Service quality, Customer Satisfaction, Re-Purchase Behaviour: Empirical Evidence from the Mass Road Transport Sector in a Developing Economy

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Abstract

This paper employs the SERVQUAL model as theoretical lens to explore the effect of service quality on consumer repurchase behaviour through customer satisfaction. The study develops a theoretical model to explore the dimensions of service quality through customer satisfaction indicators on consumer repurchase behaviour. A survey of a sample of 300 passengers of key private bus operators in Ghana, a developing nation in Africa was conducted to test the research model. Structural equation modelling (SEM) techniques were used to analyse the data and test the model. The results revealed that when the effects of price system and income level are controlled, the effect of service quality on re-purchase intent is mediated by passenger satisfaction and that an individual's purchase decision to reuse the services of an operator in the industry is not only significantly determined by service quality but also the level of satisfaction derived from using the transport services. There was confirmation of extant literature that if passengers have a positive assessment of a transport operator's operations in terms of service quality, they would be more likely to be satisfied with the services delivered. The findings suggest that in developing economies, passenger' decisions to repurchase a transport operator's service might not necessarily be influenced by the satisfaction gained from the service quality measures but by other factors. To the best of the researchers' knowledge, this study is the first to empirically test the effect of service quality on consumer repurchase behaviour in Sub-Saharan Africa using SEM techniques

1.0 INTRODUCTION

Transportation is part and parcel of human life with virtually everyday life and activities of human revolving around it (Govender, 2014). Transportation involves the movement of people, goods and services from a point of origin to a destination (Okoko, 2006). Transportation involves

ability to access business activities, employment, education as well as recreational opportunities thereby contributing to policy effectiveness and reducing isolation through enhancing security and job creation (Gwilliam, 2002). Basorun and Rotowa (2012) indicated that transportation and urban planning involves providing adequate and equitable service for all groups within society. As mass transport organizations grow older and mature, the quality of their service dwindles (Andreassen, 1994). The application of the concept of service quality in the public transportation sector is critical in meeting the public's expectations of mass transport (Ancarani and Capaldo, 2001). This is because overall perceived quality has a significant effect on customer behavioural intentions (Zeithaml et al., 1996).

In effect, customers examine the brand image and perceived quality of the transport service to make repurchase decision. Improving service quality in the transport industry would benefit existing transit passengers and new transit passengers as well as the society as whole by reducing traffic problems including congestion, roadway and parking costs, energy consumption and pollution emissions (Annan et al., 2015; Litman, 2008). The core reason for conducting this study is that within the area of public transport, service quality has remained an elusive and neglected area in research. Accessibility to data regarding service quality and performance indicators in the transport sector are non-existent (Simona, 2010). Few studies in this area debates and focuses on the transport system comprising of city network developments, spatial designs, system configurations, government policies and engineering services. For instance in Ghana, mass transport buses are in so many forms and different levels of comforts, hence making it difficult to assess the service quality of the transport service.

As a result, there is a challenge in measuring service quality in the transport sector and this pose a challenge to most public transport organizations (Zeithaml and Bitner, 2000) coupled with subjectivity of the transport service (McKnight et al., 1986 and Parasuraman et al., 2000). Aderamo (2010) opines that the level of service quality in passenger transport in developing countries is very low. The supply of passenger transport is not able to meet demand. This could be attributed to evolving urbanization coupled with increased transportation needs of the people which has to be fully addressed and satisfied (Aderamo, 2010). However, the measurement of passenger satisfaction of a transport operator is mostly subjective. The desired level of service quality in the transport sector is usually different from the operators' perceived quality, as most at times the daily experiences of passengers, what they desire, hope or expect from the transportation are often neglected (dell'Olio et al., 2010). Hence, how the operations of a passenger transport affect the satisfaction of commuters (timeliness, fulfilments, etc.) is not much considered.

Many extant studies have given support to the assertion that service quality has a strong influence on customer satisfaction (Oliver, 1997; Stradling et al., 2007; Felleson and Friman, 2008; Khurshid, 2012) whereas others looked at the effect of customer satisfaction on repurchase behaviour (Eboli and Mazulla, 2007; Gatersleben and Uzzel, 2007. However, the mediating effect of customer satisfaction between service quality and repurchase has not been much explored area especially in the transport sector. Service quality in the transport sector could be predicted by many factors including frequency, price, punctuality, travel time which within the Sub Saharan setting have major impact on customer satisfaction and eventually repurchase behaviour of commuters. This study therefore sough to empirically test these concepts quantitatively in Ghana with evidence from the transport sector. Even though private sector mass transport operators have a perceived positive public acceptance in their operations, they are faced with some challenges leading to passenger dissatisfaction. These include inadequate passenger waiting space, no advanced ticketing, no online reservations, and inadequate space at bus terminal among others.

This affect their service quality which has an impact on the commuter repurchase intent. Per these issues, it is timely and crucial for a study like this to be conducted to examine the effect of transportation service quality on passenger satisfaction and commuter re-purchase behaviour in the road mass transit industry. The rest of this paper is organized as follows. The next section discusses the theoretical background and hypothesis development for this study which were drawn from service quality research in the transport sector, customer satisfaction and consumer repurchase behaviour literature and we review how these concepts are related. We then discuss measures and their operationalization, model estimation and results of the

study from the structural equation modelling (SEM). We then highlight the managerial and theoretical implications of the study for both research and practice.

2.0 MATERIALS AND METHODS

2.1 Service Quality

Several studies on service quality research abounds (Gronroos 1982; Parasuraman et al., 1985; Brady and Cronin, 2001). However, service quality has been a general challenge as far as public transport organizations are concerned, especially with difficulty in measuring the transport service quality (Zeithaml and Bitner, 2000). Some of these challenges related to service quality in the transport sector in general could be cited from both developing and developed countries. For instance, a study undertaken in Singapore in Asia in 2012 revealed that there are four dimensions relevant to public transport service and they include extent of service, connections, liveable cities and inclusivity which altogether improves travelling experience (Land Transport Authority, 2013).

Similarly, Samson and Thompson (2007) revealed that other attributes relevant to service quality in the transport sector included punctuality and reliability of service as well as cleanliness of stations. These attributes if not managed well, may lead to passenger dissatisfaction (Samson and Thompson, 2007). Parasuraman et al. (1985) suggested that the utility of service does not only comprise the dimensions in the SERVQUAL model including tangibles, responsiveness, empathy among others, but it also takes into consideration other factors such as security, previous experiences and word of mouth (Simona, 2010).

Other researches indicated that it is not easy to measure service quality in the transport sector as it comprises abstract and intangible factors including safety and comfort (such as that of Beirao and Cabral, 2007 and Emboli and Mazulla, 2007). However, several studies have utilized the SERVQUAL model propounded by Parasuraman et al. (1988) which employed the RATER scale (responsiveness, assurance, tangibles, empathy and reliability) dimensions of service quality to measure that construct vis-à-vis other factors to determine the perception and interpretation of the concept of service quality (Barabino, 2012).

2.2 Consumer Re-purchase Behaviour

Most studies indicate that service quality and customer satisfaction are antecedents of consumer repurchase behaviour. However, Ravald and Gronroos (1996) indicated that between the two concepts, customer satisfaction is the better predictor of repurchase behaviour. Ravald and Gronroos (1996) assertion was earlier on supported by Cronin and Taylor (1992)'s study which indicated that customer satisfaction provides a stronger effect on repurchase behaviour than service quality.

2.3 Customer Satisfaction

The importance of the understanding of customer satisfaction has been an area which cannot be overemphasised in recent times in contemporary business (Eboli and Mazulla, 2007; Khurshid et al., 2012). Extant studies define satisfaction from the standpoint of customer evaluative judgement after purchase decision (Churchill and Surprenant, 1992; Oliver, 1980). They argue that customer satisfaction is as a result of customers' attitude or evaluation of a product or service that they have purchased in relation to their preconceived perception of how it should have been (Oliver, 1980).

Several studies regarding satisfaction and dissatisfaction in public transport has been conducted to develop and create attractive public transport. From the study of Gatersleben and Uzzel (2007), commuting by either car or public transport is mostly stressful because of resulting delays from traffic volumes. The stress was also attributed to boredom from the delays and long waiting times, unpredictability and longer travel times.

All these cause dissatisfaction to commuters. On the other hand, satisfaction from transport emanated from attributes including pleasurable feelings from road trips, listening to music, interacting with people as well as a view of nature and passers-by in the cause of travelling (Gatersleben and Uzzell, 2007). Another study by Eboli and Mazulla (2007) indicated that service planning is the latent variable for customer satisfaction which is manifested through service reliability, availability of information, service promotion, right personnel and avenue for complaints.

2.4 Customer Satisfaction and Re-purchase Behaviour

With regard to the re-purchase behaviour, empirical studies by several studies found a positive effect of customer satisfaction on repurchase behaviour (Bitner et al., 1990; Cronin and Taylor, 1992). However, more recent studies did not substantiate this relationship (Sivadas and Baker-Prewitt, 2000). Another study by Rust and Zahorik (1993) indicates that customers are likely to switch to other supplier when their expectations are not met and thus dissatisfied and would also remain a loyal customer if the supplier provides better alternatives than expected.

2.5 Research Model and Hypotheses

Scholars argue that service quality and customer satisfaction are highly related and there has been some studies which view these variables (service quality and customer satisfaction) as antecedents of consumer repurchase behaviour. However, in the area of the transport sector, there are not much support and empirical studies especially in Sub-Saharan Africa. It is for this reason that this study is conducted to fill this gap. In relation to literature reviewed for the study, it has been conceived that there exists direct relationship between service quality and customer satisfaction and repurchase intent and also a direct relationship existing between customer satisfaction and repurchase intent. Not only are these perceived relationships based on theory but have also been supported by empirical findings in most industries. Thus, the theoretical framework developed for the study sought to evaluate these relationships in the case of service quality in road transport services, particularly, bus systems in a developing economy like Ghana.

Several studies have examined the nexus between service quality and repurchase behavioural through customer satisfaction and value (Anderson and Sullivan, 1993; Patterson and Spreng, 1997). While some of these studies found a direct relationship between service quality and repurchase behaviour (Parasuraman et al., 1988, 1991; Taylor and Baker, 1994; Zeithaml et al., 1996), others did not find significant relationships (Seiders, 2005; Fen and Lian, 2007). Repurchase behaviour is mostly predicted by improved service quality (Boulding et al., 1993; Zeithaml et al., 1996; Bloemer et al., 1999 and Keillor et al., 2007). However, in the private sector, it is not easy to just retain existing customers and attract new customers through improved service quality. Thus, it is necessary to test the relationship that service quality has on consumer re-purchase behaviour. This study proposes a conceptual model (in Figure 1) and develops a number of hypotheses to test the effect of service quality on customer satisfaction which also leads to re-purchase behaviour.
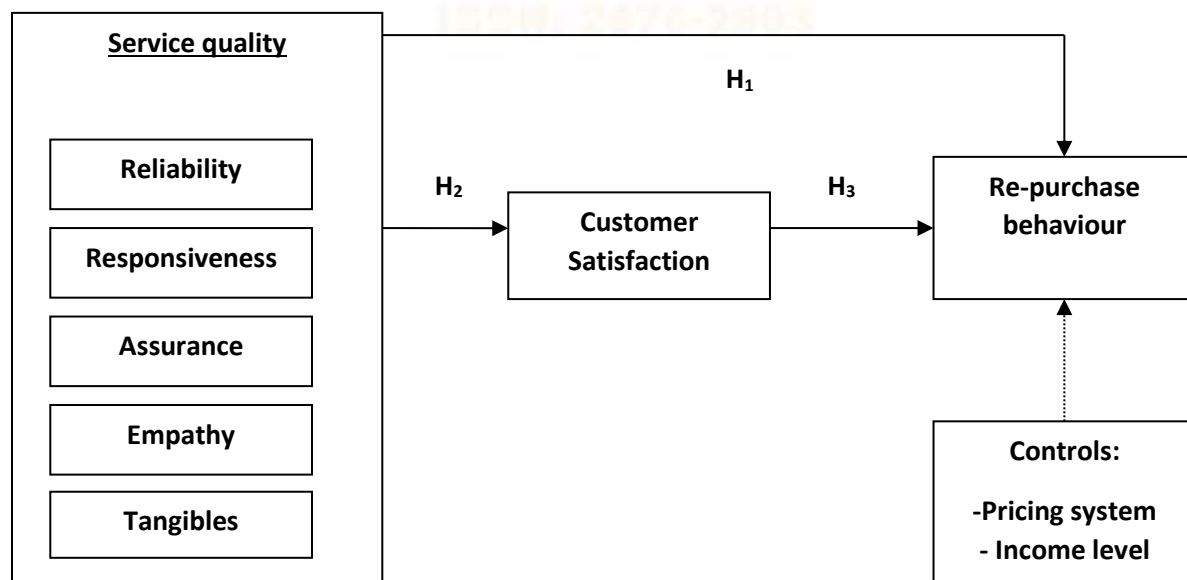

Figure 1: Research Model

This study looks at the effect of service quality on repurchase behaviour using the SERVQUAL model with the RATER dimensions. The focus is on service elements such as expenditure on design, communication and delivery of service quality through the RATER dimensions. Another study by Alexandris et al. (2002) indicated that the dimensions of service quality better predict consumer behavioural intentions including their repurchase intention and word-of-mouth recommendations. Based on the discussions above, we propose the following hypothesis:

H1: Service quality is positively related to re-purchase behaviour.

According to Khurshid et al. (2012), there was a positive relationship between service quality and customer satisfaction in their study of Pakistan public transport. The study revealed that the ability to attract and retain customers stem from offering services which satisfy customers and failure to do that leads to a switch to other competitors. Accordingly, we propose that:

H2: Service quality is positively related to customer satisfaction.

Most research found a positive effect between customer satisfaction and repurchase behaviour (Seiders, 2005). However, most recent studies look at customer satisfaction as a mediator or moderator between service quality and customer repurchase behaviour. This was negated by the study by Fen and Lian (2007) which used Pearson correlation analysis to indicate that service quality and customer satisfaction both have a direct effect on consumer repurchase behaviour. This is confirmed by other studies (Patterson and Spreng, 1997; Bolton, Hellier et al., 2003), which also revealed that the levels of customer satisfaction have an influence on customer's repurchase intentions and behaviour.

It could be seen that customer satisfaction has more influence on consumer repurchase behaviour (Dabholkar, 1995). This was supported by the Parasuraman et al.'s (1994) study which asserted that customer satisfaction has more likelihood to achieve greater level of significance especially with both customer satisfaction and service quality on customer repurchase behaviour. Accordingly, we propose that:

H3: Customer satisfaction is positively related to re-purchase behaviour.

3.0 METHODOLOGY

In collecting data from the study's sample, questionnaires were administered to passengers. The questionnaire items were adopted from existing instruments. Both descriptive and inferential statistical tools were employed in analysing the data collected. The study focused on the road transport bus services, which are operated by individuals, associations (GPRTU), and other well-established companies (e.g., OA Transport Services, VIP Transport Services, STC). Although there are many stakeholders in the transport industry, the present study was primarily concerned with the passengers and their perceptions on service quality and other issues such as satisfaction and repurchase behaviour.

In order to reduce the tendency of researcher bias in collecting data, the study focused on a section of passengers who could independently read, understand, and provide objective responses to the data collection instrument. The respondent group identified therefore was made up of students at the high school level, polytechnic, undergraduate and postgraduate students. In all, 300 questionnaires were administered. Out of this, 288 were returned and 259 of them were found usable for the study. This represented an effective response rate of 86.33%. Given that more than half of the respondents have at least one year travel experience with their respective service providers, it was perceived that they provided responses that adequately reflect the operations of the service providers in terms of service quality and other related variables evaluated in this study.

3.1 Measures and their Operationalization

We based on insights from extant literature to develop most of the items in measuring the construct. The items used to measure the constructs were adopted from previous works. For instance, with service quality, actual service experience dimension of the SERVQUAL framework was adopted from Parasuraman et al. (1988), where the respondents were asked to provide

responses on the service quality of the bus operators in the country. Also, customer satisfaction items were adopted from the study of Govender (2014) whereas the re-purchase behaviour items were adopted from the study of Perez et al. (2007). In order to ensure that all items fit the slightly different context of Ghanaian setting other than advanced settings, minor modifications were made being careful to retain the original meanings of the research items.

Table 1 indicates a summary of the measurement constructs and research items for this study.

Table 1: Summary of Measurement Constructs and Research Items

Construct	Item	Wording	Source
Reliability	REL1	Any given information regarding the transport service is accomplished by the operator (schedules, frequency, etc.).	Parasuraman et al. (1988)
	REL2	The transport operator provides sufficient information about its services (e.g. schedules and frequency).	
	REL3	The operator can be depended on to respond to customer service problem.	
	REL4	The mass transport operator provides services as promised.	
	REL5	The transport operator I usually use is very reliable.	
Responsiveness	RES1	Employees of the mass transit operator offer fast services to customers (ticket sales and others take short time).	Parasuraman et al. (1988)
	RES2	The transport operator's service is very open to passengers concern.	
	RES3	The transporter operator is always ready to respond to passengers' requests (tickets sellers, drivers, etc.).	
	RES4	The transporter operator is very responsive to the needs of passengers.	
	RES5	Whenever I complain to the transporter operator about its service I receive a quick response.	
Assurance	ASS1	Employees' behaviour (tickets sellers, drivers, etc.) inspires trust to passengers.	Parasuraman et al. (1988)
	ASS2	Drivers of the buses assure passengers of complete safety.	
	ASS3	The transport operator assures passengers of its ability to deliver its required service.	
	ASS4	Employees of the transport operator are consistently reassuring.	
	ASS5	Employees of the transport operator possess the knowledge to answer passenger questions.	
Empathy	EMP1	The transport operator is sympathetic to the worries of passengers.	Parasuraman et al. (1988)
	EMP2	The transport operator patiently listen to passengers' concerns.	
	EMP3	The staff of the transport operator are courteous when talking to passengers.	
	EMP4	The staff of the transport operator care about passengers' individual needs.	
	EMP5	The staff of the transport operator have passengers' best interest at heart.	
	EMP6	The staff of the transport operator understand passengers' needs.	
	EMP7	The transport operator is sympathetic to the worries of passengers.	

Tangibles	TAN1	The buses used by the transport operator are always in good conditions.	Parasuraman et al. (1988)
	TAN2	The buses used by the transport operator are always clean.	
	TAN3	The seats on the buses owned by the transport operator are always comfortable.	
	TAN4	The buses owned by the transport operator do not often breakdown.	
	TAN5	The transport operator has modern facilities (e.g. computers, ticket machines, bus stops, air conditioning system, etc.).	
	TAN6	The staff of the transport operator always appear neat and professional.	
	TAN7	Visually appealing materials are associated with the transport operator's buses (bus facilities, seats, etc.).	
	TAN8	The transport operator has modern equipment (e.g. ticket machines, IT systems).	
	TAN9	The Physical facilities of the transport operator are appropriate for the service it provides.	
Customer satisfaction	SAT1	Passenger information	Govender (2014)
	SAT2	Staff behaviour	
	SAT3	Bus cleanliness	
	SAT4	Passenger comfort	
	SAT5	Bus station cleanliness	
	SAT6	Frequency of bus service	
	SAT7	Regularity of bus service	
	SAT8	Security of passengers	
Repurchase Behaviour	RPB1	I will say positive things about my transport operator to other people.	Perez et al. (2007)
	RPB2	I will recommend my transport operator to someone who seeks my advice.	
	RPB3	I will encourage my family and friends to travel with my transport operator	
	RPB4	I will consider my transport operator as my first choice when travelling.	
	RPB5	I will do more business with my transport operator in years to come.	

In measuring the service quality, a 7 point scale was employed, measuring "1=strongly disagree" through to "4=neither agree nor disagree" to "7=strongly agree". In all, 28 adapted items were employed, with 4, 4, 5, 6, and 9 respectively measuring RELIABILITY, RESPONSIVENESS, ASSURANCE, EMPATHY and TANGIBLES as sub-constructs of service quality (TSQ). With customer satisfaction, also a 7-point scale, ranging from 1= "Extremely dissatisfied" through to 4= "Neither satisfied nor dissatisfied" to 7= "Extremely satisfied". In each case, 8-items were employed. Specifically, key items adapted were in reference to the study of Govender (2014). Finally, items to measure repurchase behaviour were adopted and modified from the study of Perez et al. (2007) using a 7-point scale, ranging from 1= "Not likely at all" through to 4= "Note sure" to 7= "Extremely likely".

4.0 RESULTS AND DISCUSSIONS
4.1 Measurement Model Evaluation

Before estimating the study's proposed model, the items employed in measuring the constructs in the model were assessed in terms of reliability and validity. In assessing the internal consistency among the measures for each construct, Cronbach's Alpha was used. The results obtained are shown in Table 1. All alpha values obtained were higher than the

recommended threshold of .70 (Bagozzi and Yi, 2012), indicating that the measures employed in measuring the respective constructs satisfactorily have one underlying concept (Field, 2009).

Exploratory Factor Analysis (EFA) was run using Principal Axis Factoring and Direct Oblimin with Kaiser Normalization for rotation, eight factors were fixed to extract. The Kaiser-Meyer-Oklin value was .951, exceeding the recommended value of .6 and Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix (Pallant, 2007). The eight factors produced with Eigen values exceeding 1 explained 46.03%, 8.32%, 4.53%, 4.09%, 3.30%, 2.54%, 2.18%, and 1.52% of the variance. Inspection of the inter-correlation among the components revealed the presence of many coefficients above .30. Given a minimum loading of .50, all the items on the respective components were retained except for "satisfaction", which had one item not loading appropriately, hence removed

Further, the items retained from EFA were subjected to confirmatory factory analysis (CFA). The CFA was designed to identify any problematic indicators of the constructs (Boso et al., 2013). This analysis was performed in Lisrel 8.8 with maximum likelihood estimation procedure. Following various purification steps, 1, 1, 1, 3, and 4 items were respectively removed on the scales measuring reliability, assurance, empathy, tangibles, and satisfaction. The final list of items retained is shown in table 4.10 with their respective loadings, t-values, and R^2 values. The retained items all loaded at 1% significance level, which indicate good convergent validity of the measures.

Further, results in Table 2 and Table 3 show that composite reliability and discriminant validity of the variables were acceptable, with indices exceeding the minimum cut-off values of .60 and .50 respectively (Bagozzi and Yi, 2012). All the average variances extracted (AVEs) were larger than the shared variances between constructs, indicating satisfactory discriminant validity (Fornell and Larcker, 1981; cited by Boso et al., 2013). While the correlation between customer satisfaction and repurchase is quite high, this is understandable given that the two constructs share similar conceptual domain: they are both indicative of customer acceptance of a firm's market offering. Actually, the high shared variance between the two constructs (.623) is smaller than all reported AVEs, demonstrating discriminant validity of the two constructs.

Table 2: Correlation matrix and validity results of the constructs

Variables	1	2	3	4	5	6	7	8
1. Reliability	1.000							
2. Responsiveness	.550	1.000						
3. Assurance	.713	.658	1.000					
4. Empathy	.587	.555	.603	1.000				
5. Tangibles	.474	.485	.546	.640	1.000			
6. Satisfaction	.523	.493	.555	.644	.789*	1.000		
7. Repurchase behaviour	.436	.409	.495	.625	.732	.741	1.000	
8. Pricing system	.169	.288	.293	.385	.456	.407	.665	1.000
MEAN	4.195	4.071	4.271	3.867	4.362	4.742	4.310	4.575
STANDARD DEVIATION	1.204	1.326	1.236	1.240	1.287	.994	1.193	1.324
N	257	256	257	255	254	257	256	258
Composite reliability (CR)	.857	.936	.922	.942	.963	.904	.963	.874
Average variance extracted (AVE)	.666	.785	.748	.765	.724	.704	.788	.698

* Highest *r* value among the constructs [r^2=.623 < all reported AVEs; demonstrating discriminant validity among the constructs]

Table 3: Measurement model factor loadings, t-values & squared multiple correlations (R^2)

Constructs	Measures	Factor loadings	T-values	R^2
Reliability *(1=Strongly disagree; 4=neither agree nor disagree; 7=strongly agree) CR=*	Any given information regarding the transport service is accomplished by the operator	.793	*Fixed*	.629
	The operator can be depended on to respond to customer service problem	.834*	13.88	.695
	The mass transport operator provides services as promised	.820*	13.67	.673
Responsiveness *(1=Strongly disagree; 4=neither agree nor disagree; 7=strongly agree)*	Employees of the mass transit operator offer fast services to customers	.841	*Fixed*	.707
	The transport operator is always ready to respond to passengers' request (tickets, sellers, etc.)	.936*	20.46	.876
	The transport operator is very responsive to the needs of passengers	.908*	19.42	.824
	Whenever I complain to the transport operator about its service I receive a quick response	.857*	17.56	.734
Assurance *(1=Strongly disagree; 4=neither agree nor disagree; 7=strongly agree)*	Employees' behaviour inspires trust to passengers	.868	*Fixed*	.754
	Drivers of the buses assure passengers of complete safety	.873*	18.94	.763
	The transport operator assures passengers of its ability to deliver its required service	.901*	20.07	.811
	Employees of the transport operator possess the knowledge to answer passenger questions	.816*	16.76	.666
Empathy *(1=Strongly disagree; 4=neither agree nor disagree; 7=strongly agree)*	The transport operator is sympathetic to the worries of the passenger	.848	*Fixed*	.720
	The transport operator patiently listens to passengers' concerns	.873*	18.44	.762
	The staff of the transport operator are courteous when talking to passengers	.864*	18.10	.747
	The staff of the transport operator have passengers' best interest at heart	.896*	19.34	.803
	The staff of the transport operator understand passengers' need	.891*	19.15	.794
Tangibles *(1=Strongly disagree; 4=neither agree nor disagree; 7=strongly agree)*	The buses used by the transport are always in good conditions	.876	*Fixed*	.768
	The buses used by the transport operator are always clean	.906*	21.38	.822
	The buses owned by the transport operator do not often breakdown	.826*	17.71	.682
	The staff of the transport operator always appear neat and professional	.851*	18.74	.724
	Visually appealing materials are associated with the transport operator's buses	.869*	19.55	.755
	The transport operator has modern equipment	.770*	15.65	.593
Satisfaction *(1=extremely dissatisfied; 4=neither satisfied or nor dissatisfied; 7=extremely satisfied)*	Passenger information	.739	*Fixed*	.547
	Bus station cleanliness	.781*	12.75	.610
	Frequency of the bus service	.894*	14.79	.799
	Regularity of bus service	.927*	15.34	.860
Repurchase behaviour *(1=not at all; 4=maybe; 7=extremely likely)*	I will say positive things about my transport operator to other people	.870	*Fixed*	.756
	I will recommend my transport operator to someone who seeks my advice	.932*	22.56	.869
	I will encourage my family and friends to travel with my transport operator	.920*	21.90	.846
	I will consider my transport operator as my first choice when travelling	.883*	20.04	.779
	I will do more business with my transport in years to come	.832*	17.86	.692
Pricing system *(1=Strongly disagree; 4=neither agree nor disagree; 7=strongly agree)*	My transport operator's prices are relatively cheap	.811	*Fixed*	.658
	My transport operator's prices are relatively stable	.883*	15.36	.779
	My transport operator's pricing systems meet all my travel needs	.811*	14.18	.657

*factor loadings significant at 1%

4.2 Model Estimation

In testing for the hypotheses of the study, a structural equation modelling (SEM) approach was employed. The main outcome variable was repurchase behaviour or intent (RPB) and the main predictor variable was service quality (TSQ), with passenger satisfaction (PS) being the mediating variable. For parsimonious reasons, TSQ was treated as a unidimensional construct in the structural model estimation. In doing this however, a 2nd order construct model was formulated to assess if the five sub-constructs share any underlying concept, which is TSQ. The results from this analysis: $X^2(df) =349.25(204)$; $X^2/df=1.712$; RMSEA=.053; NNFI=.986; CFI=.988; and SRMR=.051; was satisfactory, and thus, the individual measures retained from the CFA on each sub-constructs were averaged to obtain five measures for TSQ. The structural model was assessed by developing four nested models. For Model 1, RPB was being predicted by pricing system and passenger income level, with all other paths constrained to zero.

Although there are two main modes of transport (road and air, i.e. domestic) that are fully in operation in Ghana, ones' income level as well as the nature of pricing system employed by the service providers are likely to influence travellers' purchase decisions. It must be noted that, even for the bus operators, the pricing system differ widely (e.g. VIP buses and GPRTU buses), hence there was the need to control for the potential effects of these variables.

In the case of Model 2, only the path from PS to RPB was freed, that is, Model 1 plus path from PS to RPB were estimated. Model 3 had the path from TSQ to RPB estimated in addition to the paths in the case of Model 2, with the path from TSQ to PS constrained to zero. Lastly, in Model 4, all paths in the theoretical framework were estimated. That is, the paths from TSQ to PS, TSQ to RPB, and PS to RPB as well as the control variables were estimated all together. Comparing the goodness of fit indices, it was found that Model 4 was superior to the others, hence, the hypotheses of the study were assessed on that. In all, per the results from Model 4, it was found that the model explains 52.7% and 71.6% variance in passenger satisfaction and repurchase behaviour respectively.

4.3 Survey Results

The first hypothesis (H1) of the study argues that service quality is positively related to re-purchase behaviour. Given the standardized estimates of the superior model (i.e. Model 4), this hypothesis was not supported because while the path from service quality to repurchase intent was positive (β=.09; t=.99), it was not statistically significant at 5%. Although it has both been theorized and found empirically (e.g. Perez et al., 2007; Alexandris et al., 2001) that improved service quality leads to favourable repurchase behaviour, a significant support was not found in this present study.

Also it was hypothesized (H2) that service quality is positively related to customer satisfaction. The study finds support to this hypothesis because the parameter estimate (β=.73; t=8.66) was positive and significant at 1%, and support the view that the satisfaction that customers derive from a service enhances when they perceive the service quality to be higher (Cronin et al., 2000; Jen and Lu, 2003). This finding confirms earlier findings by Khurshid et al. (2012) who reported that in the Pakistan public transport, there exist significant direct relationship between service quality and customer satisfaction.

Lastly, the study posits (H3) that customer satisfaction is positively related to re-purchase behaviour. The standardized estimates (β=.49; t=6.63; p< .01) produced provided support for this hypothesis. This result confirms findings in extant literature which suggest that customers' repurchase intentions and behaviour is adequately shaped by their previous service experience in terms of the satisfaction derive in patronizing a particular service or product (Seiders et al., 2005; Bolton, 1998; Hellier et al., 2003). These can be seen in Table 4.

Table 4: Structural model results

	Standardized estimates							
	Model 1		**Model 2**		**Model 3**		**Model 4**	
	PS	RPB	PS	RPB	PS	RPB	PS	RPB
Controls								
Income			.54 (2.89**)		.27 (2.30*)		.12 (.78)		.10 (.76)
Pricing system			.45 (1.79*)		.47 (5.08**)		.48 (7.63**)		.43 (7.60**)
Main effects								
Passenger satisfaction (PS)				.57 (9.39**)		.56 (9.33**)		.49 (6.63**)
Service quality (TSQ)						.12 (1.40)	.73 (8.66**)	.09 (.99)
Goodness of fit indicators:								
x^2 (df)	376.84 (115)		328.79 (114)		326.72 (113)		234.32 (112)	
x^2/df	3.277		2.884		2.891		2.092	
Δx^2	-		48.05**		50.12**		142.52**	
Δdf	-		1		2		3	
RMSEA	.094		.085		.086		.065	
NNFI	.948		.959		.959		.979	
CFI	.956		.966		.966		.983	
SRMR	.264		.244		.244		.052	
R^2	-	68.7%		68.1%	-	64.3%	52.7%	71.6%

For the model estimates, the t-values are in the parentheses
*significant at 5% (one-tail)
**significant at 1% (one-tail)

4.4 Discussion of Results and Implications

The study focused on the relationship that exist among three major constructs – service quality, customer satisfaction and re-purchase behaviour. From the empirical findings, the following implications can be made:

The first hypothesis of the study argued that service quality is positively related to re-purchase behaviour. However, the findings of this study from the superior model indicated otherwise. The path from service quality to repurchase behaviour was not statistically significant at 5%. This means there is the need for mediation effect of a variable between service quality and repurchase behaviour. This finding could thus suggest that the respondents' decisions to reuse a transport operator's service might be greatly influenced by other factors for which this current study did not capture. Potential factor among these could be that the respondents have fewer choices, not in terms of which service provider to patronize its services, but that there are few functioning modes of public or mass transport in Ghana.

Until the few past years, the only domestic mode of transport which has been functioning fully is road transport. Although the domestic airlines have experienced substantial growth in terms of passenger throughputs and aircraft movements, relatively, their fares are far higher for same travel distances, and most of the study's target respondents are students and unemployed and thus their purchase decisions may not necessarily be influenced by their perceptions on the service quality of the bus operators.

Hence, while some of the study's participants might perceive the service quality of the bus service providers unsatisfactory, they have no alternative than to repurchase the service. It is however acknowledged and expected that the relationship between these two variables would be significant in countries, particularly developed ones, where the other modes of transports particularly, the rail system, is adequately developed.

Again, the second hypothesis of the study was that service quality is positively related to customer satisfaction. The study findings supported this hypothesis and the view that the satisfaction that customers derive from a service enhances when they perceive the service quality to be higher. Thus, this implies that if passengers have a positive assessment of a transport operator's operations in terms of service quality, they would be more likely to be satisfied with the services delivered. This confirms extant literature.

The third hypothesis of the study was that customer satisfaction is positively related to re-purchase behaviour. The results from the findings and analysis confirm findings in existing literature which suggest that customers' repurchase intentions and behaviour is adequately shaped by their previous service experience in terms of the satisfaction derive in patronizing a particular service or product. This also implies that when customers (in this case passengers) are highly satisfied, it will influence their decision to repurchase the transport operator's service.

In all, per the results from Model 4, it was found that the model explains 52.7% and 71.6% variance in passenger satisfaction and repurchase behaviour respectively. It also revealed that customer satisfaction fully mediates the relationship between service quality and repurchase behavior as hypotheses 2 and 3 were supported and both statistically significant which as in contradiction to Hypothesis 1 which even though was supported but not statistically significant at 5%. It must be noted also that though the path from pricing system was not hypothesized in the study, the findings of the study support the traditional economic conceptualization that effective pricing system significantly influence customers purchase decisions.

The findings of the study can also be useful to policy makers in Ghana. The findings suggest that policy makers should consider, among other things the formulation and implementation of policy and directives for road passenger transport services for the private sector. It is interesting to note the findings suggest that road passenger transport services in Ghana are less concerned about safety and security (assurance dimension of service quality) which is contrary to what literature has predicted.

The issue of safety is of paramount importance in Ghana as the country in recent years has experienced a number of fatal road accidents as well as armed robbery attacks. The findings of this study imply that in Ghanaian context, probably authority should not let market forces alone instead policy makers should intervene and making appropriate policy tools that would promote safety in road passenger transport especially in the private sector. This would ensure total satisfaction of passengers.

5.0 CONCLUSIONS

Transport service quality has a strong influence on customer satisfaction and attention should be given to it at the transport sector in Ghana. Frequency, price, punctuality and travel time are the crucial factor that is responsible in bringing higher level of satisfaction. Listening to the voice of the customer is a common and effective way to identify customer needs and the means to satisfy them. Several cities in different countries are already measuring customer satisfaction using different measures. It could be seen that, transport service quality has an effect on customer satisfaction, which in turn influences repurchase behaviour. This study empirically tested these concepts quantitatively in Ghana with evidence from the private sector.

According to the results of this study, the Ghanaian passenger somehow consider the service quality of the passenger road mass transport services as 'acceptable'. The study findings supported that an enhanced transport service quality leads to customer satisfaction and which in turn create a more positive repurchase behaviour. This implies that within the transport sector, the mediation role of customer satisfaction in the relationship between service quality and repurchase behaviour cannot be overestimated.

The results from the findings and analysis again confirmed findings in existing literature which suggest that customers' repurchase intentions and behaviour is adequately shaped by their previous service experience in terms of the satisfaction derived in patronizing a particular service or product.

In conclusion, the study found that although the effect of service quality on re-purchase intent works through passenger satisfaction, other factors such as pricing system significantly affect re-purchase behaviour. Given that competition has become keener in the industry, effectively 'manipulating' other variables (e.g. pricing system, customer service, service recovery, etc.) could also be a source of gaining sustained competitive edge.

5.1 Limitations and Direction for Future Research

The study encountered some challenges and limitations. Time constraints, inadequate financial and material resources were challenges that limited the depth of coverage of the research work. Despite all these limitations, the findings of the study remained unbiased and these limitations did not affect the validity of this study. The result of this study demonstrated that service quality does not necessarily lead to customer satisfaction. The study proved that customer satisfaction is necessary to link the nexus between service quality and consumer repurchase behaviour.

However, the factors which cause customer satisfaction and influences consumer judgement and repurchase behaviour were not much explored. This was a major limitation of this study. A more qualitative study which employ in-depth interviews and brainstorming sessions would have been appropriate to gather more elements of measuring customer satisfaction and repurchase behaviour. It could be said that public transport is not a sure means of attraction to consumers and there has to be more effort to convince patronage of private car usage to passenger transport. Therefore, future research could look at how private car users would be convinced to patronize passenger transport with its effort on ensuring better satisfaction in meeting their transport needs.

For this same study, there could be further extension to cover other customers in other parts of the country. Unfortunately, limited number of respondents for only Kumasi could not be generalized for the entire country. Recruiting higher number of respondents will be more suitable to conduct a nation-wide study.

REFERENCES

- Aderamo, A. I. (2010). Transport in Nigeria: The case of Kwara State. African Economic and Business Review, 8(1), pp. 19-40.

- Alexandris, K., Dimitriadis, N. and Markata, D. (2002) Can perceptions of service quality predict behavioral intentions? An exploratory study in the hotel sector in Greece, Managing Service Quality, 12(14), 224–231.

- Ofori, I., Bluwey, E., Ackah, D., (2024), "Total Quality Management Practices, Organisational Culture and Firm Performance; Service or Product Innovation", African

Journal of Procurement, Logistics & Supply Chain Management Society 2024, 7(9): pp.165-205. DOI: https://dx.doi.org/10.4314/ajplscm.v7i9.5

- *Ackah, D., (2014). "The Impact of Motivation on Employee Performance in the Manufacturing Industry", Global Journal of Management Studies and Researches (GJMSR), Volume 1, Number 5, pp. 291- 310, 2014,*

- *Ofori, I., Ackah, D., (2024), "The Role Organizational Culture as a Moderating Factor in the Relationship Between E-Procurement Adoption, Procurement", African Journal of Procurement, Logistics & Supply Chain Management Society 2024, 7(9): pp.01-32. DOI: https://dx.doi.org/10.4314/ajplscm.v7i9.1*

- *Attafuah, E. D. & Ackah, D., (2022) "The Impact of Financial Engineering on Building Project Finance Among Commercial Banks in Ghana" Finance & Management Engineering Journal of Africa, Volume 4, Issue 10, pp. 01-44*

- *Ackah, D., Dadzie. B., E., Yornu, K. I., (2025), "The Role of Corporate Governance in Strengthening Competitive Advantage through Strategic Project Procurement", Dama Academic Scholarly & Scientific Research Society 2025, 10(01): pp.58-81, DOI: https://dx.doi.org/10.4314/dasjr.v10i1.3*

- *Ackah, D., Ofori., I., (2025), "The Influence of Green Logistics and Food Distribution Strategy on Post-Harvest Loss Reduction", African Journal of Procurement, Logistics & Supply Chain Management Society 2025, 7(9): pp.01-17, DOI: https://dx.doi.org/10.4314/ajplscm.v8i1.1*

- *Ackah, D., Addo, K. S., K., Yornu, K. I., (2025), "Analysing the Connection Between Motivation, Compensation, and Employee Job Satisfaction", Dama Academic Scholarly & Scientific Research Society 2025, 10(01): pp.01-31, DOI: https://dx.doi.org/10.4314/dasjr.v10i1.1*

- *Ackah, D., Addo, K. S., K., Yornu, K. I., (2025), "Analyzing the Impact of Green Procurement on Inexpensive Advantage and Business Performance", Dama Academic Scholarly & Scientific Research Society 2025, 10(01): pp.32-57, DOI: https://dx.doi.org/10.4314/dasjr.v10i1.2*

- *Ackah, D., Ofori, I., Amponsah., R., (2025), "Resource Capabilities as a Moderator: Impact of Procurement Practices on Project Performance and Competitive Advantage", Project Management Scientific Journal, 2024, 8(9): pp.158-188. DOI: https://dx.doi.org/10.4314/pmsj.v8i1.6*

- *Ackah, D., (2020). "The Impact of the World COVID-19 Pandemic on Project Financing" Project Management Scientific Journal, Volume 4, Issue 4, pp.01-13*

- *Ofori., I., Ackah., D., Owusu-Asantewaah., P., (2025), "Supply Chain Collaboration, Organizational Resources and Firms' Performance", African Journal of Procurement, Logistics & Supply Chain Management Society 2025, 8(01): pp.41-58, DOI: https://dx.doi.org/10.4314/ajplscm.v8i1.3*

- *Ackah, D., & Boadu, O. K. (2025). Entrepreneurship as a Catalyst for Innovation and Economic Growth in Ghana", Dama Academic Scholarly & Scientific Research Society 2024, 10(04): pp.28 - 47, DOI: https://dx.doi.org/10.4314/dasjr.v10i4.2*

- *Mensah-Amewuda., B., Mensah., O., Agyemang., I., Ackah., D., (2025), "Disposal of Unused Medicines in a Rural Ghanaian Household and its Effect on the Environment", Dama Academic Scholarly & Scientific Research Society 2024, 10(02): pp.40-51, DOI: https://dx.doi.org/10.4314/dasjr.v10i2.5*

- *Attafuah, E. D. & Ackah, D., (2020) "The repercussions facing the Ghana Stock Exchange (GSE)" Finance & Management Engineering Journal of Africa, Volume 2, Issue 11, pp.11-14*

- *Ackah, D., Addo, K. S., K., Yornu, K. I., (2024), "Effect of Green Procurement Practices on Financial Performance", African Journal of Procurement, Logistics & Supply Chain Management, 2024, 7(8): pp.13-40. DOI: https://dx.doi.org/10.4314/ajplscm.v7i8.2*

- *Owusu K., Issah Ofori., I., Ackah., D., (2025), "Behavioral Competencies, Supply Chain Resilience and Firm Performance: The Moderating Effect of Internal Integration", African Journal of Procurement, Logistics & Supply Chain Management Society 2025, 8(01): pp.18-40, DOI: https://dx.doi.org/10.4314/ajplscm.v8i1.2*

- *Ackah, D., Agboyi, M., R., & Adu-Gyamfi, L., (2014). "Competitive tendering, an effective tool in ensuring value for money in the public sector," Global Journal of Management Studies and Researches (GJMSR), Volume1, Number 4, pp. 108 – 185*

- *Ackah, D., Dadzie, B., E., (2025), "The Influence of Procurement Practices on Project Outcomes and Competitive Edge", Dama Academic Scholarly & Scientific Research Society 2024, 10(01): pp.82-111, DOI: https://dx.doi.org/10.4314/dasjr.v10i1.4*

- *Ackah, D., Kondegri-Pangka, M., & Agboyi, A., R., (2015). "The Role and Impact of Rural Banking on SME's (Small Medium Enterprise)", Global Journal of Management Studies and Researches (GJMSR), Volume 1, Number 5, pp. 311 – 323*

- *Ackah, D., Amponsah, R., (2024), "Evaluating the Project Management Maturity in the Construction Industry of Developing Countries, Ghana in Perspective", Project Management Scientific Journal, 2024, 7(9): pp.01-15. DOI: https://dx.doi.org/10.4314/pmsj.v7i9.1*

- *Ackah, D., Adu-Gyamfi, L., & Agboyi, M., R., (2015). "The Impact of Trade Liberalisation on Import Composition," Global Journal of Management Studies and Researches (GJMSR), Volume 1, Number 5, pp. 273 – 290*

- *Ackah, D., Addo, K. S., K., Yornu, K. I., (2024), "Enforcing Ethical Codes of Conduct in Procurement and Its Impact on Public Procurement Performance in Ghana", African Journal of Procurement, Logistics & Supply Chain Management 2024, 7(8): pp.72-92. DOI: https://dx.doi.org/10.4314/ajplscm.v7i8.5*

- *Acquah, P., Ofori, I., & Ackah, D., (2022) "Analyzing Stakeholder Challenges in Public Sector Project Implementation" Project Management Scientific Journal, Volume 6, Issue 1, pp. 01-15*

- *Ackah, D., Addo, K. S., K., Yornu, K. I., (2024), "Information Sharing's Impact on Supply Chain Management, Logistics, and Organizational Performance", Project Management Scientific Journal, 2024, 7(9): pp.16-33. DOI: https://dx.doi.org/10.4314/pmsj.v7i9.2*

- *Ackah, D., Addo, K. S., K., Yornu, K. I., (2024), "Senior Management's Influence on Supplier Selection and Procurement Performance", African Journal of Procurement, Logistics & Supply Chain Management, 2024, 7(8): pp. 93-113. DOI: https://dx.doi.org/10.4314/ajplscm.v7i8.6*

- *Ofori, I., & Ackah, D., (2021) "The Influence of Green Logistics and Food Distribution Strategy on Post-Harvest Loss Reduction" African Journal of Procurement, Logistics & Supply Chain Management, Volume 4, Issue 12, pp.33-48*

▪ Ofori, I., Ackah, D., Dadzie. B., E., (2024), "Digitalization and Operational Performance of the Audit Service of Ghana", Project Management Scientific Journal, 2024, 7(9): pp.93-116. DOI: https://dx.doi.org/10.4314/pmsj.v7i9.6

▪ Ackah, D., Agboyi, M., R., & Adu-Gyamfi, L., (2014). "An Investigation of Yam Ingestion Customs in Ghanaian Urban Communities," International Journal of Sciences: Basic and Applied Research (IJSBAR), Volume 17, Number 2, pp. 374 – 411

▪ Ackah, D., Dadzie. B., E., Yornu, K. I., (2024), "The Influence of Corporate Governance on Strategic Procurement and Competitive Advantage", African Journal of Procurement, Logistics & Supply Chain Management, 2024, 7(8): pp.13-40. DOI: https://dx.doi.org/10.4314/ajplscm.v7i8.7

▪ Ackah, D., Ofori, I., Dadzie. B., E., (2025), "Examining the Role of Technological Innovation, and the Impact of Green Procurement on Competitive Advantage and Company Performance", Project Management Scientific Journal, 2024, 8(9): pp.107-134. DOI: https://dx.doi.org/10.4314/pmsj.v8i1.4

▪ Annan, J., Mensah, J. and Boso, N. (2015). Traffic Congestion Impact on Energy Congestion and Workforce Productivity: Empirical Evidence from a Developing Country. Archives of Business Research, Vol 3(4), pp. 40 – 54.

▪ Ancarani, A., and Capaldo, G. (2001). Management of standardised public services: a comprehensive approach to quality assessment. Managing Service Quality, 1(5), 331-41.

▪ Anderson, E. W., and Sullivan, M. W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. Marketing Science, 12(2), 125–143.

▪ Andreassen, T. W. (1994). Satisfaction, loyalty, reputation as indicators of customer orientation in the public sector. International Journal of Public Sector Management, 7(2), 16-34.

▪ Bagozzi, R. P., & Yi, Y. (2012), "Specification, evaluation, and interpretation of structural equation models", Journal of the Academy of Marketing Science, 40(1), 8-34.

▪ Barabino B., Deiana E. and Tilocca, P. (2012). Measuring service quality in urban bus transport: A modified SERVQUAL approach. International Journal of Quality and Service Sciences 4(3):238-252.

▪ Basorun, J. O. and Rotowa, O. O. (2012). Regional Assessment of Public Transport Operations in Nigerian Cities: The Case of Lagos Island.

▪ Beirão, G. & Sarsfield Cabral, J. A. (2007). Understanding attitudes towards public transport and private car: A qualitative study. Transport Policy, 14 (6), 478-489.

▪ Bitner, M. J. (1990). Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses. Journal of Marketing, 54(2), 69–82.

▪ Bloemer, J., Ruyter, K. & Pascal, P. (1998). Investigating drivers of bank loyalty: the complex relationship between image, service quality and satisfaction. International Journal of Bank Marketing, 16(7), pp. 276286.

▪ Bolton, R. N. (1998). A Dynamic model of the Duration of the Customer's Relationship with a Continuous Service Provider. Marketing Science, 17(1), 45–66.

▪ Boso, N., Cadogan, J. W. & Story, V. M. (2013). Entrepreneurial orientation and market orientation as drivers of product innovation success: A study of exporters from a developing economy. International Small Business Journal, 31(1), 57-81.

- Boulding, W., Kalra, A., Staelin, R. & Zeithaml, V.A. (1993). A dynamic process model of service quality: from expectations to behavioural intentions. Journal of Marketing Research, Vol., February, pp. 7-23

- Brady, M. K. and Cronin, J. J. (2001). Some new thoughts on conceptualizing perceived service quality: a hierarchical approach, Journal of Marketing, 65, 34–49.

- Churchill, G. A. Jr. and Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. Journal of Marketing Research. 19, 491-504.

- Cronin, J. J., and Taylor, S. A. (1994). SERVPERF versus SERVQUAL: reconciling performance based and perceptions-minus-expectations measurement of service quality. Journal of Marketing, 58 (1), 125–131.

- Dabholkar, P. A. (1995). A Contingency Framework for Predicting Causality between Customer Satisfaction and Service quality. Advances in Consumer Research, 22(1), 101–108.

- dell'Olio, L., Ibeas, A. and Cecin, P. (2010). Modelling user Perception of Bus Transit Quality. Transport Policy, 17, 388-397.

- Eboli, L. and Mazulla, G. (2007). Service quality attributes affecting customer satisfaction for bus transport. Journal of Public Transport, 10(3):30-42.

- Fen, Y. S. & Lian, K. M. (2007). Service quality and customer satisfaction: Antecedents of customer's re-patronage intentions. Sunway Academic Journal, 4(1), 59 – 73.

- Fellesson, M. and Friman, M. (2008). Perceived Satisfaction with Public Transport Service in Nine European Cities. Journal of the Transportation Research Forum, 47 (3), 93103.

- Field, A. P. (2009). Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (third edition). London: Sage publications.

- Gatersleben, B. & Uzzel, D. (2007). Affective Appraisals of the daily commute: comparing perception of the drivers, cyclist, walkers, and users of public transport. Environment and Behaviour, 3, 416-431.

- Govender, K. K. (2014). Public service quality in South Africa: A case study of bus and mini bus services in Johannesburg. African Journal of Business Management, Vol.8 (10), pp. 317-326

- Gronroos, C. (1982). Strategic Management and Marketing in Service Sector, Marketing Science Institute, Cambridge, MA.

- Gwilliam, K. M. (2002). Cities on the move: a World Bank urban transport strategy review. Washington, D.C.: The World Bank.

- Hellier, P. K., Geursen, G. M., Carr, R. A., and Rickard, J. A. (2003). Customer repurchase intention: A general structural equation model. European Journal of Marketing, 37(11/12) 1762–1800.

- Jen, W. and Lu, T. J. (2003). Effects of service quality, customer satisfaction and switching barriers on passengers behavioural intentions in scheduled coach service. Proceedings of the fifth Eastern Asia Society for Transportation Studies, Easts, Tokyo, Japan, vol. 4, pp. 701-716.

- *Khurshid, R., Naeem, H., Ejaz, S., Mukhtar, F., & Batool, T. (2012). Service Quality and Customer Satisfaction in Public Transport Sector of Pakistan: An Empirical Study, International Journal of Economics and Management Sciences, 9, 24-30.*

- *Land Transport Authority (2013). Land transport master plan 2013. Department of Transport Publishing, Singapore.*

- *Litman, T. (2008). Valuing Transit Service Quality Improvements. Journal of Public Transportation, Vol. 11, No. 2, Spring, pp. 43-64*

- *Litman, T. (2010). "Sustainable Transport Performance Indicators, Green Growth In transportation: International Views on the Transition, Korean Transport, pp. 267-326.*

- *McKnight C. E., Pagano, A. N., Paaswell, R. E. (1986). Using Quality to Predict Demand for Special Transportation, in Behavioural Research for Transport Policy. International Conference on Travel Behaviour. The Netherlands: VNU Science Press.*

- *Okoko, E. (2006).Quantitative techniques in urban analysis. Ibadan: Kraft Books Limited.*

- *Oliver, R. L. (1997). Satisfaction: A Behavioural Perspective on the Consumer, McGraw-Hill, New York*

- *Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research, Vol. 17, No, 4, pp. 460-469.*

- *Pallant, J. (2007). SPSS survival manual (3rd ed.). London: Open University Press.*

- *Parasuraman, A., Zeithaml, V. A. and Berry, L. (1988). SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, 64(1), pp. 12-40.*

- *Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: implications for further research. Journal of Marketing, 58(1), 111–124.*

- *Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985). A conceptual model of service quality and its implications for future research", Journal of Marketing, Vol. 49, pp. 41-50.*

- *Parasuraman, A., Zeithaml, V.A. and Malhotra, A. (2000). A conceptual framework for understanding e-service quality: Implications for future research and managerial practice. MSI Working Paper Series No. 00-115, Cambridge, MA, pp. 1-49.*

- *Patterson, P. G., and Spreng, R. A. (1997). Modelling the Relationship between Perceived Value, Satisfaction and Repurchase Intentions in a Business-to-Business, Services Context: An Empirical Examination. International Journal of Service Industry Management, 8(5), 414–434.*

- *Perez, M. S., Abad, J. C. G., Carrillo, G. M. M., & Fernández, R. S. (2007). Effects of service quality dimensions on behavioural purchase intentions: A study in public-sector transport. Managing service quality, 17(2), 134-151.*

- *Ravald, A., and Gronroos, C. (1996). The Value Concept and Relationship Marketing. European Journal of Marketing, 30(2), 19–30.*

- *Rust, R., and Zahorik, A. J. (1993). Customer Satisfaction, Customer Retention, and Market Share. Journal of Retailing, 69(2), 193–215.*

- *Samson, R and Thompson, P. (2007). Passenger focus: Priorities for improving services in Scotland. Transport Scotland Publishing, Scotland.*

- *Seiders, K., Voss, G. B., Grewal, D., & Godfrey, A. L. (2005). Do satisfied customers buy more? Examining moderating influences in a retailing context. Journal of Marketing, 69(4), 26–43.*

- *Simona, S. (2010). Quality of Public Transportation Services in Urban Area of Oradea. Annals of Faculty of Economics, 1(2), pp. 469-474. Faculty of Economics, University of Oradea, Oradea.*

- *Sivadas, E. and Baker-Prewitt, J. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. International Journal of Retail & Distribution Management, Vol. 28 No. 2, pp. 73-82.*

- *Stradling, S., Carreno, M., Rye, T., & Noble, A. (2007). Passenger Perceptions and Ideal Urban Bus Journey Experience. Transport Policy, 14, 283–292.*
- *Taylor, S. A., and Baker, T. L. (1994). An Assessment of the Relationship between Service Quality and Customer Satisfaction in the Formation of Consumers' Purchase Intentions. Journal of Retailing, 70(2), 163–178.*

- *Zeithaml, V. A., Berry, L. L., and Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. Journal of Marketing, 60(2), 31–47.*

- *Zeithaml, V. A., & Bitner M. J. (2000). Services Marketing (2nd ed.). New York: McGraw Hill. Inc.*