchase: although customer responses are simply indications of future behaviour and are not assurances, they have the following benefits. Another is that industries can grasp this idea when they gauge satisfaction, putting it comparatively simple to connect intention and satisfaction for analytical purposes. Lastly is the intent to repurchase which is really a very strong indicator of expectations behaviour (Thomas & Sasser 1995). Even though this step will normally exaggerate the likelihood of repurchase, the level of overstatement generally is quite reliable, meaning that future results can be predicted fairly correctly.

Primary behaviour is the key to this idea. There are five categories that show actual repurchasing behaviour: These categories are: regency, frequency, amount, retention, and longevity (Thomas & Sasser 1995). Although these are important measures to factual behaviour, they only provide a glimpse of overall share and are most useful as an indication of changes over time. Secondary behaviour involves: customer referrals,

endorsements and spreading the word which are important forms of consumer behaviour for a company (Thomas & Sasser 1995). In most product and service categories, word of mouth is one of the most important factors in acquiring new customers. Frequently, it is easier for a customer to respond honestly to a question about whether he or she would recommend the product or service to others than to a question about whether he or she intends to repurchase the product or service (Zeithaml, Parasuraman & Berry, 1990). Such indications of loyalty, obtained through customer surveys, are frequently ignored because they are soft measures of behaviour that are difficult to link in the eventual purchasing behaviour.

However, since secondary behaviour significantly leverages on the positive experiences of a single customer, it is very important to understand what types of experiences create such behaviour (Zeithaml, Parasuraman & Berry, 1990). However, by the late 1960's, researchers were beginning to question the validity of behaviour as the sole indicator of loyalty. Day (1969) criticized past behavioural conceptualizations as he felt they could not distinguish between true or intentional loyalty because of the existence of spuriously loyal buyers who were deal-orientated in their repurchasing and lacked any attachment to brand attributes. Including psychological attachment as a distinguishing factor, Day (1969) advanced the definition of loyalty as a more discrete form of repeat purchase behaviour. Day also argued that true loyalty exists only when there is involvement with the purchase and with the commitment to the brand.

Attitude measures of brand loyalty holds that behavioural measures may provide an adequate prediction of loyal purchase behaviour. However, they fail to consider the process that has led to that behaviour. In contrast, attitudinal measures may offer an understanding of the factors that are central to the development and modification of brand loyalty (Pritchard 1991). Attitudes are considered to be the psychological construct most capable of providing an explanation of the process that has led to purchase behaviour (Day 1970). Monroe and Gultinan (1975) examined the degrees of loyalty by using a single, seven-point scale item that looked at price sensitivity to repurchasing a particular brand. An attitude is a habit of mind. It is learned and it predisposes that a person this either a generally positive or negative reaction or response to an object or group (Beacham 1986). Waters (1987) studied the effect of attitudes on consumer behaviour and noted that weakly held attitudes are much more easily changed than strongly held attitudes. Fishbein (1975) stated that attitudes are rooted in beliefs: People acquire their attitudes as they learn to link

various objects, concepts, values, goods, attributes, qualities, and characteristics with the object or subject of concern. An individual's attitude is influenced by the set of beliefs which the individual holds about the object. People develop attitudes toward things which are meaningful to them, and those attitudes play various roles in daily life. Consumers do not have only inborn attitudes; it is through learning that they develop strong positive and negative attitudes. Attitude formation and attitude change have been carefully differentiated by (Freedman & Steinbruner 1964).

They have defined an attitude as a lasting system which is made up of a cognitive component, a feeling component, and an action tendency. Crespi (1965) used the fact that attitudes are produced as a consequence of endogenous influences to show that the ways in which each consumer makes purchase decisions and responds to advertising, is to satisfy individual needs and motives. Pritchard (1991) found that psychological commitment consists of three dimensions: resistance, volition, and complexity. Resistance measures overall reluctance or resistance to change are important associations with or beliefs about a particular service. Therefore, the items comprising the resistance factor demonstrate the importance of symbolic association, awareness, and perpetuation of the public- self in ongoing purchase relationships. Volition includes factors that are related to components of free choice, control or self-responsibility for one's preference to use a particular service. Complexity reflects the ease with which an attitude or preference can be changed.

Composite measure of Brand Loyalty looks at the uni-dimensional measure of brand loyalty which is probably insufficient in measuring such a complex multi-dimensional phenomenon (Jacoby & Kyner 1973). Thus, in order to be truly loyal the consumer must hold a favourable attitude toward the brand in addition to purchasing it repeatedly (Day 1969).

Olson and Jacoby's (1971) research advanced the concept of brand loyalty to be multi-dimensional. They found that four factors underlie this concept: labeled behavioural brand loyalty, attitudinal brand loyalty, multi-brand loyalty, and general brand loyalty. Moreover, Newman and Werbel's (1973) work on information search and its relationship toward brand performance provided the conceptual foundation for the development of another composite measure of loyalty. Recent attempts have begun to examine the loyalty construct using the composite approach (Howard *et al.* 1988, Selinet *al.* 1988; Backman and Crompton 1991). Backman and Crompton (1991) used frequency of purchase to operationalize behaviour and developed another attitudinal index which they termed "psychological attachment to measure recreation activity loyalty. Recent research has been

impeded by inadequacies in the formulation of valid and reliable behavioural and attitudinal measures. For example, the use of frequency of purchase alone to assess behavioural loyalty does not consider the competitive effects (e. g. multi-brand loyalty) of purchase behaviour in the product category.

The above indicates that the frequency of participation attributed to a brand or agency would appear to hold little meaning unless it is considered in the light of a participant's overall frequency of participation. On the other hand, a closer examination of the theoretical and empirical rigor underlying the development of various attitudinal measures raises some construct validity questions (Nunnally 1967). Day (1970) argued that to adequately measure the attitudinal component of loyalty, researchers must first regard the construct as a psychological process. The previous loyalty attitudinal measures tend to be based on the antecedents or consequences (e. g. ego involvement and satisfaction) of loyalty rather than psychological process from which those effects are derived. Therefore, Muncy (1983) supported the perception of inadequate measurement, arguing that many of these measures are derived from an operational definition rather than from a theoretical conceptualization of loyalty. From the previous discussion, it was seen that the loyalty construct has evolved through several conceptual and operational interpretations. The most widely accepted of these definitions are multi-dimensional in nature, incorporating the attitudinal and behavioural measures of commitment and repeat purchase (e. g., Day 1969, Jacoby 1971a, Muncy 1983, Selin *et al.* 1988). Therefore, a loyal travel consumer will repeatedly purchase or use a particular travel service and possess a positive sense of attitudinal commitment toward that service provider

2.3 Theoretical Review

Several theoretical approaches and models explain the influence of perceived service quality on customer satisfaction and retention. According to Anderson, (1973), these approaches can be seen as variations of the consistency theories and they focus on the nature of the process of comparing the customer's expectation and post usage experience. The theories of consistency suggest that when the expectations and the actual performance of the product and service do not fit, the customer will present a certain level of tension. In order to get rid of this tension, the customer will try to adjust both expectations and perceptions on the actual performance of the product and service. Some theoretical approaches fall under the umbrella of the theories of consistency (Peyton, Pitts,

& Kamery, 2003). Their content we will briefly present based on the work of Peyton et.al. (2003) and on the synthesis achieved by, Vavra (1997).

2.3.1 Systems theory

This theory was propounded by (Johnson *et al.* 1995). Here, a measure of overall service quality should include evaluations of all dimensions of service: inputs, processes, and outputs all of which play significant roles in industries operations. Appraising services with systems approach is different from evaluating products because of service attributes. In addition to outputs, a customer is exposed to and is affected by an industry inputs and processes. Johnson *et al.* (1995) recommended that service quality depends on the quality of each three dimensions: quality of inputs, quality of processes and quality of outputs. Input quality refers to e.g. equipment that is up-to-date, waiting areas that are clean and comfortable, service personnel that have skills and knowledge and are properly attired. Subsequently, process quality is a quality of the interface between provider and consumer (Johnson *et al.* 1995). Frequently, customers are directly affected by the service production process; thus, accessibility, availability and service provider's willingness to help are parts of process quality. Output quality refers to the result of service stipulation and includes both tangible results and intangible benefits; it means changes in the consumer's physical/mental state or a change in something that the consumers possess. Beside testing systems approach, Johnson *et al.* (1995) conclude that consumers assess quality by considering various aspects of output, process, and input, with the output being most significant and input almost irrelevant. Process is significant in e.g. transportation industry.

2.3.2 The theory of contrast

This theory is pioneered by Hovl and, Harvey, and Sherif (1957) who indicated an unconventional approach to the assessment post-usage process that was presented in assimilation theory, in that post-usage assessments results in opposite predictions for the effects of expectations on satisfaction (Cardozo, 1965). Dawes, Singer & Lemons, (1972) defined contrast theory as the tendency to magnify the discrepancy between one's own attitudes and the attitudes represented by opinion statements. This approach states that whenever the customers experiment disconfirmation, they try to minimize the discrepancy between their previous expectations and actual product/service performances, by shifting their evaluations away from expectations. While the theory of assimilation asserts that the

customers will try to minimize the expectation-performance discrepancy, the theory of contrast insists on a surprise effect that can lead to exaggerating the discrepancy. According to the contrast theory, any discrepancy of experience from expectations will be exaggerated in the direction of the discrepancy. If the firm raises expectations in its advertisement, and then a customer's experience is only slightly less than that promised, the product/service would be rejected as totally unsatisfactory. Under-promising in marketing communications and over-delivering will cause positive satisfaction also to be exaggerated (Vavra, 1997).

2.3.3 *The theory of assimilation*

Festinger's theory of dissonance (1957) forms the basis for the theory of assimilation. The theory of dissonance states that the consumer makes a sort of cognitive comparison between the expectations regarding the product/service and the products/services perceived performance. If there is a discrepancy between expectations and the product's/service's perceived performance, the dissonance will not fail to appear. This position of outlook on post-usage assessment was introduced in several literature that discuss satisfaction under the form of the theory of assimilation, (Anderson, 1973). According to Anderson, a customer tries to avoid dissonance by adjusting their perceptions of a certain product, in order to bring it closer to their expectations. In a similar way, a customer can reduce the tension resulting from the discrepancy between expectations and the product's/service's performance, both by distorting the expectations so that they can be in agreement with the product's/services perceived performance, and by increasing the state of satisfaction during a decreases in the comparative significance of experimental disconfirmation (Olson & Dover, 1979).

This theory presumes that customers are motivated enough to adjust both their expectations and their product/services performance perceptions. If the customers adjust their expectations or product/service performance perceptions, dissatisfaction would not be a result of the post-usage process. Customers can reduce the tension resulting from a discrepancy between expectations and product/service performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced (Olson & Dover, 1979).

Some researchers have discovered that the control of the actual product performance can lead to a positive relationship between expectations and satisfaction.

(Anderson, 1973). Accordingly, it is understood that dissatisfaction might never come except the assessment process begins with the clients' negative expectations. Peyton *et al* (2003) affirmed that the Assimilation Theory has a series of deficiencies. First, the approach assumes that there is a relationship between expectations and satisfaction, but it does not specify the way in which the expectation disconfirmation can lead to satisfaction or dissatisfaction. Second, the theory also posits that consumers are motivated enough to adjust either their expectations or their perceptions about the performance of the product/service. Some researchers have found that controlling actual product/service performance can lead to a positive relationship between expectation and satisfaction. Consequently, it would show that dissatisfaction might never happen except the evaluative processes were to commence with negative customer expectations.

2.3.4 Disconfirmation theory

Disconfirmation theory argues that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations, Ekinci and Sirakaya (2004). Szymanski and Henard found in the meta-analysis that the disconfirmation concept is the best predictor of customer satisfaction, Petrick, (2004). Ekinci and Sirakaya (2004) cite Oliver's updated definition on the disconfirmation theory, which states. That satisfaction is the guest's fulfillment response. It is a concludes that goods or service characteristic, or the goods or service itself, offers (is provides) an agreeable stage of consumption-related achievement, including stages of under or over- achievement, (Ekinci & Sirakaya, 2004). Mattila, & O'Neill, (2003) argued that along with the most accepted approval theories is the disconfirmation theory, which discusses that satisfaction is connected to the size and the way of the disconfirmation knowledge that comes as a result of comparing service performance against expectations. Essentially, satisfaction is the outcome of direct experiences with goods or services, and it comes by relating perceptions against average (expectations). Research also indicates that the way the service was delivered is more important than the outcome of the service process, and dissatisfaction towards the service often simply occurs when guest's perceptions do not meet up with their expectations (Mattila, & O'Neill 2003).

2.3.5 *The theory of assimilation-contrast*

The assimilation-contrast theory was suggested as another way of explaining the relationships between variables within the satisfaction model (Hovland, Harvey & Sherif, 1957). This concept posits that satisfaction is a function of the magnitude of the discrepancy between expected and perceived performance. Commonly, the consumers go within recognition or refusal scope, in agreement with their perceptions. As stated in the theory of assimilation, customers have a tendency of assimilating or adjusting the differences in product performance perception, with a view of getting them to the stage of their earlier expectations, but only if the difference is comparatively little (Peyton *et. al.*, 2003). A large discrepancy between perceived performance and expectation results in opposite effects and the consumer's tendency is one of increasing the perceived difference. Assimilation or contrast can emerge in relationship with the difference perceived between expectations and the real goods performance. This theory attempts to exemplify the detail that both the assimilation and the contrast theory paradigms are appropriate in the study of customer satisfaction. A number of studies have tried to test this theory empirically. Olson and Dover (1979) and Anderson (1973) established some proof to prop up the assimilation theory approach. Referring to these studies, Oliver (1980) argued that there were perceptual differences between satisfaction.

2.3.6 *ServqualModel*

Almost certainly the most famous service quality model is SERVQUAL, developed by Parasuraman *et al.* in 1985. The SERVQUAL instrument has been widely applied in a variety of service industries, including tourism, hospitality, and the airline industry. The instrument is used to measure airline service quality (You & Park, 2007). Parasuraman, Zeithamal, and Berry (1988) developed a 22-items tool called SERVQUAL for determining customer perceptions of service quality. SERVQUAL addresses many elements of service quality divided into the dimensions of tangibles, reliability, responsiveness, assurance, and empathy, (Parasuraman, Valarie, Zeithamal & Berry (1988). A number of researchers have applied the SERVQUAL model to measure service quality in the airline industry, with modified constructs to suit specific airline situations, Saleh, and Ryan, (1992), The researchers declare that quality is a link between expectations and performance; i.e. how well the service that is offered is equivalent to consumers' expectations. Gronroos (1982), whose model will be discussed afterward, also made similar conclusions. The SERVQUAL-model measures discrepancy between what

consumers expect from the service provider and how the consumers perceive it. Parasumaran *et al.* (1985) identified five gaps: Gap 1: consumer expectation – management perception gap, Gap 2: management perception service quality specifications gap; Gap 3: service quality specifications – service delivery gap; Gap 4: service delivery – which is outside communications gap; Gap 5: expected service – is perceived service gap. Service quality, according to this model, depends on the dimension of Gap 5 (expected service – perceived service gap), which in turn depends on the previous four gaps, i.e. $Gap5 = f(Gap1, Gap2, Gap3, Gap4)$.

To gauge perceived service, Parasumaran *et al.* (1985) recognized ten main determinants of service quality, which influence mutually expected and perceived services, and through those, perceived service quality. Predictable service is also impacted by word of mouth, personal needs in addition to earlier period knowledge. The main criticism of SERVQUAL has focused on the use of expectation as a comparison standard Teas, (1994). It has been argued that expectation is dynamic in nature and that it can, therefore, change according to customers' experiences and consumption situations Hussain (2005). Contrary to the key issues stated in the literature is the applicability of the five SERVQUAL dimensions to diverse service backgrounds and imitation studies prepared by other researchers futile to prop up the five-dimensional factor formation as was obtained by Parasuraman *et al* in their development of SERVQUAL (Ramsaran-Fowdar, 2007).

2.3.7 *SERVPERF Model*

The performance support service quality (SERVPERF) was acknowledged by Cronin and Taylor (1992). Cronin and Taylor proposed the SERVPERF instrument, which is a more concise performance-based scale; an alternative to the SERVQUAL model Paul, (2005). The perceived quality model postulates that an individual's perception of the quality is only a function of its performance. Cronin *et al.* (1994), went further to argue between the success of SERVQUAL and SERVPERF for measuring service quality. The researchers reasoned that, as well as client expectations in assessing service quality, SERVPERF range offers a helpful instrument for measuring general service quality. Moreover, Lee, Lee, and Yoo (2000), empirically compare SERVQUAL (performance minus expectations) with a performance-only model (SERVPERF). The researcher also wraps up with fact that the outcome appeared to be better than the previous model. It has

been acknowledged that such an approach limits the explanatory power of service-quality measurement (Parasuraman *et al.*, 1994).

From the critical review of literature, it is evident that different theories and models have used a number of different definitions for service quality, satisfaction, and retention. Also, there is an agreement that service quality, satisfaction, and retention involve a set of inter-related variables rather than a single variable. Also, despite a number of theoretical approaches and models that have been developed to explain the relationship between service quality, satisfaction and retention, the review of literature revealed that all theories and models are all variants of the consistency theories and have all been focused on the nature of the consumers' post-experience evaluation process, while they have all viewed satisfaction and retention as a responsive reaction to quality service experience by the consumers.

2.3.8 Gronroos service quality Model.

Gronroos offered another prominent service quality model in 1982. Where he observed two areas of service quality: technical and functional. Technical quality is what a consumer is receiving from a service. He proposed that the consumer is concerned not only in the result of the service process, but also in the process itself. Thus, functional quality is a way in which the service is supplied, or how a consumer receives technical quality. Moreover, there is image quality, i.e. corporate image (for example, an image of a member of environment, how the customers perceive the service provider). Both technical and functional quality aspects contribute to image quality. In addition, such factors as word-of-mouth, beliefs as well as marketing performance influence image quality. These types of service quality are equal to the ones Lehtinen & Lehtinen (1982) suggested.

In the model, Gronroos (1982) defined the perceived quality of service as the result of an assessment process, where the consumer evaluates his/her expectations with the service he/she perceives he/she has received. Moreover, in his later study Gronroos (1993) recommended that measuring consumer experiences provides close estimate of service quality. In 2001, Gronroos disapproved his own idea of perceived service quality by persisting that he had not at all meant that service quality should be assessed, and it should not be measured at all. In its place, he asserts that his model word service should be put back with the word attribute, i.e. there would be technical and functional characteristic of service, which would help to avoid a discussion about the relationship between service

quality and customer satisfaction. Therefore, this study is anchored on the SERVQUAL Model of Parasuraman, (1989).

2.4 Empirical Review

Barabino, Deiana, and Tilocca (2012) conducted a study on measuring service quality in urban bus transport: which is a modified SERVQUAL approach. The study showed the possibility to implement a SERVQUAL approach abiding by the requirements set by the EN 13816. The results illustrate a high degree of importance placed on attributes such as onboard security, bus reliability, cleanliness, and frequency, with these latter three characterized by the widest negative gaps between perceptions and expectations. The sole quantitative supply of transport does not seem to affect quality perceptions more than attributes such as staff courtesy and bus comfort.

Too and Earl (2010) presented the findings of a survey of 604 commuters within Varsity Lakes on public transport needs in the area. The study has also illustrated the application of the SERVQUAL instrument for measuring public transport service quality. The findings can then be compared and greater insights can be drawn on improving public transport service levels. Across the board, the overall perception scores on all public transport were less than the expectation scores. This represented a less than satisfactory service quality. In particular, the areas where public transport fell short were in the responsiveness and reliability criteria.

Khairani and Hati, (2017), conducted a study on the effects of perceived service quality towards customer satisfaction and behavioural intentions in online transportation in Indonesia. The method use for the analysis was Structural Equation Modeling (SEM). The result revealed that customer satisfaction has a positive and significant impact on customer loyalty and word of mouth and also customer satisfaction does not have a significant impact on customer loyalty. The study recommended that further research should be done to compare the service quality of conventional public transportation like taxi and online transportation.

Ganiyu (2017) conducted research on customer satisfaction and loyalty; a study of interrelationships and effects in Domestic airline industry in Nigeria. The research used correlation research design to draw information from domestic passengers using convenience sampling techniques and data obtained was analyzed with

Pearson Correlation, analysis of variance, linear regression and one-way analysis of variance. The result revealed that there is a relationship between customer satisfaction on customer loyalty. Also, the study revealed frequent air travelers displayed more loyalty tendency towards airline carriers compared to non-frequent passengers. The study recommended that airline carriers should implement strategies that will guarantee long term relationship with air travelers by offering service quality that will meet past customer expectation.

Rabbini, Qadri, and Ishfaq (2016) conducted research on service quality, customer satisfaction, and customer loyalty; an empirical study of banks in India. Convenience sampling techniques and descriptive statistics was adapted to analyze the data. The findings indicated that there is no significant effect on service quality on customer loyalty. They recommended that an organization should improve on its service quality to receive the productive result of service quality strategies. The study also suggested that banks offer loyalty programmes retain customers.

Dubey and Srivastava (2016) conducted a study on the impact of service quality and customer loyalty in the telecom sector in India. A survey based exploratory and casual research design was used and multiple regression analysis was also adopted to analyze the data. Out of the four antecedents of service quality only tangibility and assurance had a significant and positive impact on customer relationship. Management and tangibility had a significant impact on customer loyalty. The study recommended that service providers should put their endeavor to upgrade the technology and serve the customer with modern equipment's. Also, the employee should try to please customers by their neat appearance

Juhari, Bhatti, and Piaralal, (2016). Carried out research on service quality and customer loyalty in the Islamic Insurance Sector: exploring the mediating effects of customer satisfaction in Malaysia. The study proposed and tested frameworks through structural equation modeling (Amos-16). The result of the study indicated that four of six service quality dimensions positively influence customer satisfaction and customer loyalty and only two dimensions were not significantly related to customer satisfaction and loyalty. The study recommended that managers should pay attention to fairness to improve service quality and maximize customer satisfaction.

Rahhal (2015) did research on Syria. The struggle to develop a valid and liable instrument to measure customer perceived service quality incorporating both service delivery as well as technical quality aspect was the focus. Convenience sampling techniques provided the tool for collecting information on mobile phone service users. The finds showed a direct significant impact of service quality on customer satisfaction. The

study recommended that Syrian firms must understand how to provide superior network quality which is considered critical by respondents in assessing the quality of mobile service and satisfaction in the Syrian context.

Chilembwe (2014) conducted a study of assessment of customer service and service guarantee impacts for the airline in Malawi. The study revealed that customers were not aware of the service guarantee offered by the airline and yet it became apparent that these customers to consider the benefit of service guarantee when making the choice of airline. In addition, revealed that all the three airlines offered both conditional and non-conditional service guarantee.

Hussein and Hapsari (2014) conducted a study on how quality, value, and satisfaction create passenger loyalty; an empirical study on bus rapid transit passenger in Indonesia. Survey method was employed to collect data and Partial Least Square (PLS) was used to analyze the data. The finding of the shows that service quality has a significant impact on loyalty and passenger satisfaction and perceived value are essential determinate of passenger loyalty. The study recommended measured of actual behaviour to capture the real phenomenon.

Al.Bostanji (2013) conducted research on the impact of service quality on customer loyalty; a study on five stars hotel customers in Riyadh, KSA. The study used convenience sampling techniques and questionnaire to gather data. The findings of the study indicated that there is an impact of service quality on customer loyalty in the five-star hotel in Riyadh. Based on the above findings, the study recommended that for the provision of service quality that will meet customer's expectation, workers should be granted powers by management to understand customers' needs and raising service providers through the levels of training.

Bharwana, Bashir and Mohsin, (2013), did a study on the impact of service quality on customer satisfaction; a study from the service sector especially private colleges Faisalabad, Punjab, in Pakistan. Random sampling method was used to select the respondent for the study. The findings showed that service quality is found to be positively correlated while one of the factors showed negative correlation with service quality and customer satisfaction. The study observed that if the management of a firm is conscious enough about the quality of service the customer satisfaction is increased which will lead to customer loyalty and at the end customer will be committed to the organization.

2.5 Hypotheses Development

2.5.1 *Service quality and loyalty*

A rich body of literature over several decades has documented relationships among service quality, customer satisfaction and loyalty (Cronin, Brady, & Hult, 2000; Tian-Cole, Crompton, & Wilson, 2002; Lee, Graefe, & Burns, 2004). Nevertheless, evidence of the relationships among the three constructs has been ambiguous, leaving the extent/direction of their relationships largely unsettled (Nor, & Wan, 2013). In other words, individual study findings varied extensively in terms of statistical significance, direction, and magnitude of service quality effects on customer satisfaction and loyalty. An in-depth review of the service marketing literature revealed that service quality, customer satisfaction, and loyalty are connected to each other. According to Kuo, Wu, and Deng (2009), service quality has a direct effect on how customers' appraise a company and their willingness to patronize the service provider in subsequent transactions. Similarly, many studies in diverse industries have documented a positive relationship between service quality and customer satisfaction, as well as the tendency of repeated patronage (Baker & Crompton, 2000; Bou-Llusar, Caminson-Zornoza, & Escrig-Tena, 2001; Lai, 2004). Correspondingly, Danher and Mattsson (1998) posited that high customer satisfaction and service quality will most likely lead to improved customer loyalty and willingness to recommend the service provider. Oliver (1980) claimed that customer loyalty (e.g. repurchase intentions, willingness to engage in positive word-of-mouth communication) is a function of customer satisfaction, which also relates to a cognitive comparison of expectations prior to consumption and actual purchase experience.

Additionally, customer satisfaction significantly mediates the relationship between service quality and customer loyalty in the transport company (Mpingajira, 2008; Lo, Osman, Ramayah, & Mosahab, 2010). According to Cronin and Taylor (1992), service quality and customer satisfaction are prerequisites of customer loyalty. Correspondingly, Bitner (1990) submits that positive word-of-mouth becomes more widespread as customer satisfaction levels with service quality rises. Thus, the following hypotheses are formed;

H₁:- Tangibility of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

H₂:- Responsiveness of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

H₃:- Reliability of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

H₄:- Assurance of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

H₅:- Empathy of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

2.6 Conceptual Framework.

Figure 1 below indicates the framework for the study based on the SERQUAL model by (Prarsuraman, 1988). The framework shows the relationship between the variables as shown below;

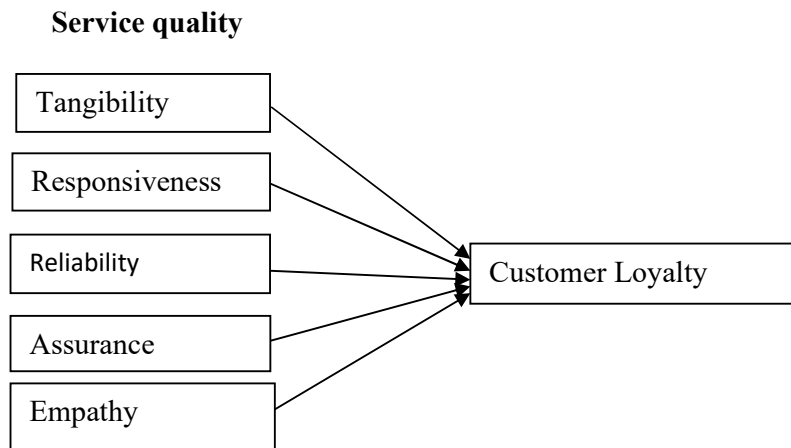


Figure 2.1: Theoretical Framework Based on SERQUAL Model of (Parasuraman, 1989)

The model above illustrates the proposed theoretical framework that serves as the basis for this study. It is used to focus on the relationship among the five independent variables which consist of tangible features, schedule, responsiveness, assurance and security service towards Customer Loyalty.

Table 2:1 Summary of Empirical Review

S/ N	Author	Country	Title	Keyword	Methods	Findings	Recommendation
1	Khairani and Hati, (2017)	Indonesia	Perceived service quality towards customer satisfaction and behavioural intentions in online transportation	Mobile application, transportation, service quality, behavioral intention, and perceived value	Convenience Sampling techniques Structural Equation Modeling (SEM).	customer satisfaction has a positive and significant impact on customer loyalty and word of mouth and also customer satisfaction does not have a significant impact on customer loyalty	further research should be done to compare service quality of conventional public transportation like taxi and online transportation.
2	Ganiyu, (2017),	Nigeria	customer satisfaction and loyalty; a study of interrelationships and effects in Domestic airline industry	Customer satisfaction, loyalty programme, service failure, domestic air travel airline industry	correlation research design to draw information from domestic passengers using convenience sampling techniques and data obtained was analyzed with Pearson correlation, analysis a,	There is a relationship between customer satisfaction on customer loyalty. Also, the study reveals frequent air travelers display more loyalty tendency towards airline carriers copied	Guarantee long term relationship with air travelers by offering service quality that will meet past customer expectation.

				linear regression and one-way analysis of variance	to frequent passengers.	
3	Rabbini, Qadri, and Ishfaq, (2016),	India	service quality, customer satisfaction, and customer loyalty; an empirical study of banks	Customer satisfaction, retail banks, service quality, efficiency factors.	Convenience sampling techniques and descriptive statistics were used to analyze the data	that there is no significant effect on service quality loyalty organization should improve on its service quality to receive the productive result of service quality strategies. The study also suggests that bank offer loyalty programmes retain customers.
4	Dubey and Srivastava, (2016),	India	Impact of service quality and customer loyalty in the telecom sector	Service quality, customer loyalty, CRM, empathy, assurance, responsiveness, tangibility, reliability	A survey based exploratory and casual research design was used and multiple regression analysis was used to analyze the data	The antecedent of service quality tangibility and assurance have a significant and positive impact on customer relationship management and tangibility has a significant impact on customer loyalty. Service providers should put their endeavor to upgrade the technology and serve the customer with modern equipment's. Also, the employee should try to please customers by their neat appearance

5	Rahhal, (2015),	Syria	the effect of service quality dimensions on customer satisfaction; empirical study investigation in Mobil telecommunication	Service quality dimensions, customer satisfaction, telecommunication, Syria	Convenience sampling techniques were used to collect information mobile phone service users	the direct significant impact of service quality on customer satisfaction	Syria firms must understand how to provide superior network quality
6	Hussein and Hapsari, (2014),	Indonesia	how quality, value, and satisfaction create passenger loyalty; an empirical study on Bus rapid transit passenger	Bus rapid transit, outcome quality, interaction quality, physical quality, service quality, satisfaction and loyalty	survey methods were used to collect data and partial least square (PLS)	service quality has a significant impact on loyalty and passenger satisfaction and perceived value are essentialdeterminates of passenger loyalty	Measure actual behavior to capture the real phenomenon.
7	Al.Bostanji , (2013)	Riyadh	impact of service quality on customer loyalty; a study on five stars hotels customers		convenience sampling techniques and questionnaire	impact of service quality on customer loyalty in a five-star hotel in Riyadh is significantly positive,	provision of service quality that will meet customer's expectation, workers should grant powers by management

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section presents the research methodology for the study under the following headings; research design, population of the study, sampling size, sampling techniques, source of data collection, instrument for data collection, validity of instrument, reliability of instrument and the method of data analysis.

3.2 Research Design

This study adopted a cross-sectional survey research design, using a quantitative research approach. Essentially, the cross-sectional survey involves data collection from a sample that accurately represents the population to which generalization is made (Cooper, Schindler 2011). The choice of this approach is based on the fact that it facilitates prediction of behaviour from a population that is too large to observe a direct manner (Bordens, & Abbot, 2002), and it provides a basis for ascertaining the nature and degree of relationship between study variables (Kerlinger, 1986).

3.3 Population of the Study

The target population of this study consisted of Adamawa Sunshine passengers departing from Yola to any destination in Nigeria. This means the passengers that depart from Adamawa Sunshine Transport Company terminus, morning, and afternoon, in the months of September, October, and November and December 2018 as shown in table 3.2.

Table 3.2 population Size

S/N	Month	Population	Total
1	September	200.000	200.000
2	October	250.000	250.000
3	November	320.000	320.000
4	December	400.000	400.000
	Total	1170.000	1170.000

Source: Adamawa state sunshine transport company office (2018).

3.4 Sampling Size

A targeted sample size of the study will be determined from the population of Adamawa Sunshine Transport passengers at the departure, based on sampling size table of Krejcie and Morgan, (1970) see table 3.2 in appendix. If a population is 1,000,000

thesample size will be 384; and based on the population size of the study which is above 1,000,000 the researcher has used 436 sample size. It was adopted despite varying customer traffic chosen to obtain a balanced sample selection, insofar as a sample based on customer traffic could create bias or shift in the estimates from the real value.

3.5 Sampling Techniques

A multi-stage sampling technique was used in this study. The first stage is to categorize transport schedules into two groups (i.e. morning, and afternoon transport). Thereafter, traffic frequency was used to assign a proportional quota to the two transport schedules; that is, morning departure (70%), and afternoon departure(30%), in order to distribute the survey instrument to the respondents. Preliminary investigation by the researcher revealed that transport traffic is highest in the morning, which justifies use of quota sampling. In the second stage, a judgmental (also referred to as purposive) sampling will be used to select respondents that can provide accurate information relevant to the study. In this study, infants, travelers that cloud not read nor write, and passengers with obvious health challenges was excluded. Lastly, convenience sampling was used to distribute the questionnaire to those that were accessible. The multi-stage approach was adopted to enhance the representativeness of the sample.

3.6 Source of Data Collection

Primary source of data collection was used. Primary data refers to data that has been originally gathered from first hand-experience. Hence, it is more reliable, authentic and objective in data collection (Gulnazahmad, 2011). For current study, self-administered questionnaire will be used due to its convenience, inexpensive, reduction of biases and greater anonymity.

3.7 Instrument for Data Collection

The data collection instrument used for this study is a self-administered structured questionnaire. In general, the questionnaire ensures a higher level of anonymity and uniformity of response (Cooper, Schindler, 2011). The questionnaire items for the study was adapted from previous related/validated studies, and asks questions that respondents can easily understand and answer. The questionnaire items essentially capture pre-service, in-service and other related services. As previously noted, the questionnaire was distributed before passenger departure. However, possible service issues will be incorporated in the responsiveness and employee dimensions of the modified SERVQUAL model adapted in this study. Moreover, it has been shown that Adamawa Sunshine passengers do not differentiate between in-service or services rendered before

passenger departure, but view the Adamawa Sunshine travel experience as a whole (Ekaterina, 2012). Constructs have been operationalized using 5-point Likert scales, ranging from strongly disagree (1) to strongly agree (5).

3.7.1 Constructs Measurement

Service quality was measured using 24 items scale. Items were based on scale by Lenka *et al.* (2009) and Sureshchandar *et al.* (2001) Park, Robertson & Wu (2004); Pakdil & Aydin (2007); Archana & Subha (2012); Namukasa (2013). The scale has five dimensions: tangibility, responsiveness, reliability, assurance and empathy. Passenger loyalty was measured using a six item scale developed by (Zeithaml *et al.* 1996; Park, Robertson & Wu 2004).

3.8 Validity Assessment

To ensure that the instrument measured what it was intended to measure accurately, content validity was used for assessment. The researcher adapted the approaches suggested by Cooper and Schindler (2011) to obtain content validity that is, identifying existing scales from the relevant literature and seeking opinions from a panel of experts, including senior academics from the marketing and non-marketing departments within the Modibbo Adama University of Technology, Yola. Additionally, the researcher contacted two Adamawa Sunshine experts at Adamawa Sunshine Motor Park, Adamawa State to evaluate the questionnaire's suitability in the Adamawa sunshine context. Based on their feedback, several items were eliminated or modified to improve the comprehensibility and clarity of the research instrument.

3.9 Reliability of the Study

Cronbach's Alpha was used to test the reliability of the variables, while a pilot study was conducted to assess the reliability of the survey instrument (questionnaire), which will involve 30 respondents (Adamawa Sunshine passengers) with similar attributes and knowledge about the phenomena being investigated. While different views have been put forward about the level of acceptance of the reliability measure, Hair, Black, Babin, and Anderson (2010) affirmed that an alpha value of 0.60 and higher are acceptable. Therefore, pilot test was carried out to determine the reliability of the research instruments (questionnaire items).

3.9.1 Pilot Test

Before the conduct of the actual questionnaire, a pilot test has been done to find out the possible errors done in the questionnaires such as the ambiguous questions. Meanwhile, pilot testing provides the opportunities for the researchers to find out and remedy a wide range of potential problems that would occur in preparing the questionnaire and correct it before the actual questionnaire is conducted (Pratt, 2008). For the pilot test, 30 questionnaires were distributed and the feedback gathered was used to improve the clarity of the question. After the questionnaires were collected, the reliability test was conducted by using the Statistical Project for Social Science (SPSS) Version 22. In order to test the reliability, Cronbach's Coefficient Alpha was adopted. Table 3.3 shows the result of the pilot test conducted.

Table 3.3: Result of Pilot Test

S/N	Variables	No. of items	Cronbach's Alpha
1	Tangibility (TAG)	6	0.922
2	Responsiveness (REP)	5	0.893
3	Reliability (REL)	5	0.928
4	Assurance (ASS)	5	0.863
5	Empathy (EMP)	5	0.864
6	Passenger Loyalty (PLYT)	5	0.918

Field survey, 2019

3.9.2 Constructs Measurement

A SERVQUAL framework was utilized to measure service quality levels of Adamawa State Sunshine Transport Company. SERVQUAL is a multi-item instrument for measuring service quality. This instrument was first developed by Parasuraman *et al.* (1985) through an exploratory study of marketing academics. The outcome was a 22-item scale that has received widespread application in the research of service quality (e.g. Deveraj *et al.*, 2002; Zeithaml *et al.*, 2002; Lai, 2006). The 22 items in the SERVQUAL scale were essentially framed around five dimensions of service quality, and these are tangibles: physical facilities and equipment reliability; ability to perform the promised service dependably and accurately; responsiveness: willingness to help customers and provide prompt service; assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence; empathy; and caring, which is individualized attention the firm provides its customers.

According to Parasuraman *et al.* (1985), ‘service quality as perceived by customers stems from a comparison of their expectations with their perceptions of the actual service performance’. The SERVQUAL instrument requires customers to rate their expectations and perceptions of service quality on each of the 22 items. A SERVQUAL score is obtained by subtracting customers’ expectation score from their perception scores (P – E) on the 22 items. The SERVQUAL instrument was subsequently empirically tested and validated through a later study by Parasuraman *et al.* (1988). The robustness of the instrument was reinforced through the numerous studies that followed across various industries applying the SERVQUAL framework. For example, bus services (Barabino, Deiana & Tilocca, 2012)

3.10 Method of Data Analysis

Data obtained from the questionnaire was analyzed using descriptive statistics (frequency and percentage) and inferential statistics (factor analysis, regression analysis) using the Statistical Package for Social Science SPSS (20) software. A preliminary analysis was initially run to ensure that all multivariate assumptions (normality, homoscedasticity, linearity, test for independence of the error terms, and multicollinearity) are met (Authors, 2013).

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter represents the patterns and analysis of results which are relevant to the research questions and hypotheses. This chapter elaborates the output of study based on the SPSS software. The final result of the survey was analyzed.

4.2 Descriptive Analysis

4.2.1 Respondent's demographic profile

The demographic profile of the respondents has been identified in Section A of the questionnaire. A total of three questions were asked to collect data regarding the respondents' gender, age, and educational level.

4.2.2 Gender of the respondent

Table 4.4 shows the analysis of respondents' gender which revealed that 57.6% of the respondents were female while male constituted 42.4% of the total sample size which is the least.

Table 4.4: Gender of the Respondents

Variables	Frequency	Percentage (%)
Male	185	42.4
Female	251	57.6
Total	436	100.0

Source: Field Survey, 2019

4.2.3 Age of the respondent

Based on Table 4.5, 9.2% of the respondents fall into categories below 20 years old, 27.8% constitute those between the ages of 20-29 years, those between the ages of 30-39 constitute 37.4% and 40 year-old and above constitute 25.7%. Based on the findings those within the ages of 30-39 years old constitute the highest percentage of those who travel with Adamawa State Transport Company.

Table 4.5 Age of the Respondent

Variables	Frequency	Percentage (%)
Below 20 yearsold	40	9.2
20-29 yearsold	121	27.8
30-39 yearsold	163	37.4
40 years and above	112	25.7
Total	436	100.0

Source: Field Survey, 2019

4.2.4 Educational level of respondents

The findings on Table 4.6 revealed that the majority of respondents who have primary school leaving certificate were 32.8% followed by those with secondary education 30.2% and those who had tertiary education constitute 25.9% of the respondents and non formal education constituted 10.8%. This implies that those with primary school education constituted the highest sample size of those who travel with Adamawa Transport Company.

Table 4.6: Educational Level of Respondents

variables	Frequency	Percent
Primaryschoolleavingcertificate	143	32.8
Scondaryschoolcertificate	133	30.5
Tertiaryeducation	113	25.9
Nonformaleducation	47	10.8
Total	436	100.0

Field survey, 2019

4.3 Scale of Measurement

4.3.1 Reliability test

According to Hair (2016), the Alpha Coefficient below 0.7 means weak reliability of the variables. If the Alpha Coefficient ranges from 0.7 to 0.8, they are considered to be moderately strong. If the alpha coefficient is in the range of 0.8 to 1.0, they are considered to be very strong.

In this study, it presented the reliability of six variables. Cronbach's Alpha was employed to examine the internal reliability of the 31 items used to measure the six constructs. Based on Table 4.7, the results revealed that the internal reliability of each construct has ranged from 0.853 to 0.907. Alpha Coefficient of 0.7 was set as the minimum criterion. In this study, the entire construct fulfilled the criterion as it portrayed an alpha coefficient of 0.853. The result has shown that empathy had the highest coefficient (0.907) while assurance had the lowest coefficient (0.853).

Table 4.7: Reliability Statistics for Each of the Variable

S/N	Variables	No. of items	Cronbach's Alpha
1	Tangibility (TAG)	6	0.887
2	Responsiveness (REP)	5	0.866
3	Reliability (REL)	5	0.860
4	Assurance (ASS)	5	0.853
5	Empathy (EMP)	5	0.907
6	Passenger Loyalty (PLTY)	5	0.864

Source: Field Survey, 2019

4.3.2 Normality test

Homoscedasticity means that the variance of errors is the same across all levels of the IV. When the variance of errors differs at different values of the IV, heteroscedasticity is indicated. According to Berry and Feldman (1985) and Tabachnick and Fidell (1996), slight heteroscedasticity has little effect on significance tests. However, when heteroscedasticity is marked it can lead to serious distortion of findings and seriously weaken the analysis thus increasing the possibility of a Type I error. Figure 4.2, 4.3 and 4.4

Researchers have suggested that in a large sample size above 200, the shape of the graphical distribution should be considered rather than the value of the skewness and kurtosis statistic, as large samples decrease the standard error, which in turn inflates skewness and kurtosis statistics (Field, 2009)

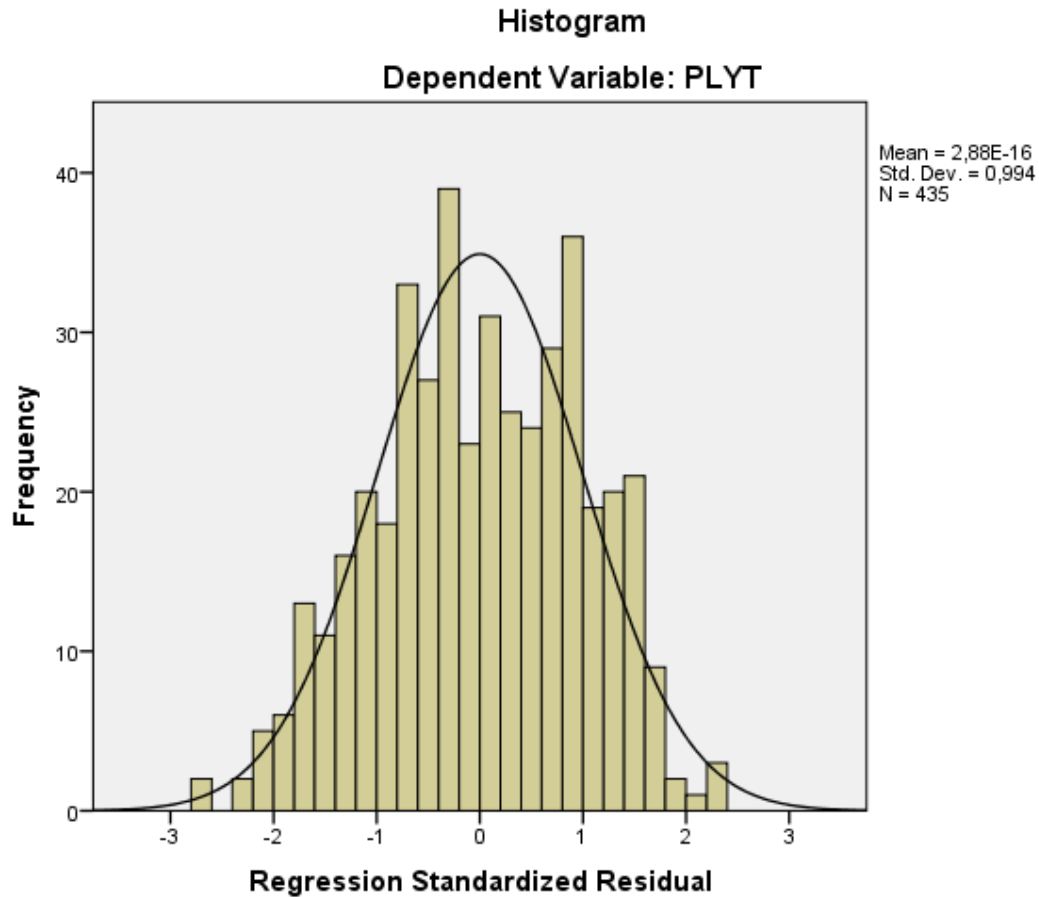


Figure 4.2: Histogram

The present study employed a graphical method to check for the normality of data collected (Tabachnick, & Fidell). Against this background, the present study used the histogram and normal probability to make sure that normality assumptions were not violated. Figure 4.2 shows that data collected for the present study reflects a normal pattern since all the bars on the histogram were closed to the normal curve. Moreover, this is also supported by inspection of normality probability plot (labeled Normal P-P Plot of Regression Standardized Residual); where the observed value for each score is plotted against the expected value from a normal distribution. A reasonable straight line suggests normal distribution. Hence, proof that normality assumptions were not violated.

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PLYT

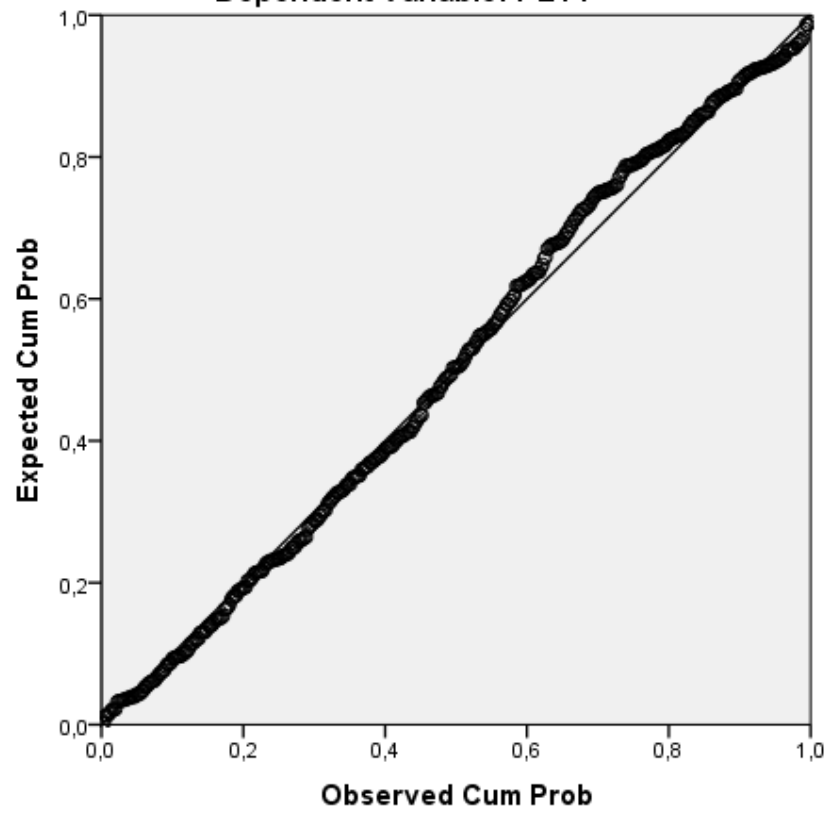


Figure 4.3: Normal P-P Plot of Regression Standardized Residual

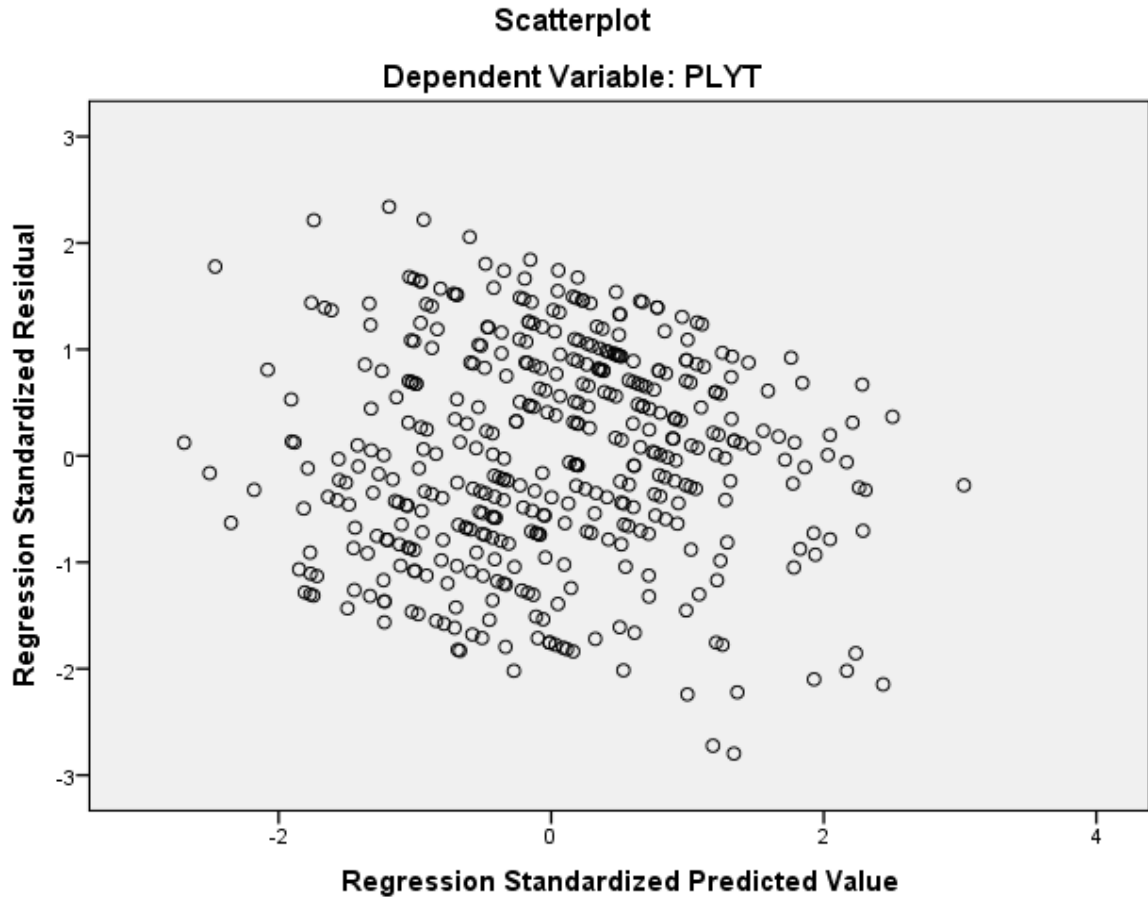


Figure 4.4: Scatterplot

4.3.3 *Autocolleration assumption*

The Durbin Watson test for autocorrelation was carried out to test if there is any violation in the assumption; from the results, it shows that there is no autocorrelation within the residuals of the specified model of the regression. The acceptance critical criterion of Durbin Watson is between 1.5 and 2.5. For this study, it can be assumed that the value is within the range of critical criterion that is 2.161 which indicates that there is no violation of autocollimation in this study.

4.3.4 *Linearity assumption*

Multiple regression can accurately estimate the relationship between dependent and independent variables when the relationship is linear in nature (Osborne & Waters, 2002). The chance of non-linear relationships is high in the social sciences, therefore it is essential to examine analyses for linearity. If the relationship between the dependent and

independent variables is not linear, the results of the regression analysis will under- or overestimate the true relationship and increase the risk of errors (Osborne & Waters, 2002). If linearity is violated all the estimates of the regression including regression coefficients, standard errors, and tests of statistical significance may be biased (Keith, 2006). Where bias occurs, it is likely that it does not reproduce the true population values. Violation of this assumption threatens the meaning of the parameters estimated in the analysis (Keith, 2006). It can be seen from Figure 3 that the variables have a linear relationship.

4.3.5 Homoscedasticity assumption

Homoscedasticity means that the relationship under investigation is the same as the entire range of the dependent variable. Lack of homoscedasticity is shown by higher errors (residuals) for some portion of range compared to others. Where homoscedasticity assumption is met, residuals will form a patternless cloud of dots. Lack of homoscedasticity is easily seen in standardized scatter plot. The scatter plot of the standardized predicted dependent variable against standardized residuals. In Figure 4 below service quality was used to predict customer loyalty and the standardized predicted and the residual values were saved. The plot is largely cloudy indicating homoscedasticity. This shows that there is no violation of homoscedasticity which can lead to the problem of heteroscedasticity.

4.4.6 Multicollinearity assumption

Multicollinearity is a high degree of correlation (linear dependency) among several independent variables. It commonly occurs when a large number of independent variables are incorporated into a regression model. It is because some of them may measure the same concepts or phenomena. Only the existence of multicollinearity is not a violation of the Ordinary Least Squares Regression (OLS) assumption. However, perfect multicollinearity violates the assumption that the X matrix is fullyrank, making OLS impossible. When a model is not fully ranked, that is, the inverse of X cannot be defined, there can be an infinite number of least squares solutions.

Symptoms of multicollinearity may be observed in situations:

- i. Small changes in the data produce wide swings in the parameter estimates;
- ii. Coefficients may have very high standard errors and low significance levels even though they are jointly significant and the R for the regression is quite high;

- iii. Coefficients may have the “wrong” sign or implausible magnitude Greene (2000). We can make a judgment by checking related statistics, such as tolerance value or Variance Inflation Factor (VIF), Eigenvalue, and condition number. The VIF acceptance range is between 1 and 10 in this study the VIF is 2.643. It shows that regression was not violated and there is no problem of multicollinearity. The rule of thumb for a large VIF value is ten (Keith, 2006; Shieh, 2010).

4.3.7 Normality assumption

Regression assumes that variables have normal distributions. Non-normally distributed variables (highly skewed or kurtotic variables, or variables with substantial outliers) can distort relationships and significance tests. There are several pieces of information that are useful to the researcher in testing this assumption: visual inspection of data plots, histogram, P-P plots and scatter plot give researchers information about normality.

4.4 Regression analysis

After the test of all assumptions of multiple regression (MR) that are known a primary concern in the research include Autocolleration, linearity, homoscedasticity, normality, and collinearity. This section specifically defines, each assumption regression model analysis outcome reported on Table 4.8 below shows R-value 0.436, R. Square value is 0.190 and adjust R.square is 0.180. This shows 19% of the effect of service quality that explained passenger loyalty in Adamawa State Sunshine Transport Company.

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. the error of the estimate	Durbin-Watson
1	.436 ^a	.190	.180	5.10201	1.380

a. Predictors: (Constant), EMP, TAG, ASS, REP, REL

b. Dependent Variable: PLYT

Source: Field Survey, 2019

The F-value or ANOVA test on Table 4.9 indicates that F= 20.082, (P<0.000) which is significant to this study, is done by confirming the fitness of the model. The result shows that service quality has a strong relationship with passenger loyalty and the data is fit for the study.

Table 4.9 ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2613,709	5	522.742	20.082	.000 ^b
	Residual	11167,105	429	26.031		
	Total	13780,814	434			

a. Dependent Variable: PLYT

b. Predictors: (Constant), EMP, TAG, ASS, REP, RE

Field survey, 2019

However, Table 4.10 shows the coefficient of the variables. The first outcomes indicates that tangibility has $\beta = -,163$ $t = -4,072$, $P < 0.05$. This means tangibility has significant effects on passenger loyalty and null hypothesis is accepted. However, the negative sign on the figure shows that there is a negative effect of tangibility on passenger loyalty. This shows that the higher the tangibility problem, the lower the passenger loyalty will be. The second stage responsiveness has the $\beta = -,118$, $t = -2,375$, $P < 0.05$. It indicates that there is significant responsiveness on passenger loyalty, so the null hypothesis is rejected and it accepts the alternate hypothesis.

Based on the findings, reliability has $\beta = ,306$, $t = 5,344$, $P < 0.05$. This indicates that there is a significant effect of reliability on passenger loyalty. Therefore the null hypothesis is rejected and an alternate hypothesis accepted. Assurance has $\beta = ,002$, $t = ,039$, $P > 0.05$. This shows that assurance has no significant effect on passenger loyalty. Therefore, it accepts the null hypothesis. The effect of empathy on passenger loyalty indicates that $\beta = ,169$, $t = 3,245$, $P < 0.05$. This reveals that empathy has a significant effect on passenger loyalty.

Table 4.10:Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	13.701	1.115		12.284	.000		
TAG	-.163	.040	-.199	-4.072	.000	.795	1.259
REP	-.118	.050	-.118	-2.375	.018	.771	1.297
REL	.306	.057	.282	5.344	.000	.679	1.473
ASS	.002	.046	.002	.039	.969	.898	1.113
EMP	.169	.052	.168	3.245	.001	.707	1.414

- a. Dependent Variable: PLYT
Field survey, 2019

4.6 Findings of the study

- i. The finding revealed that tangibility of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty
- ii. The finding revealed that responsiveness of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- iii. The finding revealed that reliability of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- iv. The finding revealed that assurance of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.
- v. The finding revealed that empathy of Adamawa Sunshine Transport Company has a significant effect on passenger loyalty.

4.6 Discussion of Findings

Multiple regressions were employed to analyze the data collected on the effect of five dimensions of service quality on passenger loyalty. Based on the findings, tangibility has a significant effect on passenger loyalty. The outcome of this study is in line with the findings of Barabino, Deiana, and Tiloccais (2012), study on measuring service quality in urban bus transport: a modified SERVQUAL approach. The study showed the possibility to implement a SERVQUAL approach abiding by the requirements.

The results illustrate a high degree of importance placed on attributes such as onboard security, bus reliability, cleanliness, and frequency, with these latter three characterized by the widest negative gaps between perceptions and expectations; and

which agrees with the studies of Zeithaml et al. (1996), Ruyter *et al.* (1998), Wong and Sohal (2003), Aydin and Özer (2005), Masarrat, and Jah, (2014), Tierran, Rhoades, & Jr, (2008), Shukla, (2013), Adeola and Adebisi, (2014), Ansari and Qadri, (2014), Zangmo, Liamprecha and Chemsripong, (2014), Kalaiarasan, Appannan and Doriasamy, (2015) and Waha, Sukati and Hua Li, (2015). If customers are satisfied with the service quality provided by the enterprises, they will recommend it to others. Furthermore, perceived service quality is an antecedent of passenger satisfaction. The principal benefits offered to clients (passengers) by the Transport Company should be emphasized in promotional activities and transport management should ensure that what is promised to passengers is delivered.

The findings indicated that responsiveness has a significant effect on passenger loyalty. The findings of this study are consistent with the study of Too and Earl (2010), who presented the findings of a survey of 604 commuters within Varsity Lakes on public transport needs in the area. The study has also illustrated the application of the SERVQUAL instrument for measuring public transport service quality. The findings can then be compared to greater insights can be drawn on improving public transport service levels. Across the board, the overall perception scores on all public transport were less than the expectation scores. This represents a less than satisfactory service quality. In particular, the areas where public transport fell short were in the responsiveness and reliability criteria. Also, the study is consistent with the research of Chou, (2014), Dick and Basu (1994), Aydin and Özer (2005), Zangom, Liamprecha, and Chemsripong, (2014), and Shukla, (2013).

Based on the outcome of the study, reliability has a significant effect on passenger loyalty. This research finding was consistent with the studies of Garbarino and Johnson (1999), Sirdeshmukh *et al.* (2002), Zangom, Liamprecha, and Chemsripong, (2014), Aydin and Özer (2005), Shukla, (2013) Oliver ,(1980) and Bearden and Teal, (1983). The results show that the level of passenger loyalty in the transport industry would affect the loyalty level. Passenger perceived reliability as one of the dimensions of service quality as an important attribute in the transport company. The stakeholders of the transport industry can increase passenger confidence by increasing their satisfaction in delivering quality services so that they would use or encourage others to use air travel services.

Based on the result of the study, the researchers have found out that assurance is not significant to passenger loyalty and it is also the least important factor that will

influence loyalty. Due to the nature of the bus, passengers are not provided with any assurance on their luggage unless passengers opt to pay extra charges. This study supported by the study of (Mpingajira, 2008; Lo, Osman, Ramayah, & Mosahab, 2010). According to Cronin and Taylor (1992), service quality and customer satisfaction are prerequisites of customer loyalty. Correspondingly, Bitner (1990) submitted that positive word-of-mouth becomes more widespread as customer satisfaction levels with service quality rises.

Finally, the findings of this study indicate that there is a significant effect of empathy on passenger loyalty. The findings of this study can be supported by the study of Mpingajira, 2008; Lo, Osman, Ramayah, & Mosahab, 2010). According to Cronin and Taylor (1992), service quality and customer satisfaction are prerequisites of customer loyalty. Correspondingly, Bitner (1990) submitted that positive word-of-mouth becomes more widespread as customer satisfaction levels when service quality rises

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study seeks to establish the effect of service quality on passenger loyalty in Adamawa Sunshine Transport Company using modified SERVQUA theoretical framework. Primary data was collected using a questionnaire which was administered to passengers of Adamawa Sunshine Transport Company. The assumption was that in the given time, the experiences the respondents had were still fresh in their memories. The response rate from the research study was 95% and this was considered adequate.

From the respondents' descriptive study, the personal details were classified as gender, age, and educational level, working status, income, the purpose of traveling and frequency of travel. Majority of the respondents were female which constituted the highest sample size. The scale measurement was identified by the reliability test. The Cronbach's Alpha was used to examine reliability among six constructs. Among the five constructs measured, all the reliability analysis result appeared reliable in values greater than 0.7. The data collected using the modified SERVQUAL model is shown in the factor analysis as realized. The same items of dimensions load into one single factor meaning that the modified SERVQUAL model is valid for the study.

The results of the study confirm the research hypotheses in the model. It proves that tangibility has significant effect on passenger loyalty, responsiveness has a significant effect on passenger loyalty, reliability has a significant effect on passenger loyalty, assurance has no significant effect on passenger loyalty and lastly, empathy has significant effect on passenger loyalty. Evidence from the study shows that Adamawa Sunshine Transport Company has to improve performance on assurance in the dimensions of service quality in order to increase passenger loyalty levels since passengers expect more than what is been offered. This will enable the Adamawa Sunshine Transport Company to maintain a high level of competitiveness.

5.2 Conclusion

Based on the findings from the study it is clear that loyalty is high but there is a need for Adamawa Sunshine Transport Company to focus on continued improvement on the quality of service. In addition, the result of the findings is especially important to the Nigerian Public Transport Company because it is reputed to be the fastest growing means of transport. To remain competitive, the Adamawa Sunshine Transport Company needs to

focus on its operational strategies to reduce cost but at the same time increase service quality. Strategies such as capacity sharing can be used to cater for delayed flights occasioned by under booking. This will minimize cases of planes flying under capacity. Innovation can be used to increase their communication with passengers.

The study was based on a process model of the services that the passengers face during the journeys. The process model represented these services as a sequence of steps. Each step had corresponding service quality attributes. The data for the empirical research was collected by using a convenience method where the respondents were asked to assess service quality attributes of Adamawa Sunshine Transport Company based on passenger perceived importance.

The empirical results pointed out the importance of high expectations on such service quality aspects as information availability, communication as well as timely arrival. Baggage delivery emerged somewhat predictably as a very important part of the overall bus service experience. Moreover, research has shown that there is not much difference between male and female expectations of bus service, rather it differs from what Westwood et al. (2000) claimed.

To conclude the research, it can be said that whereas passenger requires good quality information and communication on promptly and when needed, other services can help any carrier to go on extra mile for passenger satisfaction and loyalty level.

5.3 Recommendations

The study revealed that workers attitudes and characteristics were of concern to passengers. There were complaints that Adamawa Sunshine Transport Company lacked assurance. The recruitment processes need to be more stringent in order to attract the right caliber of staff. In addition, continuous staff training, particularly on passenger service issues, needs to be considered by Adamawa State Transport management. Likewise, management should consider additional incentives to workers, to motivate them to excellence in passenger service. There is a need for the Adamawa Transport Company to adopt the latest modes of communication technology to track the feelings of passengers and the quality of service they receive.

This will require prompt responses and enable Passengers to communicate in real time concerning their travel and trip. There were complaints about limited luggage compartments that seriously inconvenienced passengers on long journeys as they were forced to carry their luggage in their hands. This should be addressed by Adamawa Sunshine Transport Company. The quality and user friendly to use website should be

addressed as most customers seemed to prefer such to access information about transport services. The Adamawa Sunshine Transport Company can also consider introducing other classes in order to accommodate a wider variety of passenger needs and expectations.

In order to be successful, the Adamawa sunshine transport company will have to attain maximum scores on the following issues:

- i. Scrutinize those areas of weak valuations of the quality of services as perceived by different passengers. This will help the Adamawa Sunshine Transport Company to solve the problems and to give certain classes of services that were not enclosed before. Furthermore, it will affect passenger's satisfaction and their eagerness to travel by road transport in the future.
- ii. Develop the quality of services offer to different classes of travelers. It was observed that the quality of services in other class is not perceived to be of a good standard.
- iii. Adamawa Sunshine Transport Company should take into consideration that advanced information systems are necessary in order to render a complex travel programme and allow for the possibility of sensitivity to individual passenger needs and satisfaction. The historical information pertaining to the travel behavior of passenger is of critical analytical value for analyzing both service quality and the profit of each service in the system, as well as for supplying new service changes.
- iv. Adamawa Sunshine Transport Company administrators should center their effort on specific areas of quality that have superior influence in explaining the passenger's intent to behave and their satisfaction. If only partial resources are available to implement service quality improvements, ensuring that the guarantee service is executed accurately, dependable, and with great care of individual passenger needs. This will give the best return in passenger satisfaction for repeat purchase in the prospect.

5.4 Suggestions for Further Research

After completing this study, the researchers have found out that there are some areas for improving the quality of this study in the future. In order to avoid the bias of this study, the multi-language questionnaire is highly recommended, which should provide English and Hausa versions of the questionnaire. By inserting multi languages in the questionnaire, it can help to increase the level of understanding for the respondents who are not able to understand the full English version of the questionnaire. Additionally, the

respondents can choose their preferred language to answer, thus they would be able to understand the research questions which lead to the accuracy of the result.

Besides, the study has only covered five factors that might have an effects on passenger loyalty. However, the researcher might neglect certain significant factors that play an important role in determining the loyalty level towards service quality that is delivered by the AdamawaSunshine Transport Company. Price and security are emphasized by the passengers from Adamawa Sunshine Transport Company. Thus, these two factors should be carried out in future research to obtain an in-depth understanding of passengers' loyalty levels towards Adamawa Sunshine Transport Company.This is useful for this study with regards to Adamawa Sunshine Transport Company.

5.5 Contribution to Knowledge

The limited studies on the effect of service quality and passenger loyalty in Adamawa State Sunshine Transport Company in Nigeria using modified SERVQUAL that measures exclusively before and after service behaviour at the terminus, has filled the gap of existing literature on the subject. Also this study has contributed to understanding the quality of services rendered in Adamawa Sunshine Transport Company, especially using a modified SERVQUAL model.

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APPENDICES

Appendix I: Introductory Letter

Department of Management Technology,
School of Management and Information Technology,
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P.M.B. 2076, Yola, Adamawa State, Nigeria.

I am a student of ModibboAdamaUniversity and Technology Yola, , Adamawa state. I am conducting research on the “**Impact of Service Quality on Passenger Loyalty in Adamawa Sunshine Transport Company**”, as a partial fulfilment of the requirements of the Master of Science (Msc) degree award. I am with utmost humility requesting for your attention and information to facilitate the successful completion of this research. The questions in the questionnaire are fashioned to obtain responses from you which will be analyzed for the achievement of the research objectives.

Please, supply the information pertaining to your organization and yourself as sincere as you can. I am assuring you that any information supplied would be treated in strict confidence and are to be use for research purpose alone. Thank you for your cooperation.

Yours sincerely,

TUMBA, Joseph

Appendix II: Research Questionnaire

SECTION A: Demographic Details

1- Gender: Male () Female ()

2-Age: Below 20 years old () from 20 to 29 years old () from 30 to 39 years old () From 40 and above

3 - Education level: Primary () secondary () Tertiary () non formal education () Others

SECTION B

The following set of statements is based on of quality service provided by Adamawa Sunshine transport by tick (√) in front of words that correspond with the degree of your answer.

S/N	Tangibility	SD 1	D 2	UD 3	A 4	SA 5
1	Adamawa sunshine transport company has new buses					
2	Physical facilities at the terminus are appealing					
3	Adamawa sunshine transport company on board comfort is in an excellent form.					
4	On board cleanliness of Adamawa sunshine transport company is usually appealing.					
5	The terminus of Adamawa sunshine transport company of appealing					
6	There is on board space availability (seat and standing capacity)					
	Responsiveness	SD 1	D 2	UD 3	A 4	SA 5
1	There is bus in Adamawa sunshine transport company is frequency obtainable.					
2	Tickets are available to passengers at all the time.					
3	Ticket are easily validate at the terminus					
4	Passengers are informed bus route travel time					
5	Passengers are informed exactly which service will be offered.					
	Assurance	SD 1	D 2	UD 3	A 4	SA 5
1	Workers behaviour in still confidence in passengers					
2	Passengers feel assure that service request are duly follow-up by the Adamawa sunshine transport company					
3	Workers that provide service to passengers are courteous and friendly					
4	Workers maintain adequate knowledge of handling passenger queries.					
5	Passenger of Adamawa sunshine transport company is safe in their transaction.					
	Security/Safety	SD 1	D 2	UD 3	A 4	SA 5

1	Passenger assurance for safety and security					
2	Airline has passenger's security and safety records					
3	Airline has Luggage security and safety					
4	Life assurance is guaranteed					
	Online Service	SD	D	UD	A	SA
		1	2	3	4	5
1	It is flexible and easy to choose transport.					
2	It is flexible and easy to select date and time.					
3	It is very fast to the result page.					
4	The information is clearly present on the result page.					
5	The company information is accurate and update in time.					

Section C: Passenger Loyalty

The following set of statements is based on your loyalty to Adamawa Sunshine transport. Please tick (√) in front of words that correspond with the degree of your answer.

	Passenger Loyalty	SD	D	UD	A	SA
		1	2	3	4	5
1	I always recommend this Adamawa sunshine transport company to anyone who asks my advice					
2	I often say positive things about this transport company					
3	I intent to use this transport service next time.					
4	Low prices in competitors service will not lead me to switch to it					
5	I will pay any price requested by this transport company even if the prices of other transport less					
6	If I have a problem in the service provided by company, I will contact the employees directly					

THANK YOU

APPENDIX II: Krejcie and Morgan Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Appendix III: Results

Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
,887	6

Reliability Statistics

Cronbach's Alpha	N of Items
,866	5

Reliability Statistics

Cronbach's Alpha	N of Items
,860	5

Reliability Statistics

Cronbach's Alpha	N of Items
,853	5

Reliability Statistics

Cronbach's Alpha	N of Items
,907	5

Reliability Statistics

Cronbach's Alpha	N of Items
,864	5

Frequency Table

gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	185	42,4	42,4	42,4
female	251	57,6	57,6	100,0
Total	436	100,0	100,0	

age of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid below 20 years old	40	9,2	9,2	9,2
20-29 years old	121	27,8	27,8	36,9
30-39 years old	163	37,4	37,4	74,3
40 years and above	112	25,7	25,7	100,0
Total	436	100,0	100,0	

educational level of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid primary school leaving certificate	143	32,8	32,8	32,8
secondary school certificate	133	30,5	30,5	63,3
tertiary education	113	25,9	25,9	89,2
non formal education	47	10,8	10,8	100,0
Total	436	100,0	100,0	

Regression

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,436 ^a	,190	,180	5,10201	1,380

a. Predictors: (Constant), EMP, TAG, ASS, REP, REL

b. Dependent Variable: PLYT

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	13,701	1,115		12,284	,000		
TAG	-,163	,040	-,199	-4,072	,000	,795	1,259
REP	-,118	,050	-,118	-2,375	,018	,771	1,297
REL	,306	,057	,282	5,344	,000	,679	1,473
ASS	,002	,046	,002	,039	,969	,898	1,113
EMP	,169	,052	,168	3,245	,001	,707	1,414

a. Dependent Variable: PLYT

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2613,709	5	522,742	20,082	,000 ^b
	Residual	11167,105	429	26,031		
	Total	13780,814	434			

a. Dependent Variable: PLYT

b. Predictors: (Constant), EMP, TAG, ASS, REP, REL

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	TAG	REP	REL	ASS	EMP
1	1	5,605	1,000	,00	,00	,00	,00	,00	,00
	2	,136	6,418	,00	,19	,17	,06	,05	,16
	3	,105	7,292	,00	,00	,02	,04	,84	,15
	4	,064	9,364	,03	,50	,79	,02	,02	,01
	5	,050	10,583	,00	,06	,01	,79	,02	,63
	6	,039	11,962	,97	,24	,01	,09	,07	,04

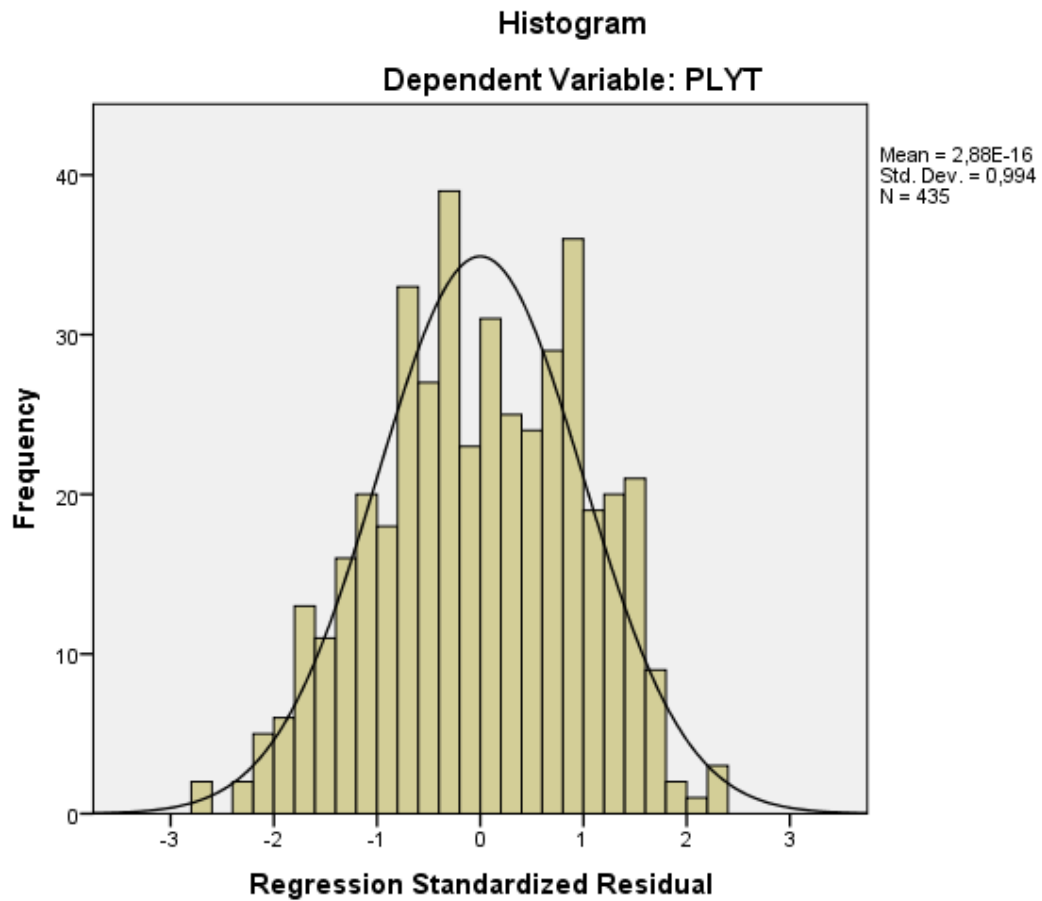
a. Dependent Variable: PLYT

Residuals Statistics^a

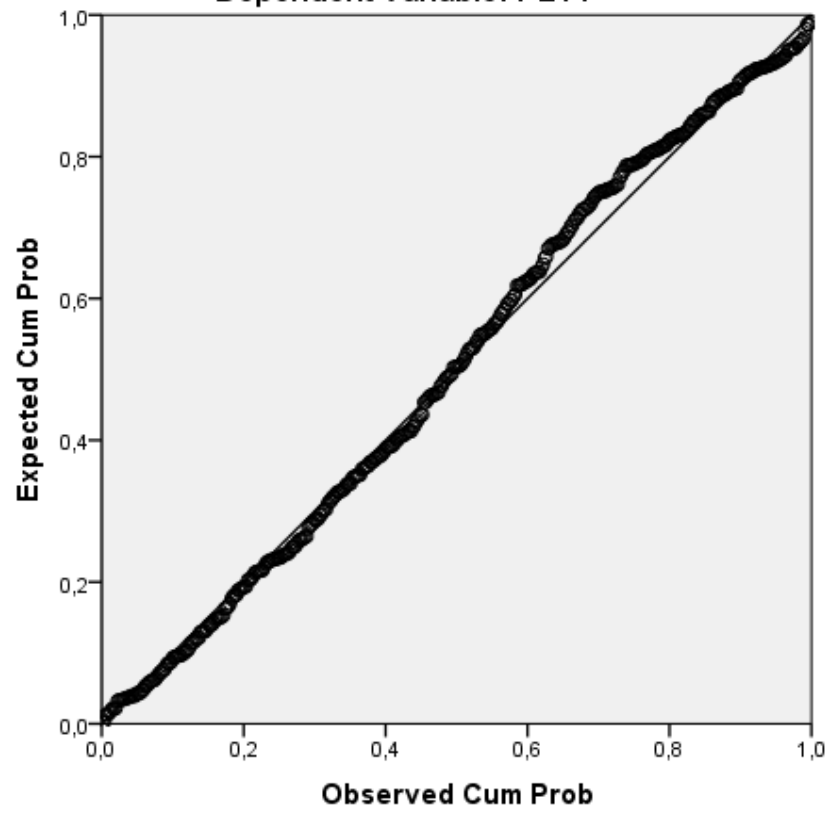
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9,3681	23,4110	15,9793	2,45405	435
Residual	-14,27031	11,94048	,00000	5,07254	435
Std. Predicted Value	-2,694	3,028	,000	1,000	435
Std. Residual	-2,797	2,340	,000	,994	435

a. Dependent Variable: PLYT

Charts



Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PLYT



Scatterplot

Dependent Variable: PLYT

