

# Tourists Perception of Public Transit Services for Leisure Travel Satisfaction in Lagos

Oloruntobi Olakunle Oluwatosin, Safizahanin B. Mokhtar, Muhammad Zaly Shah

**Abstract:** *This study determined to promote leisure satisfaction through pleasurable travel experiences in an active tourist destination. Local transportation provides links between tourists' population and leisure targets at destinations. Therefore, diverse leisure activities and innovative tourism enterprises in many active cities are regulated by transport services. This study found that tourists are unwilling to adopt public mass transits for satisfactory travel in Lagos due to unattractive service attributes, thereby induced the increasing use of private vehicles for active leisure travel which technically retards touristic attraction of the city. Questionnaire survey technique was employed to collect data that were analysed in this study from the target respondents. Public transports deprived service attributes were identified to make Lagos uninteresting for wider leisure visitors and triggered a gradual declining of its tourism economy and social benefits. The transport service attributes examined from tourists' sensitivities and perceptions are reliability, affordability, aesthetic features, comfort and safety to gain insight into how transportation service attribute variability impact leisure travel satisfaction in Lagos. This study used SPSS version 22.0 to analyse 108 valid responses. The Structural Equation Modelling (SEM) created in AMOS was valuable in determining complex mode integration via Exploratory Factor Analysis (EFA). The EFA characterised the cumulative variance attributes responsible for the unsatisfactory tourists' perception of Lagos public transport system in recent times. This study conclusively proved that 11.33% of leisure tourists sampled use public transports service, while 88.67% opted for personalised transports, and over 43.0% of returning visitors to Lagos prefer not to use existing public transport services. This study advocates the improvement of transport service elements identified to encourage future use of Lagos public transports.*

**Keywords:** *Tourists, Leisure destinations, Public transports, Service attributes, Travel satisfaction*

## I. INTRODUCTION

Variability of public transport services impacts tourists' overall behavioural responses at destinations. Transport industry assimilates the psychological and social acceptance of various leisure travellers to travel and organises their mobility pattern across territories. Transportation remained fundamental to the tourism sector and tourists' ease of movement at designated leisure targets. Albalade & Bel (2010) agreed that service features of public transports (i.e.

peculiarity and operations) have functional effects on leisure modal shift in an urban city as well as tourism viability. Travel is a dominant ingredient of tourism development; thus, tourism and transportation inseparably coexist and function to provide visitors with satisfactory touring experience at destinations. Consequently, the successes of the tourism industry and leisure behaviours at destinations principally depend on the efficiency of the local transportation services. Efficient transport arrangements and operations enable the absolute objectives of tourism aims to be fulfilled at destinations (Barker et al., 2003; Dwyer & Kim, 2003). The tourism industry has witnessed tremendous expansion in recent years and had immensely contributed to global economic growth. The immeasurable benefit of tourism sector prompted many regions to persistently strive to realise extensive tourism benefits as well as other travel support services. Since dynamic tourism is meaningfully realised through enhanced tourists transport services that are well-managed and consistent in performance, Dickinson & Robbins (2007) confirmed that transport services for tourism progression require sensitive strategies and intelligent consolidation to expand tourists' mobility in urban cities.

Transportation is an integral part of the tourism industry that links tourists with various leisure attractions, while public transports services provide supports for the tourism industry to thrive. Many countries with exceptional transport services continue to realise robust enterprise, financial growth and earn tremendous GDP through extended tourism services (Duval, 2007). Khadaroo & Seetanah (2007) established that tourism expands exceedingly where healthier transportation systems exist. Tourism as one of the important global economic sectors requires a safe, convenient and comfortable mode of transport to function efficiently (Cao et al., 2015). Similarly, transportation cost and travelling time are important considerations when deciding travel mode at destinations. Tourist transport often requires consistent development and service qualities enhancement within the public transportation framework for effective recreational travel purpose to reduce automobile traffic in tourist's delighted areas (Chon et al., 2013; Filimonau et al., 2014). This implied that excellent local transport services provide tourists with exhilarating physical and psychological satisfaction at destinations. Transports features, conditions and extent of services formed the backbone of tourism activities and must be enhanced to meet the needs of tourists at destinations (Khan et al., 2017).

**Revised Manuscript Received on November 15, 2019**

**Oloruntobi Olakunle Oluwatosin**, Department of Urban and Regional Planning, Universiti Teknologi Malaysia, Skudai, Malaysia. Email: ooloruntobi2@live.utm.my

**Safizahanin B. Mokhtar**, Department of Urban and Regional Planning, Universiti Teknologi Malaysia, Skudai, Malaysia. Email: safizahanin@utm.my

**Muhammad Zaly Shah**, Department of Urban and Regional Planning, Universiti Teknologi Malaysia, Skudai, Malaysia. Email: b-zaly@live.utm.my

## Tourists Perception of Public Transit Services for Leisure Travel Satisfaction in Lagos

The U.N World Tourism Organisation (WTO) agreed that consistent mobility of recreational travellers' is an irreplaceable tourist offer that naturally induces domestic and overseas visitors to the existing attractions at destinations (UNWTO, 1997). The organization further encouraged efficient public transport services to responsibly promote sustainable, responsible and universally accessible tourism in active tourists' areas.

Tourism and transport studies profoundly appreciate the complex relationship that exists between the two disciplines and understands how they complement each other. Tourism entirely depends on cost-effective, comfortable, efficient and safe transport arrangement to function appropriately (Page & Meyer, 2013). Public shared transports such as passenger buses, mass rapid transits and motorised tricycles provide services that drive tourism from universal viewpoints, and their user-friendliness has a gripping impact on tourists' behaviours. According to Dwyer & Kim (2003) and Khadaroo & Seetanah, (2007), the consistent influx of tourists to a particular location positively inspires businesses, trades and development of geographical markets while prompting unexpected burden on the local transport system. Therefore, it is practically impossible to plan, invest and reap financial benefits from tourism sector without surmounting the transportation challenges that are fundamental to the realisations of vibrant tourism development (Mandeno, 2012; UNWTO, 2014). Evidence from past studies showed that overall condition and performance of existent public transports in urban cities visibly influence tourism viability whereas more exhaustive studies further clarified that logical modification to existing transportation structure and services positively boost tourism performance. Efficient and safe public transport system and their dynamic operations remain a focal point for encouraging rapid tourism in urban cities (Murphy, 2013). Improving leisure passengers' connection through public transports accessibility and better-quality service will ease tourists' travelling difficulties and increase leisure industry projections at destinations (Beirão & Cabral, 2007; Mowforth & Munt, 2015; Khan et al., 2017). As the tourism industry expands, local transports are confronted with multifaceted challenges with regards to attracting tourists by offering them suitable means of travel that satisfy their leisure desires. Many popular tourist destinations are presently besieged with public transportation issues, e.g. inaccessibility and immobility to the resort areas (Kantawateera et al., 2014). These implied unsafe, unpleasant and unsuitable travel means for leisure tourists that require certain mobility needs and patterns for their respective holiday satisfaction.

This study investigated public transport service unreliability and lack of attractive leisure travel modes that dwindled the confidence of tourists in the congested metropolis of Lagos - Nigeria. The urban destination neglected to take tourists' travel needs and transport requirements for visitors into account, leading to active use of alternative modes for tourism-related travelling across the megacity. Beirão & Cabral (2007) cited that destinations where visitors actively use local transport for their leisure trips had proven that their mobility needs had been well served. This implied that potential visitors are assured of unhindered mobility to and from their accommodations and

freely accessing local activities and attractions and travel leisurely using reliable and comfortable mode without the needs for cars. In Lagos, the African largest city and important tourists' destination, public transports have been unable to promote and sustain tourism in recent times. The existing public transportation system in the megacity lacks the user-friendly appeal, aesthetics and service characteristics to motivate leisure travellers to actively use them for domestic leisure trips. Observable debility of Lagos public transports critically upset the tourism performance and results in constrained mobility as most tourists were impelled to use personalised transports for active travel. The inability of tourists to conveniently use public transport services to perform leisure travel in Lagos partly led to the tourism decline of the African Model Megacity. Existing statistics confirmed the gradual decline in Lagos tourism dynamism and performance (See Table I).

**Table- I: Lagos Travel and Tourism Earnings and Benefits**

Tourism Input & Value	(%) Growth per Year			
	2012	2013	2014	2015
Direct GDP	2.25	2.24	1.53	1.16
Total GDP	3.53	3.92	3.41	3.09
Direct Employment	1.47	1.54	1.32	1.26
Total Employment	3.51	3.56	3.50	3.44
Visitor Exports	1.45	1.86	1.31	0.82
Total Investments	7.36	7.56	8.65	9.18

Lagos tourism market in Africa failed to live up to its expectations in recent years. A total sum of \$136 million tourism revenues was generated in 2015 (approximately 1.16%) of the Lagos gross domestic product (GDP) for that year. The tourism earnings were much lower than the tourism revenue accrued in 2013 which was approximately 2.3% of the GDP for the fiscal year. The travel and tourism sector earnings and investments data are shown in Table 1 confirmed Lagos poor tourism vigour. UNWTO (2014) indicated that revenue generation, employment creation and rapid infrastructural development through present-day tourism has been the goal of every sensitive and discerning destination. Regrettably, Lagos unlike most modern cities with huge tourism potentials lacks the tourist-friendly transport services to promote visitor's mobility and travel convenience; which conflict with Antoniou & Tyrinopoulos (2013) assertion that higher mobility consistency of a city is directly proportional to higher tourism viability of that city. The typical leisure mobility situation of Lagos led to the stagnated flow of visitors to many exciting places of relaxations and repressed leisure activities all together. Global Destination Cities Index of 2017 presents African foremost cities that recorded a high turnout of overseas visitors and multiplier effects of tourism. These multiplier effects of tourism were perceptibly felt more in social settings and geographical markets of those African cities with excellent public transport system as reported in Table II.

However, Lagos as the largest city in the continent with most populous urban agglomerations continued to struggle with tourism growth despite its natural topographies and

structures, distinctive culture and heritage, unique land formations, natural innovativeness and artefacts, and its awe-inspiring features.

**Table- II: Global Destination Cities Index 2017: African Most Visited Cities**

Rank	Destination City	Country	International Visitors	Cash spent by visitors
1	Johannesburg	South Africa	4,880,760	\$2,897,920,000
2	Cape Town	South Africa	1,623,360	\$1,426,320,000
3	Lagos	Nigeria	1,134,640	\$504,000,000
4	Casablanca	Morocco	1,000,000	\$615,600,000
5	Accra	Ghana	800,000	\$546,000,000

Dillimono & Dickinson (2015) reported that non-appealing public transportation services distressed the megacity's potential for exhaustive touring adventure for tourists. The author further stressed the deplorable condition of local transportation and their service qualities which had occasioned intense leisure immobility in Lagos and primarily increases the demands for personalised transports for convenience. Duval (2007) and Fáskerty et al. (2012) studies confirmed that increasing leisure travel costs, safety concern, parking difficulties and unexciting voyage are among the principal problems facing tourists' drivers and private cars tourists in urban cities and limit their quality leisure times experience at destinations with poor public transit services. The global destination cities index 2017 indicated that tourism activities are progressively declining in Lagos as compared to other African foremost cities with healthier public transport services. This study investigates tourists' perceptions of the public transit services that influence the adoption of public transport for active leisure travel in Lagos. The service qualities examined are the reliability, affordability, aesthetic features, comfort and safety of the Lagos public transport system consequent to tourists' understanding and judgment of service conditions variability. This study thoughtfully evaluates how these public transits service qualities variability impact leisure travel satisfaction in the megacity. These transport service attributes were selected based on tourists' sensitivities and perception of public transits condition and operation in the active tourism city.

This study analysed the prevailing factors influencing tourists' decision to adopt public transport options as attractive mode choices for pleasurable travelling in Lagos. Five public transport service attributes were analysed to understand the impact of public transport service variability on recreational travel and tourism in the city. The insight was deemed beneficial to the active city for improving the existing local transports services for tourist satisfactory travelling. Satisfactory tourists travelling via improved public transports will boost the tourism demand of Lagos megacity.

## II. METHODOLOGY

### Description of Study Area

Public transport service attributes dimensions variability was evaluated in this study. Lagos - Nigeria was chosen for this study because of its many touristic charms, striking

geographic characteristics, relaxation and nightlife, unlimited entertainments and cultural exhibitions. Lagos is a notable and densely populated vibrant urban city where tourism plays an ever-increasing role in its existence. It is the most populous Africa city and inclusively provides tourists with liveable recreation and attractive leisure activities (Perry, 2011).

### Study Variables and Technique Selection

Public transport service perceptions on leisure travelling were evaluated by identifying service attributes parameters that combined to discourage extensive tourist usage of the travel mode in Lagos. Then questionnaire survey was designed and used to discretely obtain information from respondents on their evaluations of existing public transport services in four separate locations carefully selected for this study. The tourists' locations chosen for the survey are (i) Lekki Leisure Lake, (ii) LUFASI Nature Park, (iii) Omenka gallery, and (iv) New Afrika Shrine. These tourists' sites have good access to public transport services. The service characteristics perceived as barriers to the adoption of public transports for leisure service in Lagos are reliability, aesthetic features, affordability, comfort and safety. The choice of service components was based on respondents' sensitivity to the local transport system and their perceptions of satisfactory travel experience using the conventional mobility option. This service components selection helps this study to determine tourists' motivation to adopt alternative mode choice for leisure travel that obliquely translated into declining tourism performance of Lagos. The public transports considered in the study are Bas Rapid Transit (Lagos BRT), metro bus (LAGbus), shared passenger minibuses (Danfo) and motorised tricycle (Keke) with the exclusion of regular city taxis. Figure 1 shows the location of Lagos on the map of Africa and provides graphical information of the study areas.

### Data Collection

This study collects primary data via questionnaire survey at the selected study locations. The respondents of this study are leisure tourists that comprise male and female, ages between 18 and 57 years old who are visitors from other regions of Nigeria, tourists from different African territories and other international tourists that provided feedbacks and further information on their leisure travel experiences from farsighted public transport service attributes.



## Tourists Perception of Public Transit Services for Leisure Travel Satisfaction in Lagos

The respondents visited Lagos for different leisure functions such as exploring the city and visiting tourist attractions during the survey and had conscious knowledge of

Lagos public transports and understand how their preferred travel modes influence leisure satisfaction.

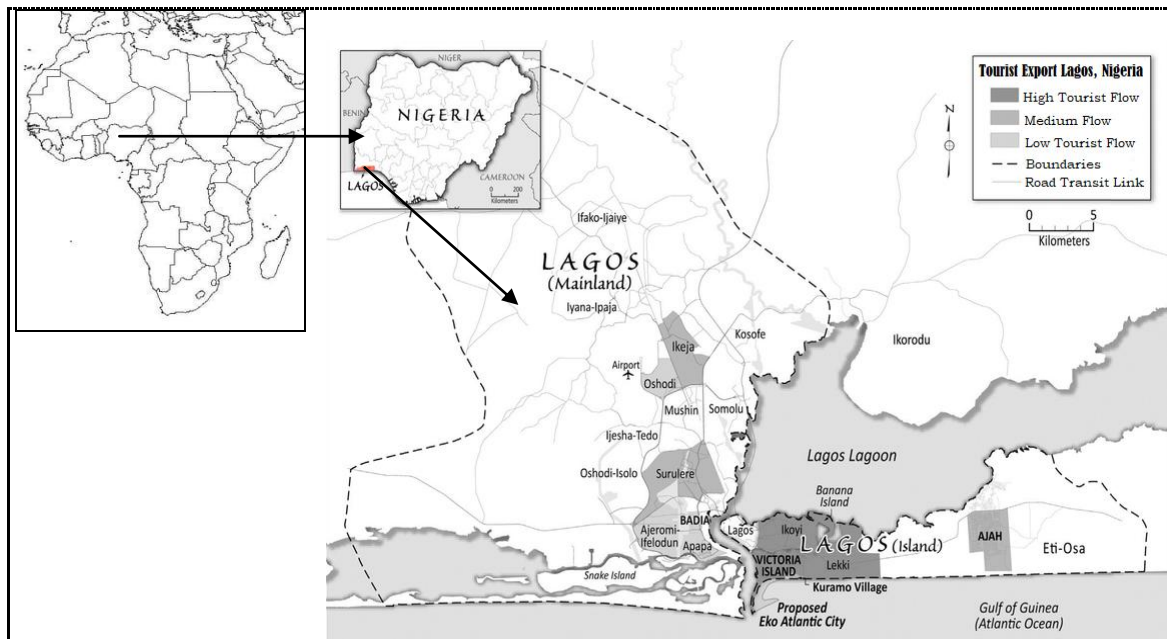


Fig. 1. Map of Lagos and the Study Locations

It was also noted during the survey that unavailability of the preferable travel mode prompted tourists to adopt the available mode as their preferable travel options. The survey was piloted between December 2017 and September 2018.

### Data Analysis

A The IBM Statistical Package for the Social Sciences (SPSS) version 22.0 was used to analyse the primary data. The study design, data type, statistical tests, underlying assumptions and associated considerations pointed the study towards the resulting factors that motivate the determination of the data analysis procedures used. Data obtained were processed and subsequently analysed, the dataset was transcribed into a readable format of SPSS software following data reliability check via Cronbach Alpha reliability method. Testing for relationships between the study objectives and the hypothesis helped to ensure that the research strategy adopted was compatible with the study's objectives. Although the literature did not recommend any precise instruments to measure how transports service attributes influenced leisure satisfaction at destinations. However, this is not a limiting factor in tourist and transport research. Qualitative evidence obtained from the self-rated questionnaire was converted to statistical data, and the service quality dimensions were stretched out to about five transit service quality statements. Lagos operational public transport schedules were taken into account during the survey.

Stratified random sampling method was used to select the 127 respondents, 19 survey responses were considered unusable and were rejected. The choice between equally valued alternatives was investigated, i.e. whether the existing public transport service attributes are critical for satisfactory recreational trips and tourism future, or use of personalised

transports should be massively permitted for active leisure travel in Lagos. The structural equation modelling (SEM) created in AMOS was used to complete the complex mode integration analyses to determine if service qualities, e.g. comfort, reliability, affordability, aesthetic features and safety influence the tourist's judgments of the overall public transits service in relation to satisfactory travel. Consequently, factor analysis helped this study to determine appropriate dimensions, associated features and underlying determinants of public transports service qualities. Consistent with Santos (1999), exploratory factor analysis (EFA) identify significant sets of sub-constructs and figured out the exact factors influencing the dataset variations and conceivably possible variables. Figure 2 illustrates the factor analysis process and the arrangement followed to achieve the exploratory factor analysis (EFA) rotation phases in this study

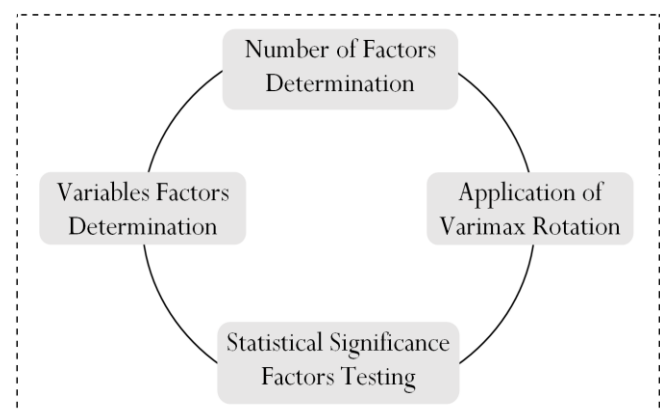


Fig. 2. EFA Rotation Development Stages

### III. RESULT AND DISCUSSION

The affordability, reliability, aesthetic features, comfort and safety of local transportation were analysed, to understand the impact of the service trait on satisfactory leisure travel in Lagos. These service qualities attributes were identified to be defying the tourists' active use of public transports and encourage an unsustainable modal shift, which adversely stagnates its tourism growth and tourism induced benefits of Lagos. Transport service characteristics data analysed presents the Cronbach's alpha coefficients generated through analysis in Table III, to justify the services assessment of the public transports for tourism-related trips completed by 108 respondents.

**Table- III: Public Transit Service Quality Dimension**

Service Component	Coefficient Value
Reliability	0.298
Aesthetic features	0.243
Affordability	0.510
Comfort	0.253
Safety	0.227

From the analyses, it was gathered that Lagos public transportation has a reliability coefficients values less than 0.3, which reflected the shaky state of the local transports system that defines tourist's mobility in the study areas surveyed. The reliability coefficient alpha value of  $\alpha = 0.298$  was obtained is less than the ideal internal consistency score ( $\alpha \geq 0.6$ ) and indicated that Lagos public transport system neglected to adhere to travel schedules and specified trip durations. Approximately 52.3% of the respondents' reported regular variation of the public transports travel schedule due to operational problems. This study further used the ease of transfer, trip frequency and information, and transit promptness as explanatory variables to determine the reliability of Lagos transport system. The reliability factors analysed further confirmed that 33% of total respondents are dissatisfied with service reliability and strongly unsatisfied with tourism motivated travelling via public transportation in the city.

Many previous studies neglected to consider aesthetic designs of public transportation as part of the service quality parameter to be studied. However, this study considers the visual appearance of public transports as a critical factor for leisure tourists especially when there are preferred alternatives. The aesthetic features were found to have a severe influence on the socio-psychological behaviours of leisure transport users. The aesthetic features Cronbach's alpha coefficients value of  $\alpha = 0.243$  was obtained based on tourists' perception of Lagos public transports for satisfactory leisure travel. The value of this coefficient is far below the ideal Cronbach's alpha coefficient score ( $\alpha \geq 0.6$ ). Based on the analysis, it was gathered that 48.6% of the leisure tourists' opined that lack of socio-psychological appeals (i.e. taste, values, efficiency, style and worth) of visual appearance translated into partial usage or boycott of Lagos public transport services. This research considered aesthetic designs such as vehicle colours, styling, interiors, spacing and inner fixtures perceived to meet tourists' visual requirements. It was equally understood from this study that outlooks and quality

requirements are the magnets that lure leisure travellers to use different transportation systems for pleasure travel. The existing Lagos public transports are a mix of old-rugged looking vehicles and fewer stylish looking vehicles that operate together, which in overall lacked appealing aesthetic features based on leisure tourists' perceptions.

Transits affordability according to Cantwell et al. (2009) is when tourists reasonably purchase access to perform basic leisure travel and trips which typically means they only spend less than 25% of their holiday budgets on transport and less than 75% on transport and leisure services combined. Based on the analysis, Lagos existing local transports were deemed affordable from respondents perception in comparison to many foremost tourists' destinations but has the Cronbach's alpha coefficients' value less than the  $\alpha = 0.6$  satisfactory service quality index. 46.4% of the total respondents' found the affordability of Lagos public transports satisfactory for leisure travel and 14.9% of the respondents are strongly satisfied with service affordability. Whereas 38.6% of overall respondents are strongly unsatisfied with affordability attribute of public transit for tourism motivated travelling the Lagos. This is largely due to the tourist's perception of value for money paid to use the local mass transit services.

Travel comfort and safety are the two most sensitive indicators for measuring service quality of the transportation system as demonstrated in several studies. These service characteristics are known to have logical implications on public transport services and operations as regard leisure travel at destinations. Perception of travel comfort and safety of Lagos public transports was analysed in this study based on tourists' satisfactory mobility requirements and travel demands. The comfort and safety dimension of the public transports have the Cronbach's alpha coefficients' values of  $\alpha = 0.253$  and  $\alpha = 0.227$  respectively. The data analysis showed that travel comfort and safety of tourists using Lagos public transportation are deprived. Since the surveys focused on leisure visitor's sensitivities to travel comfort and safety in relation to satisfactory leisure travel and holiday experience, it was gathered that 52.2% of the leisure tourists' concluded that cognitive inadequacy of comfort attribute of public transport prompted the unsustainable modal shift to personalised transports for the enjoyable travel experience. Overall, 70.3% of the total respondents perceived the safety characteristic of Lagos public transport unsatisfactory and unsuitable for enjoyable travel. Thus, this study acknowledged public transport comfort and safety features as significant factors responsible for tourists' declining usage of Lagos public transport services in the city.

The EFA combined public transports service components which are reliability, aesthetic features, affordability, comfort and safety using Varimax rotation with Kaiser Normalization analysis methods to reflect the individual service quality measures. The three general factors shown in table 4 are the reliability factor experienced by tourists based on their sensitivities and observations.

## Tourists Perception of Public Transit Services for Leisure Travel Satisfaction in Lagos

The three reliability components analysed in this section include the punctuality, travel schedule/information and trips frequency of the public transports, which are the underlying factors selected by the model. The punctuality and rapidity variables cumulative factor (46.78%) obtained exemplified the unreliability of Lagos public transport services. Transport reliability is the primary service quality factor identified during the survey. The local travel schedule/information initial eigenvalues variance of 8.77% and cumulative percent

of 61.58 signifies poor service quality condition of Lagos local transport services. Consistent with many transportation reliability studies, many secondary factors influence timely arrival at designated targets and frequencies of service, the result above shows that eigenvalues components have minimum impacts on the transport service quality reliability. Further information presented in Table IV ratified 47.97% cumulative rotation squared loadings shown as a key component among the three reliability variables analysed.

**Table- IV: EFA (Kaiser Normalisation) Initial Eigenvalues and Rotation Squared Loadings**

Component	Initial Eigenvalues			$\Sigma$ rotation squared loadings		
	Total	% Variance	% Cumulative	Total	% Variance	% Cumulative
Transit promptness	8.42	46.78	46.78	.739	4.16	47.97
Travel information	1.58	8.77	55.54	.653	3.28	53.10
Trip frequency	1.09	6.04	61.58	.617	3.27	57.35

The first reliability component of the rotation squared loadings of the exploratory factor analysis massively weighed down on the responsibility of adopting public transport for extensive tourism-related travelling in Lagos. The component burdened on the public transports satisfactory operation, availability, convenience and the ease of use of the travel mode for leisure mobility and several recreational travelling. The computational values of 47.97% variance and cumulative loading factors express the unsatisfactory service quality of the existing public transportation to accommodate tourists mobility needs. The second reliability component burdened on the accessibility concerns and the simplicity of travel information, transport user-friendliness and leisure travel inducement, which profoundly impact the leisure passengers' comfort and safety perceptiveness. The third reliability component is heavily weighted on both convenience and

safety (i.e. commuting time versus waiting time) prior to arrival at intended leisure targets. The validity of the conceptual model was determined using structural equation modelling (SEM) which supported the relationship between multiple measures and a single latent construct. The SEM facilitate the distribution of data as variables before reflecting service quality dimensions which are combined standard items to create public transport service uni-dimensional variables. Regression weights highlighted the reliability, aesthetic features, comforts and safety importance in determining public transport overall service quality to support tourists active usage in Lagos (See Table V). Noticeable levels of deviation from schedules were observed and identified as a service reliability gap that undermines operational performance quality of public transport from respondents' perspectives.

**Table- V: SEM Transport Services Elements Regression Weights**

Service Feature	Coefficient Estimate	Standard Error	Critical Ratio	Probability
Reliability	0.16	0.02	10.43	0.00
Affordability	0.43	0.02	34.78	0.03
Aesthetic features	-0.05	0.02	-5.14	0.00
Comfort	-0.13	0.02	-9.79	0.00
Safety	-0.21	0.02	-18.90	0.02

Consistent with Fáskerty et al. (2012), any service quality regression weights estimate  $\geq 0.3$  is deemed significant provided the scale combines a large number of items. The SEM regression analysis estimates the relationships between the variables and explores the forms of their relationships. Table 5 regression weights apparently describe the reliability, affordability, aesthetic, comfort and safety factors identified to have significantly influenced the public transports' overall service for satisfactory travel. Moreover, reliability and affordability have positive coefficients estimates, while aesthetic, comfort, safety have negative coefficients. The SEM regression weight analysed the relationships among the variables and led this study to deduce that tourists preferred to use alternative travel mode for active leisure travel in Lagos. This is due to public transport deficient service attributes coefficient estimates and critical ratio. Finally, only 11.33%

of the total respondents strongly adopt the use of public transports service for satisfactory leisure travelling, while 88.67% strongly preferred to use regular/executive taxis, private vehicles, and car hire service, app taxis services, etc. These personalised transports were perceived and marketed to offer the most reliable, convenient, dependable and safe travel choices for tourists in Lagos.

This study recognised that 38.4% of the total respondents' aged between 18 and 29 years old strongly prefer not to use existing public transport service due to the aesthetic qualities and visual conditions. Whereas other age groups stressed more on public transit reliability, comfort and safety reasons, local transports affordability is of little concern to most of the survey respondents.



#### IV. CONCLUSION

The main findings showed that consistent unreliability of public transports from tourists' perceptions severely impacts leisure accessibility and satisfactory travel in Lagos. This situation encouraged the tourists' population absolute reliance on the unsustainable transport mode choices in the urban city. The local shared transport service quality variability has deplorable effects on Lagos tourism performance. Reliability along with comfort and suitability of public transportation is the key to active leisure travel especially when individual tourist perceives the total time spent in their preferred shared transports as an opportunity rather than a burden. The sense of comfort and convenience of travel formed the overall perception of public transportation with regards to leisure travel satisfaction. The five service qualities indicators analysed were the most critical determinants of Lagos tourist transport demand that are consistent with the literature. Although aesthetic features were often neglected in several studies, comfort and safety were genuinely observed from the Lagos public transport system. The comfort of service was confirmed through the factor analyses as an exceptionally significant factor that influences tourists' population decision on the adoption of public transport service for active leisure travel. This outcome supported (Barker et al., 2003; Antoniou & Tyrinopoulos, 2013) research findings.

Affordability and comfort improvement may perhaps encourage visitors' usage of public transport modes for future pleasurable travelling in Lagos. Consistent with Albalade & Bel (2010) and Fáskesty et al. (2012) improvement of these transport service qualities will undoubtedly transmute into better tourists' use of local mass transits for satisfactory leisure travel experiences in the city. Although, affordability factor of public transports had the least effect on the 88.67% total tourists' population that actively adopt personalised transports for satisfactory leisure travelling based on the result shown in Table V. Since personalised transports are effectively promoted and offered to tourists in Lagos as the best travel choice and more affordable mobility option for leisure travel, this perhaps encourages the modal shift from public transports for most dependable transfers between leisure targets and visitors' respective resorts. Certainly, personalised transports waiting times are less than 15 minutes across locations while Lagos transport networking companies and other private app taxi services maintained less than 10 minutes waiting time. These personalised travel services also provide a free 15 minutes waiting time with no hidden costs/taxes for their transport users. Personalised transport services are combatively advertised as satisfactory mobility options that offer safe and convenient transfers with excellent aesthetics that meet tourists travel demands affordably in Lagos while the public transport services continue to deteriorate.

This study perceived that redesigning the interiors of the entire functional public transit vehicles in Lagos (especially the tricycles and minibuses) will improve the comfort and safety concern and inspire the leisure travellers' positive socio-psychological behaviours towards the use of public transports. The service quality coefficient values shown in

table 3 concluded that the service quality dimensions obtained from Lagos public transports are far below 0.6 Cronbach's acceptable alpha values. The service quality analyses take the critical sensitivities of the selected transports service elements into account and overall service quality based on the regression analysis estimates the relationships that help this study to deduce that tourists preferred to personalised transports in Lagos than public transport service for active leisure travel. The public transport services regression weights in Table 5 confirmed the public transport poor reliability, comfort and safety as well as aesthetic measures. The convenience and safety factors analysed necessitate that existing public transports be equipped with service components that include convenience seats arrangement and space, extraordinary safety measures, ease of passages, air-conditioners availability and smooth ride.

To encourage the use of public transport service as tourists' active travel mode choice in Lagos, provision of adequate information at the designated terminus was found in this study as the most important factor for tourists' population groups. This finding is consistent with (Beirão & Cabral, 2007; Cantwell et al., 2009; Kantawateera et al., 2015) studies that perceived transport usage and travel information as part of the convenience and local transports dependability perception by many leisure visitors that do not have the native knowledge of the bus stations, travel routes, interchanges and terminals. Kantawateera et al. (2015) proposed accessibility of electronic information boards at stops and terminals and information display on public buses to possibly ease tourists' concerns about directions and difficulty of travelling. This study agreed that the recommendation on travel information will encourage more tourists to spend minimally on transportation to explore their desired tourists' delights and increase leisure travel satisfaction.

This study highly recommends the improvement of Lagos public transports based on tourists' perception of the service attributes identified. Besides, the transport services should be planned and designed to accommodate the service qualities required by leisure travellers to increase tourists' usage of public transports. Total overhauling of Lagos public transport system should incorporate the five service qualities indicators earlier stressed for positive perceptions of service. Also, diagnostic review of existent transportation policies to shun overcrowding of the public buses and motorised tricycle to increase comfort and safety, and allowed to operate on a load factor equivalent between 65% and 70%. This diagnostic review will provide visitors with unsurpassed touring experience in Lagos and would make them re-visit the destination in the future. Punctuality and timely arrival of public transport at the stations and terminals is a major factor for visitors that must be cautiously considered by Lagos public transports service providers to improve visitors' arrival times at their projected destinations. Promoting and encouraging public transport role in tourism development of Lagos will enhance visitors' mobility to leisure attraction areas and help minimise overdependence on private vehicles in already congested areas.

Overall improvement of Lagos public transport services characteristics is a brilliant way to enhance public transport perception and attract leisure travellers to use the mode choice for enjoyable travelling. These will help leisure tourists spend a reduced amount from their holiday budgets on sustainable transport services. This paper further resolved that re-designing aesthetics of the local transports to accommodate comfort and safety feature will increase active usage in the city. The future study must perhaps focus on the initiation of efficient information and communication systems to increase interaction between tourists and local transit service providers. The suggested solution, e.g. electronic transport schedules, smart messaging systems, internet messaging apps, on-board communication, electronic displays at terminals and feedback services are additional features will improve the accessibility, consistency and reliability of the public transport service in Lagos. This will also enhance transport operational efficiency and minimise costs of tourists travel, as well as minimise over-dependence on personalised transports for tourism-related trips.

## ACKNOWLEDGMENT

The authors of this article express sincere appreciation and utmost gratitude to the management and staffs of the Department of Urban and Regional Planning, Universiti Teknologi Malaysia (UTM) Skudai Campus, Malaysia and Lagos State Authority for providing unwavering support for the completion of this research. The authors further express gratitude to the management and staffs of New Afrika Shrine, Lekki Leisure Lake, LUFASI Conservative Park and Omenka Art Gallery for their collaboration and assistance.

## REFERENCES

1. D. Albalade and G. Bel, "Tourism and urban public transport: Holding demand pressure under supply constraints," *Tourism Management*, 2010, pp. 425-433.
2. C. Antoniou and Y. Tyrinopoulos, "Factors affecting public transport use in touristic areas," *International Journal of Transportation*, vol 1. 2013.
3. M. Barker, S. J. Page and D. Meyer, "Urban visitor perceptions of safety during a special event," *Journal of Travel Research*, 2003, pp. 355-361.
4. G. Beirão and J. S. Cabral, "Understanding attitudes towards public transport and private car: A qualitative study," *Transport policy*, 2007, pp. 478-489.
5. Business Insider, 2018, Lifestyle: 5 most visited cities in Africa and why you should visit. Available: <https://www.pulse.ng/bi/lifestyle/5-most-visitedcities-in-africa-and-why-you-should-visitid8047929.html>
6. M. Cantwell, B. Caulfield and M. O'Mahony, "Examining the factors that impact public transport commuting satisfaction," *Journal of Public Transportation*, 2009.
7. Q. Cao and X. Tian, "The Structural Characteristics of Tourism Economic Network in Xinjiang Province," *Computer and Information Science*, 2015, p. 128.
8. K. S. Chon, Z. Guangrui, A. A. Lew, J. Ap and L. Yu, "China's tourism since 1978: Policies, experiences, and lessons learned," *In Tourism in China*, 2013, pp. 33-54. Routledge.
9. J. E. Dickinson and D. Robbins, "Using the car in a fragile rural tourist destination: a social representations perspective," *Journal of Transport Geography*, 2007 pp. 116-126.
10. H. D. Dillimono and J. E. Dickinson, "Travel, tourism, climate change, and behavioral change: travelers' perspectives from a developing country, Nigeria," *Journal of Sustainable Tourism*, 2015, pp. 437-454.
11. D. T. Duval, "Tourism and transport: Modes, networks and flows," Channel View Publications, 2007.

12. L. Dwyer and C. Kim, "Destination competitiveness: determinants and indicators," *Current issues in tourism*, 2003 Pp. 369-414.
13. P. Fászkerty, G. Horváth, A. Rixer and J. Turi, "The Public Transport Services to Measure the Quality of Standard Bases," *Acta Technica Jaurinensis*, 2012, pp. 207-222.
14. V. Filimonau, J. Dickinson and D. Robbin, "The carbon impact of short-haul tourism: A case study of UK travel to Southern France using life cycle analysis" *Journal of Cleaner Production*, 2014, pp. 628-638.
15. K. Kantawateera, A. Naipinit, T. P. N. Sakolnakorn, and P. Kroeksakul, "Tourist Transportation Problems and Guidelines for Developing the Tourism Industry in Khon Kaen, Thailand," *Asian Social Science*, 2015, p. 89.
16. J. Khadaroo and B. Seetanah, "The role of transport infrastructure in international tourism development: A gravity model approach," *Tourism management*, 2008, pp. 831-840.
17. S. A. R. Khan, D. Qianli, W. SongBo, K. Zaman and Y. Zhang, "Travel and tourism competitiveness index: The impact of air transportation, railways transportation, travel and transport services on international inbound and outbound tourism," *Journal of Air Transport Management*, 2017, pp. 125-134.
18. T. G. Mandeno, 2012, *Is Tourism a Driver for Public Transport Investment?* (Doctoral dissertation, University of Otago).
19. M. Mowforth and I. Munt, "Tourism and sustainability: Development, globalisation and new tourism in the third world," *Routledge*, 2015.
20. P. E. Murphy, 2013, *Tourism: A community approach* (RLE Tourism).
21. National Bureau of Statistics, 2016, Social Statistics Report 2016. *Nigeria National Bureau of Statistics*.
22. S. J. Page and D. Meyer, "Tourist accidents: an exploratory analysis," *Annals of Tourism Research*, 1996, pp. 666-690.
23. A. Perry, 2011, *Intelligent Cities: Making Over Lagos*. Time Lists.
24. J. R. A. Santos, "Cronbach's alpha: A tool for assessing the reliability of scales," *Journal of extension*, 1999, pp. 1-5.
25. World Tourism Organization (Madrid), Network, W. E, University of Hawaii (Manoa), University of Calgary (Calgary, Canada) and James Cook University (Australia), 1997, *International tourism: a global perspective*, World Tourism Organization.
26. World Tourism Organization (UNWTO) and International Labour Organization (ILO), 2014, *Measuring Employment in the Tourism Industries—Guide with Best Practices*. Madrid: UNWTO.

## AUTHORS PROFILE



**Oloruntobi Olakunle** is a passionate academic researcher and a doctorate student at the Department of Urban and Regional Planning, Universiti Teknologi Malaysia. The author is committed to strong academic research in the field of urban and regional planning, urban transportation planning and policy studies, transport infrastructure and asset management research, and multi-disciplinary studies. The author developed good data analytical skills and ability to articulate engaging methodologies to provide support for high-quality academic research, wide-ranging educational journals and scholarly articles. These abilities, moreover, equipped the author to diligently perform several extensive researches in the field of transportation and collaboratively worked with excellent authors across fields to convey valuable scientific studies and successfully published scholarly journals in multi-disciplinary fields. The author served as a Graduate Assistant (Full Time) at the University of Technology PETRONAS from May 2013 to August 2016 where the author managed undergraduate students practical (laboratory) and learning (classroom) activities such as providing weekly classroom lectures, grading of papers, supervised undergraduate projects, etc. In addition to classroom instruction and laboratory demonstration, the author performed regular administrative duties as well as maintained highway and transport laboratory. Subsequently, the author worked with multiple approaches towards teaching and academic research strategies and contributed creatively to the development processes of new knowledge.







**Dr Safizahanin B. Mokhtar** is a senior lecturer, experienced researcher and expert academic instructor at the Department of Urban and Regional Planning, Universiti Teknologi Malaysia, Skudai campus. Dr Safizahanin is a senior member of the Center for Innovative Planning and Development at the Faculty of Built Environment and Surveying, Universiti Teknologi

Malaysia, and strongly committed to high-quality innovative research and articulate distinctive methodologies to convey excellent quality research in the field of transportation, travel and tourism studies and Urban Planning. As a senior and experienced researcher, Dr Safizahanin Mokhtar cooperatively worked with excellent authors to publish valuable and robust journals in multi-disciplinary fields. Safizahanin B. Mokhtar earned several academic qualifications including BA (Hons.) in Transport, M.Sc. (Transportation Planning) and PhD (Tourism Science) with expertise in Transportation Planning and Tourism Studies. The author is currently supervising postgraduate researchers at different levels such as Master of Science (M.Sc), Master of Philosophy (M.Phil) and Doctor of Philosophy (PhD) students at the Department of Urban and Regional Planning, Universiti Teknologi Malaysia.



**Prof. Dr Muhammad Zaly Shah** is the chairman of the Center for Innovative Planning and Development, Universiti Teknologi Malaysia and currently the most senior expert in logistics and transportation planning at University. Prof. Dr Muhammad Zaly Shah is the senior lecturer, expert academic researcher and proficient

erudite instructor at the Department of Urban and Regional Planning, Universiti Teknologi Malaysia, Skudai campus. He is a recipient of the prestigious Malaysia National Science Fellowship (NSF) award for his research on the application of artificial neural network in forecasting air travel demand. Prof. Dr Muhammad Zaly Shah earned his first degree in Industrial Engineering from Bradley University, the U.S.A., M.Sc and PhD in Transportation Planning both from Universiti Teknologi Malaysia (UTM). His working experiences include as Quality Assurance Engineer at Sumitomo Electric Malaysia at Shah Alam and as Human Resources Development Controller with Malaysia Airlines. Apart from the NSF, Prof. Muhammad Zaly Shah also received several grants under the Fundamental Research Grants Scheme (FRGS) for his work in transport modelling. His academic interests are in logistics and transportation modelling, simulation, transport economics, artificial intelligence and operational research. Prof. Dr Muhammad Zaly is actively giving lectures to corporate clients including, among others, Malaysia Airports Berhad (MAB); Ministry of Defense, Malaysia; Brunei LNG; Ministry of Health Brunei; and Royal Brunei Catering.