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INNOVATION FOR TECHNOLOGY

IDENTIFICATION AND ASSESSMENT OF KEY DETERMINANTS OF PUBLIC TRANSPORTATION BEHAVIOURAL INTENTIONS OF LOCAL CITIZENS AND TOURISTS IN MAURITIUS

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Identification and Assessment of Key Determinants of Public Transportation Behavioural Intentions of Local Citizens and Tourists in Mauritius

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REPORT

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PART 1

BACKGROUND OF THE STUDY AND LITERATURE REVIEW

INTRODUCTION AND BACKGROUND

Governments generally seek to implement policies aimed at reducing car use and to promote more environmental friendly modes, such as public transport (Domarchi *et al.*, 2008). In Mauritius, the recent budget laid the foundation for a Comprehensive Bus Replacement Mechanism to enable the acquisition of up to 200 modern and more comfortable semi-low floor buses annually, with low CO_2 Emission. In addition to the above, the National Transport Corporation (NTC) has also embarked on a restructuring plan which includes the purchase of 65 new buses. Bids have already been received and will soon be evaluated. Moreover, a further 100 buses of the semi-low floor type will be purchased by the company this year. The above replacement mechanism include provisions which should see the granting of subsidies of value of Rs 1 million per bus be granted to operators which will renew their fleet of buses. The subsidies will be financed through a levy of one rupee per litre on petroleum products. In addition, the removal of VAT on such type of buses has also been announced. The combined effect of these two measures should help reduce the acquisition cost of each semi-low floor bus by some Rs 1.6 million, thus providing a greater incentive to proceed with a more environmental friendly public transport.

Unfortunately, these policies often fail, or have unsatisfying results. Travel mode choice is determined by several factors, such as contextual factors (e.g., available travel modes environment), an individual's abilities and constraints (e.g., car ownership), and various psychological factors (e.g., evaluations and motives) (Thogersen and Moller, 2008). To explore the reasons behind the unsatisfactory results of such policies, past studies on modal choice adopt two main approaches: utility-maximizing of microeconomic theory and psychological behavior theory. Although the traditional studies based on the microeconomic viewpoint and frequently using discrete choice models have given useful insights (Domarchi *et al.*, 2008), the factors that influence an individual's decision-making in this area, especially the psychological ones, still remain relatively unclear.

How to reduce private vehicle use and to encourage the use of public transport is presently one of the fundamental policy goals of transportation authorities in Mauritius. For instance, the

recent budget laid the foundation for a Comprehensive Bus Replacement Mechanism to enable the acquisition of up to 200 modern and more comfortable semi-low floor buses annually, with low CO_2 Emission. This switch from private means of transportation to public transportation means has the potential to help in both reducing traffic congestion and pollution caused due to transport in Mauritius. Unfortunately, these policies often fail, or have unsatisfying results. Travel mode choice is determined by several factors, such as contextual factors (e.g., available travel modes environment), an individual's abilities and constraints (e.g., car ownership), and various psychological factors (e.g., evaluations and motives). The present study proposes to focus on the psychological factors that affect individuals' behavioural intentions with regards to the use of public transports. An integrated model is developed based an exploratory research and by taking into account existing theories such as the theory of planned behaviour. The study furthermore explores the relationships between the various determinants of public transport behavioural intentions and their effect on behavioural intentions of public transport users with the aim of reducing private vehicle use and encouraging the use of public transport. Three objectives have been formulated, namely: to identify public transport service quality attributes and dimensions and to construct and test a measurement model of Public Transport Service Quality (PTSQ), to identify and assess other key determinants of behavioural intentions of public transport users in Mauritius, and to develop and empirically test an integrated structural model linking service quality dimensions of public transport, satisfaction with public transport, other determinants of public transport and behavioural intentions using Structural Equation Modelling (SEM). The methodology employed comprise of two phases. Phase one comprises of an exploratory phase whereby focus group discussions and in-depth interviews will be conducted with various stakeholders of public transports in Mauritius. Phase two will comprise of a survey among a sample of 600 public transport users including both local citizens and tourists. The data will be analysed using statistical techniques such as exploratory factor analysis, confirmatory factor analysis, test of differences and structural equation modelling. Finally the results will be discussed and implications for policy making will be described.

The present study proposes to focus on the psychological factors that affect individuals' behavioural intentions with regards to the use of public transports. An integrated model is

developed based an exploratory research and by taking into account existing theories such as the theory of planned behaviour. Determinants such as fares, quality of service and income identified and empirically tested by Paulley *et al.* (2006) shall also be included. A multi-dimensional approach will be used to conceptualise and operationalise transport service quality. Transport service quality dimensions include safety on board, safety at stations, travel time, number of departures and number of seats (Pedersen *et al.*, 2011). The study furthermore explores the relationships between the various determinants of public transport behavioural intentions and their effect on behavioural intentions of public transport users with the aim of reducing private vehicle use and encouraging the use of public transport.

Research Aim and Objectives

The purpose of this study is to construct a comprehensive framework for predicting behavioural intentions of local citizens and tourists in the context of public transport in Mauritius and to test the conceptual model using statistical techniques such as logistic regression and PLS-SEM.

With the goal of achieving the above aim, specific research objectives (RO) have been formulated together with research questions that pertain to the present study:

RO 1. To identify public transport service quality attributes and dimensions and to construct and test a measurement model of Public Transport Service Quality (PTSQ)

A set of research questions guide the research objective, namely:

- What are the essential public transport service quality attributes and dimensions from the extant literature and from perspective of local citizens and tourists in Mauritius?

- Are the dimensions identified unidimensional or should they be further broken down into two or more dimensions?

- How valid and reliable are the measurement scales for each of the public transport service quality dimensions?

- What are the perceptions of local citizens and tourists with regards to the service quality performance of public transport service providers and are their demographic differences?

RO 2. To identify and assess other key determinants of behavioural intentions of public transport users in Mauritius

The specific research questions to be answered when meeting the above research objective are:

- What are the main expectations of public transport users in Mauritius?

- Is there a difference between expectations of local citizens and tourists?

- Which of these expectations can be considered as being other main constructs (latent variables) acting as essential determinants of public transport behavioural intentions from perspective of local citizens and tourists in Mauritius?

- How can the determinants identified be measured?

- Are the measurement scales developed for each determinants valid and reliable?

- What are the perceived performance level of each determinants by local citizens and tourists with regards to public transport and are their demographic differences?

RO 3. To develop and empirically test an integrated structural model linking service quality dimensions of public transport, satisfaction with public transport, other determinants of public transport and behavioural intentions using logistic regression and PLS-Structural Equation Modelling (SEM).

The research questions that related to this third research objective are:

- Are there significant direct relationships between the various constructs as identified in the structural model?

- Are the hypothesised indirect effects contained in the structural model significant?

LITERATURE REVIEW

Service Quality in the Transportation Sector

Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). In 1985, Parasuraman et al undertook a Qualitative Research to investigate the concept of Service Quality. They arranged an in-depth interview with the executives and Focus Group interviews with customers to develop a model of Service Quality. According to their findings, they identified the following five gaps:

Marketer Side:

GAP 1 – Consumers' Expectations – Managements' Perceptions Gap (will impact on the customers evaluations of service quality)

GAP 2 - Management perceptions of consumer expectations- Service Quality Specifications (will impact on the service quality from the customers viewpoint)

GAP 3 - Service Quality Specifications-Service Delivery (will impact on the service quality from the customer's standpoint)

GAP 4 - Service Delivery-External Communications (will impact on the service quality from the customer's standpoint)

Customer Side:

GAP 5 - Consumer's Expected Service- Consumer's Perceived Service

Parasuraman et al (1985) identified ten key satisfaction determinants of Service Quality. They are:Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding, Tangibles.

In 1988, Parasuraman et al arranged a quantitative Research. They revealed an instrument for measuring consumers' perception of Service Quality, after that it became known as

SERVQUAL. They collapsed their satisfaction dimensions from ten to five. The dimensions were:

➔Tangibles – physical facilities, appearance of personnel and equipment

➔Reliability – ability to perform the promised service dependably and accurately

➔Responsiveness – willingness to help customers and provide prompt service

➔Assurance - (combination of items designed originally to assess Competence, Courtesy, Credibility, and Security) – ability of the organization's employees to inspire trust and confidence in the organization through their knowledge and courtesy.

➔Empathy -(combination of items designed originally to assess Access, Communication, and Understanding the customer) – personalized attention given to customer.

Organizations can use SERVQUAL in various ways. Parasuraman et al (1988) mentioned that SERVQUAL can help the Service and Retailing Organizations in assessing the expectations of customers and Service Quality perceptions. It can focus on the core areas where managers need to take attention and action to improve Service Quality.   In fact, despite the existence of other models of Service Quality such as the Perceived Service Quality (PSQ) model (Gronroos, 1984) and   Stated Preference analysis model , SERQUAL still remains the generic instrument for measuring service quality across different service sectors. SERVQUAL has already been applied in various countries including China (Chung-Wei et al., 2012), Ghana (Aidoo et al., 2013), India (Randheer, et al., 2011), Nigeria (Ali, 2012) and the United States (Kilbourne et al., 2004). Furthermore, several researchers have used SERVQUAL to measure service quality in various sectors such as public transport (Aidoo et al., 2013), airline (Sultan & Simpson, 2000), retail banking (Ravichandran, et al., 2010) and internet (Eriksson &Friman, 2007).

	Reference	Dimension	Service Quality Attributes
1.	(Govender, 2014)	RECSA : Reliability	Arriving on time (no delays en route)
		Comfort	Guaranteed seat Smooth ride Sheltered waiting areas Air conditioning
		Extent of service	Total hours of service - frequency of service Service on weekends Service on weekdays Service on public holidays Service in the evening
		Safety	Low probability of accidents Low probability of falling Low probability of assault
		Affordability	Alternatives- season tickets Cheap fares Value for money

	Author	Dimensions	Service Quality Attributes
2.	(Sumaedi, Bakti, & Yarmen, 2012)	Safety	Safety on board Safety from crime while riding Safety related to behavior of other persons)
		Comfort	Comfort of the seats Degree of crowding on the paratransit Comfortable temperatures on the paratransit
		Performance & Reliability	The paratransit engine is still powerful Wait time when transferring Travel time by paratransit The paratransit obedience to traffic regulations
		Crews Attitude	The driver/conductor are neat in appearance The driver/conductor are willing to help passenger The driver/conductor willing to respond to passenger request The driver/conductor are understanding your needs when you make inquiries The driver/conductor are courteous The driver are skilled full
		Condition of vehicles & Facilities	The paratransit has modern looking facilities and equipment Cleanliness of the paratransit exterior Cleanliness of the paratransit interior

			The paratransit clean of graffiti
	Author	Dimensions	Service Quality Attributes
3.	(Yaya, Forta, Canals, & Marimon, 2014)	Functional Quality	Employees are friendly/helpful/polite Information on the bus is adequate Employees and buses are visually appealing and neat Employees help me when I have a problem I feel safe with respect to my belongings on the bus Employees know the information to erase my doubts
		Physical Environment Quality	Buses are not crowded (enough space for all passengers) Enough seats (Passengers often get a place to sit) Buses are accessible for the elderly strollers, and disabled The safety and security measures are appropriate on the bus Temperature on the bus is suitable Buses are up to date, well equipped and preserved
		Convenience Quality	Buses run frequently, short waiting time Information(e.g., at the station, bus stops) is easy to understand The bus schedules are adapted to my needs Bus routes are adequate for my needs

	Author	Dimension	Service Quality Attributes
4.	(Eboli & Mazzulla, 2007)	Service planning and reliability	Frequency – Service frequency Reliability – Reliability of buses that come in schedule Information – Availbility of schedule/maps at bus stops Promotion – Avaibility of service information by phone, mail, Internet, etc Personnel – Helpfulness of personnel Complaints – Administration of complaints
		Comfort and other factors	Bus stop Furniture – Avaibility of shelter and benches at bus stops. Overcrowding – Bus overcrowding Cost – Cost affordability Bus Stop Maintenance – Physical condition of bus stops Cleanliness – Cleanliness of interior, seats and windows Safety on board- Vehicle reliability and competence of drivers

			Personnal security – Safety against crime on buses Environmental Protection – Use of ecological vehicles
		Network Design	Bus Stop Avaibility – Avaibility of bus stop near the home Route Charateristics – number of bus stops, distance between bus stops, etc

	Author	**Dimensions**	**Service Quality Attributes**
5.	(Vanhanen & Kurri)	Driver	Driving Style Politeness Considerateness
		Bus	General Cleanliness Seat Comfort Accessibility (ease of boarding , low floor buses)
		Travel Experience	Sense of smoothness Sense of safety

	Author	**Dimensions**	**Service Quality Attributes**
6.	(Mazzulla & Eboli, 2006)	Cost Efficiency, cost effectiveness, service effectiveness	The reasons for public transport non-use to ranking are: Long wait at bus stops; Overcrowded buses; Low frequency; Slowness of vehicles; Service unreliability; Need for transfers; Difficulty of carrying loads; High fare; Poor accessibility to bus stops; The reasons for public transport use to ranking are: Inexpensive service; Quick service; Car non-availability; Lower risk of road accidents; Difficulty of car parking; Practicality (less tiring trip); No driving licence; Service quality attribute to ranking are: Frequency; Number of bus stops; Cleanliness of interior, seats, etc.;

			Comfort on bus; Security against crimes on bus; Availability of shelter and benches at stops; Information on services; Availability of seats on bus;

	Author	Dimensions	Service Quality Attributes
7.	(Morfoulaki, Tyrinopoulos, & Aifadopoulou, 2007)	Cost Efficiency, cost effectiveness, service effectiveness	Lines frequency On-time performance Service provision hours Network coverage –wifi access on bus routes Information provision about tickets and cards Types of tickets and cards Prices of tickets and cards Tickets selling network and validation machines Personnel behavior Walking distance to terminals and bus stops Information provision Conditions at the terminals and bus stops Safety at the terminals and bus stops Onboard conditions Vehicles cleanliness Driving behavior Onboard information provision Distance between interchange points Waiting time at interchange points Information provision at interchange points

	Year	Author	Dimensions	Service Quality Attributes
8.	2015	(Hensher, 2015)	Getting to the bus stop quality	ease, safe, time (distance), knowing where the bus stop is
			Trip quality	time to board a bus - frequency, % of low floor buses time to get a seat -number of seats available average speed, network shape travel time trip cost
			Vehicle quality	cleanliness hours of vehicle cleaning/vehicle comfort of seats (types), spaciousness percent of buses with cloth seats temperature control (ventilation) percent of

				buses with air conditioning noise visual surveillance safety average age of the fleet modernity wheelchair access (yes/no) ease of use for those with disabilities
			Driver Quality	appearance-helpfulness years of driving experience money spent on driver training
			Information quality	Pre-trip information - availability of timetable/destination signs

	Author	**Dimensions**	**Service Quality Attributes**
9.	(Verma, Verma, Ajith, & Sindhe, 2013)	Reliability	Bus information – schedule & route maps are available & reliable Buses are available on time during peak hours Buses are available to every area in the city Frequency of buses is very high on every route Computerized ticketing system leaves little scope for cheating & bribing
		Tangible	Buses are clean and well maintained Buses are a safe mode of transport Buses are the best mode for advertising & campaigning Eco-friendly buses are used Bus stops are well maintained
		Responsiveness	Bus tickets are affordable and buses are a real value for money Bus routes are not lengthy Bus stops are conveniently located Response time to resolve complaints is very low Bus information is easily available through calls, SMS's & on the Internet
		Assurance	Drivers & Conductors are courteous There is a lot of safety measures against crime on buses There are very little accident damage caused by buses Drivers are well trained and safety measures are taken care of Fire & Emergency Exits are available on all

			buses
		Empathy	Bus is user friendly for handicapped
			Seats are available on every bus
			Buses are safe for young mothers
			There is first aid available on every bus
			Destination Displays Systems are useful forvisually impaired & aged

	Author	Dimensions	Service Quality Attributes
10.	(Baidoo & Nyarko, 2015)		Walking distance to bus stop - Within 10 min / More than 10 min
			Attitude of driver and mate - Very polite / Very impolite
			Transport fare - Normal fare / 15% more than normal fare
			Bus stop facility - Shelter, lighting and seat available
			No shelter, lighting and seat
			Reliability - On time late

	Author	Dimensions	Service Quality Attributes
11	(Wijaya, 2009)	Reliability	Queuing time for ticket
			Waiting time for bus
			On time departure
			On time arrival at the next stop
			Information availability
			Availability of bus fleet
		Responsiveness	Readiness to help passenger
			Services provided by service personnel
		Assurance	Bus capacity
			Bus drivers driving
			Safety information for bus passenger
			Security on bus
		Empathy	Unfriendly service personnel
			Appearance service personnel
		Tangibles	Physical condition of the bus
			Comfort shelter
			Bus AC function unwell
			Availability of trash bin on board and shelter
			Availability of media of suggestion and complaint
			Cleanliness

	Author	Dimensions	Service Quality Attributes
12	(Parasuraman, Zeithaml, & Berry, 1991)	Reliability	Ability to perform the promised service dependably and accurately Providing services as promised Dependability in handling customers' service problems Performing services right the first time Providing services at the promised time Keeping customers informed about when services will be performed
		Responsiveness	Willingness to help customers and provide prompt service Readiness to respond to customers' requests
		Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence Employees who instill confidence in customers Making customers feel safe in their transactions Employees who are consistently courteous Employees who have the knowledge to answer customer questions
		Empathy	Caring, individualized attention the firm provides its customers Giving customers individual attention Employees who deal with customers in a caring fashion Having the customer's best interest at heart Employees who understand the needs of their customers
		Tangibles	Appearance of physical facilities, modern equipment Employees who have a neat, professional appearance Visually appealing materials associated with the service Convenient business hours

	Author	Dimensionsn (SERVQUAL)	Service Quality Attributes
13	(Ojo, Mireku, & Dauda, 2014)	Reliability	Bus always arrives on time Bus never breaks down on the road Passengers can book tickets easily Staff satisfy passengers' request right the first time There is a schedule timetable for buses
		Responsiveness	Staff provide individualized attention to help customers

			Bus companies always inform people of availability of services and changes in prices in advance Bus companies provide timely and efficient services Communication with staff is clear and helpful Staff are always willing to help passengers
		Assurance	Passengers feel safe in their transactions with staff Passengers luggage are safe Staff are always polite Staff have in-depth occupational knowledge of their jobs Behaviour of staff instills confidence in the passengers
		Empathy	Bus companies have passengers interest at heart Bus companies convenient operating hours Easy accessibility of information about services Easy to find and access the ticket office/station
		Tangibles	Staffs attire is neat and smart Bus companies have a professional appearance Bus companies have adequate shed for passengers Bus companies have spacious seats for passengers on board The ticket office is attractive and neat Buses are well maintained and neat Buses have ample legroom and foot space

	Author	Dimensions	Service Quality Attributes
14	(Valeri, Stathopoulos, Marcucci, & Gatta, 2012)		5 attributes were considered (bus fare, delay, frequency, traveltime, availability).

The Theory of planned behavior (TPB)

In the literature that utilizes psychological behavior theory in modal choice research, the theory of planned behavior (TPB, Ajzen, 1985) has been widely used in predicting and explaining intended behavior across a variety of disciplines. The main components of the TPB are a person's own attitudes, subjective norms, perceived behavioral control, intentions, and behavior. More specifically, the TPB is based on the proposition that an individual's behavior is a direct function of behavioral intention and perceived behavioral control. Intentions are themselves

shaped by attitudes, subjective norms and perceived behavioral control (Ajzen, 1991). The three determinants of behavioral intentions are each based on an underlying belief structure: behavioral, normative, and control beliefs. In their respective aggregates, behavioral beliefs produce a favorable or unfavorable attitude toward the behavior; normative beliefs result in a perceived social pressure or subjective norm; and control beliefs give rise to perceived behavioral control with regard to performing the behavior. Taken together, attitude toward the behavior, subjective norm, and perceived behavioral control translate to the formation of a behavioral intention which is the immediate determinant of actual behavior. The TPB has been used to examine the mode choice behavior in past studies (Bamberg, Ajzen, & Schmidt, 2003; Bamberg, Rolle, & Weber, 2003; Bamberg & Schmidt, 2001, 2003). From a psychological perspective, travel mode choice may be perceived as not only a deliberate process (i.e. the TPB) but also originating from behavioral habits (Thogersen and Moller, 2008). Moreover, it has been argued that past behavior is the best predictor of future behavior (Bamberg, Ajzen, et al., 2003; Bamberg, Rolle, et al., 2003). Unlike the TPB, which assumes that behavior is reasoned, deliberately controlled, and deliberately planned, habit has been perceived as an automatic link between a goal and a specific behavior or as a behavioral script stored in memory (Aarts and Dijksterhuis, 2000; Aarts*et al.*, 1997, 1998; Fujii and Garling, 2003; Verplanken and Aarts, 1999). In other words, as habitual behavior demands only a small amount of attention, the individual's control over behavioral intention as well as the behavior itself becomes weak. As long as circumstances remain relatively stable, past mode choice behavior can easily affect latter choice behavior. Therefore, the behavior under consideration is not completely reasoned, and past behavior measured as a proxy for habit plays an important role in predicting future behavior, as supported by previous studies (Bamberg et al., 2003; Ouellette and Wood, 1998). The theory of behavior driven by habit has been applied into the mode choice behavior research along with TPB, in works such as Aarts et al. (1998), Bamberg et al. (2003), Domarchi et al. (2008), Eriksson et al. (2008), Garling et al. (2001), Thogersen and Moller (2008), Verplanken et al. (1994), and Verplanken et al. (1998).

Customer satisfaction and behavioral intention

Fishbein and Ajzen (1975) was the first to introduce the concept of behavioral intention to resolve the contradictive relationship between attitude and behavior that appeared in literature. They stated that attitude affects behavior indirectly through a mediator variable called behavioral intention. Fishbein and Ajzen's (1975) theory is known to be the theory of reasoned action and then the theory is strengthened by Ajzen (1991) to be the Theory of Planned Behavior (TPB). Besides, Zeithaml *et al*. (1996) developed theories suggesting that increasing customer retention, or lowering the rate of customer defection, is a major key to the ability of a service provider to generate profits. According to their model, behavioral intentions can be captured by such measures as repurchase intentions, word of mouth, loyalty, complaining behavior, and price sensitivity. Indeed, from a customer's perspective, high service quality often leads to favorable behavioral intentions while a low service quality tends to lead to unfavorable behavioral intentions. Zeithaml *et al*. (1996) further emphasized that behavioral intentions can be seen when a customer decides to remain with or defect from the company or service provider. On the other hand, Burton *et al*. (2003) argued that customer experience is related to behavioral intentions. As such, the more positive the customer's experience, the more likely he or she is willing to reuse the service.

As referred in the previous paragraph, theoretical literature usually introduced the concept of behavioral intentions as a multidimensional construct, consisting of

1) loyalty;
2) recommendation
3) paying a premium price.

Recent studies describe loyalty as a deeply held commitment to repeat purchases of preferred services (See Oliver, 1997; Bei and Chiao, 2001). Furthermore, Zeithaml *et al*. (1996) argued that loyalty can be manifested by increasing business with a company in the future and by expressing a preference for it. In addition, it is worth mentioning that Reichheld and Sasser (1990), Fornell (1992), Zeithaml *et al*. (1996) and Kandampully and Suhartanto, 2000 all agreed

on the fact that a high level of loyalty is strongly related to profitability. Recommendation was defined by Host and Knie-Andersen (2004) as a willingness to communicate about a service provider offered by an existing customer who is perceived not to obtain monetary gain from so doing. These customers represent value to service providers and act as ambassadors of the company (See Heskett *et al*., 1994; Host and Knie-Andersen, 2004). Readiness to pay more is defined by Zeithaml *et al*. (1996) as the intention of a customer to pay a higher price than competitors charge for the benefits that the customer currently receives from the service provider.

Empirical Review

Customer satisfaction is considered to be predictor variables of behavioral intention in literature (See Yang and Peterson, 2004). Many empirical studies have shown that Customer satisfaction has a positive and significant effect on behavioral intention (Li *et al*., 2011; Gounaris *et al*., 2010; Molinari *et al*., 2008; Liang and Wang, 2007; Heskett, 2002; Oliver, 1980). Cronin and Taylor (1992) reported that satisfaction had a stronger and more consistent effect on purchase intentions than did service quality. More specifically, many scholars have confirmed the positive relationship between customer satisfactions and repurchase intention as stated in Bitner (1990), Jones and Suh (2000) and Rust *et al*. (1995) just to name a few. In other words, it can be said that customer will be more likely to repurchase a product when they are satisfied.

In Fishbien and Ajzen (1975), behavioral intention has also been defined as the customers' subjective probability of performing a certain behavioral act. Empirical literature usually refer to the three customer behaviors listed below, namely
(1) Word-of-mouth,
(2) Repurchase intention,
(3) Feedback.

The empirical research that has investigated the relationship between customer satisfaction and word-of-mouth has not produced consistent findings. Some studies like Holmes and Lett (1977)

and Babin *et al*. (2005) have found a direct positive relationship whereby satisfied customers are more likely to engage in word-of-mouth. Others have found a negative relationship and argue that dissatisfied customers engage more word-of-mouth (See Bearden and Teel, 1983; Westbrook, 1987; Hart *et al*., 1990). However, Engel *et al*. (1969) and Bettencourt (1997) have not found any significant direct relationship between the two variables. Moreover, Wirtz and Chew (2002) attempted to explain these conflicting findings in terms of an asymmetric U-shaped pattern, according to which extremely satisfied customers and extremely dissatisfied customers generate more word-of-mouth, whereas moderately satisfied customers generate less word-of-mouth. To contrast to these mixed findings about the details of the relationship, there is general agreement about the valence of the word-of-mouth. For example Bitner (1990) concluded that satisfied customers generate positive word-of-mouth, whereas dissatisfied customers generate negative word-of-mouth (Richins, 1983). Although some studies have concluded that satisfaction is a necessary but not sufficient condition for positive word-of-mouth, it is often agreed that positive feedback is always driven by satisfaction. Moreover, both the level and the valence of word-of-mouth are dependent on a range of other factors, such as culture, incentives, emotion, and perception of the fairness of the encounter. With regard to the second behavior noted above, many researchers have found a positive association between satisfactions and repurchase intention (See Bitner *et al*., 1990; Jones and Suh, 2000; Cronin and Taylor, 1992). However, Sivadas and Baker-Prewitt (2000) could not confirm such a direct relationship. In attempting to explain these conflicting findings, Rust and Zahorik (1993) concluded that a satisfied customer might switch to an alternative supplier with a view to increasing the present satisfaction level as compared to a dissatisfied customer who might remain with the existing supplier because no better alternatives are available to him. The customer feedback refers to the transmission of complaints (negative information) or compliments (positive information) to providers about the services used. Such information can be useful for providers in order to identify areas in which adjustments of performance are required. Very few researchers have examined the relationship between feedback and satisfaction. Even though the samples of feedback-providing customers have been small in most studies, Soderlund (1998) was able to conclude that dissatisfied customers are significantly more likely to provide negative feedback than are satisfied customers to provide positive feedback. Thus, as it is presumed in Widianti *et al*. (2015), customers who

provide negative feedback often seek to achieve some form of compensation as a result of the poor quality of services whereas, the provision of positive feedback is often perceived by customers as not being rewarding.

Public transport studies

In public transport literature, the study of Wen *et al*. (2005) and Lai and Chen (2011) also confirmed that Customer satisfaction has a positive and significant effect on behavioral intention and that satisfaction had a stronger and more consistent effect on purchase intentions than did service quality. Widianti *et al*. (2015) on the other hand, investigated customer satisfaction in public transport. In their studies, they found out that paratransit passengers attitude is highly related to overall paratransit performance, which not only includes the performance of paratransit services factor but also the performance of non-paratransit services factor such as price and image, compares to their own expectations. If the passenger feels that the overall performance matches or exceeds paratransit passenger's expectations, he will satisfied and vice versa. Therefore, it is also expected that customer satisfaction has a positive and significant impact on behavioral intention.

Public transport studies also encompass that of Felleson and Friman (2008) who reported on an annual transnational public transport customer satisfaction study in eight European cities (Stockholm, Barcelona, Copenhagen, Geneva, Helsinki, Vienna, Berlin, Manchester, and Oslo). Four satisfaction dimensions were delineated from a factor analysis of 17 attribute-related statements: system, comfort, staff, and safety. However, the results were not consistent in all cities, meaning that public transport services were perceived differently. Several factors contribute to the variation of customer perceptions, including those related to management (how the services were provided) and personal group (culture and tradition).

In her study of customer satisfaction with public transport in Indonesia, Budiono (2009) identified two groups of service attribute. The "soft quality" factor includes security issues and comfort, and the "functionality quality" consists of frequency, travel time, punctuality, and time, with the latter being the more influential on levels of the customer satisfaction. Tyrinopoulos and Antoniou (2008) found that for the case of bus operators, customers stressed service frequency,

vehicle cleanliness, and network coverage. A well-coordinated and reliable transportation environment is strongly preferred by all users. In their study of Swedish residents in Göteborg, Friman, Edvardsson, and Gärling (2001), and Friman and Gärling (2001) indicated a relationship between frequency of negative critical incidents and satisfaction with public transport (low frequency led to increased satisfaction). Moreover, the authors believed staff behavior was of significant importance in customer perception, along with service reliability, simplicity of information and design. In contrast, Lai and Chen (2011) suggested that service quality and perceived value should receive greatest attention in improving customer satisfaction, whereas Eboli and Mazzula (2007) stressed the role of service planning and reliability. Diana (2012) examined the degree of satisfaction of multimodal travelers with public transport services in Italy. Nine service aspects were measured. The author found that satisfaction and frequency of use of urban transit are not correlated.

A study of travel mode switching in Switzerland indicated that satisfaction and attitudes were related to behavior and habits (Abou-Zeid et al. 2012). Those who switched to public transport tended to be more satisfied than those who did not. Furthermore, as is often found in customer satisfaction studies (Song et al. 2012; Tribe and Snaith 1998), expectation is also a factor influencing satisfaction with public transportation experience. Additionally, public transport satisfaction is affected by travel time: longer travel times result in lower levels of satisfaction (Gorter, Nijkamp, and Vork 2000). Similarly, crowded or unreliable services and long wait times often make customers less satisfied (Cantwell, Caulfield, and O'Mahony 2009).

PART 2

EXPLORATORY RESEARCH ON PUBLIC TRANSPORT IN MAURITIUS

PUBLIC TRANSPORT IN MAURITIUS

The first transportation modes, for individuals and goods, available on the island were carts and carriages which were pulled by domestic animals. Then in the 1860s the railway system was introduced in Mauritius; system which prevailed from the 1860s till the 1960s. The railways have contributed to a great extent to the socio-economic development of the island, for example boosting the development in some of the rural villages, such as Black-River, where plantations of tobacco, sugar cane and aloes were the main economic activities. Goods and crops, mainly sugarcane, were carried with efficacy and in increasing quantity, through the railway system. The railway network also contributed to the field of education, as it provided transport to the major towns of the island, where the schools were located. The railway was dismantled in 1964; mainly due to the persistent unprofitability of the railway system from 1948 to 1953.

Since then, public passenger transport in Mauritius is primarily met through the extensive bus and taxi network across the entire island. As per the National Transport Authority, Mauritius (NTA) report 2016, the number of buses has increased from 2,580 in 2005 to 3083 in 2016, which represents an average annual increase of 1.8%. Around 750000 passengers travel by bus daily. The bus network is mainly organized around Port Louis and has over 220 bus lines and 900 bus stops. Presently, three types of bus operators are in service in the island: the National Transport Corporation (NTC which is a parastatal body), three major private operators and over 700 privately owned small companies grouped into 12 cooperatives. The bus industry has introduced a small number of direct and speedy services which are attractive to passengers. The public transport commuters have been experiencing considerable issues and difficulties over the past years, such as old fleet of buses, frequent breakdowns, inadequate maintenance, poorly equipped workshops and poor bus scheduling. This is perhaps due to the age distribution of the fleet of public buses which shows that, 35.3% of the buses are less than 5 years, 25.8% between 5 and 9 years and 38.9% between 10 and 18 years (Ministry of Finance and Economic Development).

The density of vehicles per kilometer has increased from 39 in 1980 to 233 in 2016; causing much congestion in the roads and as a consequence making the Mauritian transport system quite inefficient. The regions which are the most congested during peak traffic periods being Port-

Louis and Ebene. The accident rate has also been on the rise over the past years. One solution proposed by the Government to improve traffic on the Mauritian roads is to decrease the use of private transport and shift more towards the use of public transport. To encourage this shift, a bus fleet modernization programme has been put into place. The aim being to provide better bus services to passengers, with low floor buses and other facilities such as air-conditioning and WIFI. The government highlights the need of a revolution in the public transport system which will be driven by innovation and quality and which will provide efficacy. Important projects which are already well underway are the replacement of all NTC ageing fleet with 500 new low-floor buses and the installation of 400 bus shelters. The NTC has also signified its intention to improve its services, for example by using a GPS system to manage its fleet or by launching a website offering the bus timetables.

Given that the service in the bus industry is not always up to the expectation of all passengers, some prefer taxis as an alternative mode of public transport. The taxi-cars have increased from 6,900 in 2010 to 7000 in 2016 with an average annual increase of 0.1%. Broadly, there are three types of taxi service: hire per trip, contract cars which are often hired by tourists for a daily rate and taxi-trains. However, this industry has grown in ways which have been insufficiently controlled, and licenses granted for patterns of operation which do not best serve the public.

Over the past years, the Government has been putting much emphasis upon measures that will enhance the road network and traffic in general. Taking into consideration the fact that the number of vehicles on the Mauritian roads has been increasing and at the same time causing more traffic congestion, actions must be taken to remedy the situation. In 2015, the Road Decongestion Programme(RDP) was put in place, having as aim to decrease traffic congestion in specific regions and it mainly consists of constructions to improve the road system in Mauritius. Following this measure, as a complementary action, in budget 2016-2017, provision was made for the introduction of the Metro Express (Light rail). It aims at eliminating the inconveniences of traffic congestion, for example employees waste much time and energy in traffic jams; the light rail system will thus improve their travelling conditions and productivity. Congestion is thus perceived as having a negative indirect effect upon the economy. Other advantages of the rail system would be a lower consumption of petroleum and less pollution. The Metro Express

project should start with the construction of Victoria Terminal and should consist of around 20 stations, linking Port-Louis to Curepipe.

Table 1.2 - Vehicles' registered, 2006 - 2015

Number

Type of vehicle	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Car	91,911	99,770	109,507	117,890	127,363	136,225	147,733	160,701	173,954	188,299
(of which taxi car)	(6,860)	(6,885)	(6,941)	(6,921)	(6,924)	(6,907)	(6,905)	(6,915)	(6,911)	(6,907)
Dual purpose vehicle	43,221	44,635	46,021	47,146	48,271	49,132	50,116	49,730	49,503	49,301
Double cab pickup [2]	-	-	-	-	-	-	-	1,155	2,065	2,689
Heavy motor car	1,118	1,223	1,290	1,275	1,249	1,230	1,244	1,250	1,271	1,284
Motor cycle	33,936	36,969	40,804	44,222	48,655	53,410	59,637	65,827	72,067	77,603
Auto cycle	104,238	105,637	107,184	108,713	110,674	112,296	113,871	114,958	115,784	116,085
Lorry and truck	12,272	12,536	12,726	12,950	13,186	13,539	13,902	14,061	14,243	14,372
Van	24,522	24,934	25,334	25,622	25,914	26,090	26,293	26,624	26,890	27,229
Bus	2,612	2,753	2,762	2,803	2,845	2,912	2,957	2,963	3,006	2,980
Tractor and dumper	3,001	3,025	3,045	3,102	3,119	3,173	3,202	3,226	3,254	3,244
Prime mover	436	452	505	558	596	650	689	715	734	774
Trailer	1,756	1,795	1,809	1,823	1,821	1,834	1,845	1,846	1,842	1,850
Road roller	96	96	96	97	98	99	101	102	103	103
Other	321	320	323	319	324	329	336	337	336	331
TOTAL	**319,440**	**334,145**	**351,406**	**366,520**	**384,115**	**400,919**	**421,926**	**443,495**	**465,052**	**486,144**

[1] Excluding pedal cycles, but including government vehicles.

[2] New category of vehicle defined in Road Traffic Act as amended by Act No. 27 of 2012.
Prior to the year 2013 'double cab pickup' was included in 'dual purpose vehicle'

Table 2: Bus Operation Statistics

	Unit	2007	2008	2009	2010	2011 [2]
Operational bus fleet (as at 30th June)	Number	1,878	1,898	1,905	1,848	1,853
Total vehicle - journeys	Thousand	4,618	4,789	4,823	4,899	4,905
Average vehicle - journeys per day	"	8.2	8.4	8.4	8.8	8.8
Total vehicle - kilometres	"	95,117	99,203	96,807	97,548	97,582
Average vehicle - kilometres per day	"	169	174	169	176	176
Total gross receipts	Rs Mn	2,048	2,152	2,169	2,219	2,239
Average gross receipts per day	Rs '000	6,301	6,621	6,674	6,827	6,889

Table 1.8 - Bus operational statistics[1], 2011 - 2015

	Unit	2011	2012	2013	2014	2015 [2]
Operational bus fleet (as at 30th June)	Number	1,853	1,884	1,918	1,986	1,943
Total vehicle - journeys	Thousand	4,905	4,900	4,808	4,805	4,820
Average vehicle - journeys per day	"	8.8	8.7	8.4	8.1	8.3
Total vehicle - kilometres	"	97,582	96,314	96,392	97,825	98,020
Average vehicle - kilometres per day	"	176	170	168	164	168
Total gross receipts	Rs Mn	2,239	2,247	2,405	2,444	2,452
Average gross receipts per day	Rs '000	6,889	6,914	7,400	7,520	7,545

[1] refer only to buses with a Road Service Licence, i.e., buses which operate on proclaimed routes and charge individual fares. Including data on special trips.

[2] provisional

Table 1.7 - Age composition of operational bus fleet ¹, 2014 - 2015

(as at 31st December)

Age group (Years)	2014		2015	
	Number	%	Number	%
< 5	640	32.6	560	28.9
5 < 10	699	35.6	668	34.5
10 < 15	440	22.4	520	26.8
15 < 20	184	9.4	189	9.8
TOTAL	1,963	100.0	1,937	100.0

¹ Refers only to buses with a Road Service License, i.e, buses which operate on proclaimed routes and charge individual fares

Source: Central Statistics Office

FOCUS GROUP DISCUSSIONS (PASSENGERS)

Prior to designing the questionnaire survey for the groups of respondents under study, that is Mauritian passengers at large and also tourists, we have conducted a series of focus group (with around 10-12 people in each group; 8 focus groups for Mauritian passengers at large and 4 focus groups for Tourists) discussions which will be used a crucial input in the design of the survey questionnaire. The main themes for each groups are summarize below

I. Mauritian Passengers: Summary of Focus group Discussion

Discussion of Service Quality and other determinants of Intention to use Public Transport in Mauritius

Tell us more about your overall experience as a user of public (bus) transport in Mauritius.

- Public transport is very important for many people (just like in many countries in the world), it is in fact crucial, however even if we can see lately some improvements (and some marked improvements from eg RHT), much need to be done to upgrade the overall state of public transport). As is it is still closer to the Indian experience as compared to for eg the European experience (as least near to it)

- In general the experience is more or less average, not to say a bit below average.

- Reliability and punctuality are the major issues, not to mention quality of bus as well (but this is improving)

- Still too many breakdowns on roads

- Also no time table respect most of the time

- Noisy buses

- Cleanliness

Which element (s) do you take into account when evaluating the quality of public transport services?

- Quality of the bus (cleanliness, seats quality, leg spacing, well maintained physically (inside and outside), well air conditioned in summer, low floor, International standards/low emission bus)

- In this era internet availability is important

- Safety aspects: bus driving experience (soft required, especially true for private operators), bus appearance to be safe and well maintained (de visu), enough holding aids inside security (cameras are essential)

- Reliability - very important- make sure no breakdown (As severe repercussions) - at least spare bus available within 15 mins in rare cases breakdown.

- Too many breakdowns (unacceptable especially for big companies).
- Punctuality - although Time table exists from NTA, still, you are always uncertain if the bus will come or has gone! Real time tracking (RHT has introduced) is essential in this modern era.
- Service quality - conductor, driver, station manager/traffic supervisor and even ticket examiner...not there yet wrt customer care- even for driver (driving habits).
- Price of the service v.s alternatives (taxi train etc).overall reasonable (but need something special for the loyals to encourae them stay, weekly pass etc)

What are the factors that influence your overall experience as a customer of public transport?
- Quality of bus
- Quality of service (including customer care+ cleanliness)
- Punctuality**
- Reliability **
- Security
- Price
- Availability of information on the trip

Are you satisfied with the services provided by public transport providers, if yes/no, why would you say so?
- A bit less than average in general
- Quality and cleanliness of bus need serious attention
- Punctuality of buss (timeliness)
- Again reliability issues (lack of information in scheduling and timings and itinerary)
- Customer care and driver habit not to the level in many cases (there are exceptions.) + station managers/traffic officers etc as well
- From most respondents :RHT transport is a good case study of what comes nearest to Expectations.

What should be done for you to continue/ start using public transport?

    -Bus lanes....priority.....bus pass incentives (couple with parking lots)

    -Free Internet connection in board in all buses

    -Loyalty programmes ..weekly, daily or monthly pass (in addition to per rides charges)

    - Feedback forms on services (driver, conductors and other)

  - Online time table + real time bus tracking

  - Prepaid fare payment (eg oyster carte, or Etoile carte of RHT)

  - More of premium services (with added fare of course.....better leg space and seats, light snacks

    available or coffee, newspaper, internet connection)..New channels.

    - Buses should be more standardised with specificities fro the Ministry (appears there is a start)-   noise, pollution, amortiseur comfort, seat quality, time table cleaning (with records on bus).

 - Cleanliness schedules on board (not only cleaning at bus depot in morning , but a good interval, eg cleaning services on bus stations

  - Ensure reliability and new buses at all time (there should be a maximum bus age)

  - Good customer care   (As far as possible keeping a driver/conductor team for a specific route - building some 'bondings' with customer)

 - Punctuality of bus is essential

  - Frequent update on disruption on services or state of services (ie if all ok, not probs etc)....online tracking and real time information.

   II. **Tourist Passengers: Summary of Focus group Discussion**

Discussion of Service Quality and other determinants of Intention to use Public Transport in Mauritius

• Tell us more about your overall experience as a user of public (bus) transport in Mauritius.

- In general the experience is average and lots of room for improvements

- Punctuality is a major issues (actually tourist do not know the schedules itself, of there is one)

-Quality of bus as well could be much better in many cases

- Some case of lack of Cleanliness noted

Which element (s) do you take into account when evaluating the quality of public transport services?

- Reasonable bus scheduling and intervals – affixed time table and real time time tabling
- Quality of the bus (cleanliness (internal and external), Seats quality (including leg room), air conditioned, low floor, International standards buses)
- Maybe internet availability is a must + also to allow use of GPS
- Safety aspects : Camera in all buses
- Punctuality – have note seen any timetable and at many times , buses are not punctual in MUR
- Service quality – this encompasses mainly conductor, driver courtesy but also the station manager crucial assistance as well.
- The interaction process.
- use of common language somehow (English and French)
- Price of the service is also an element

What are the factors that influence your overall experience as a customer of public transport?

- Quality of service
- Punctuality
- Security
- Price
- Information Availability
- Assistance from the transport people

Are you satisfied with the services provided by public transport providers, if yes/no, why would you say so?

- Average in general

- Quality of bus need improvements and need to be aligned with international standards (although their appear a move towards this with the low floor buses lately)

   - Information availability is crucial especially for tourists

   - Timeliness as per announced time

   -Customer care not bad (at least wrt to tourists) but personal could be better trained on dedicated tourism routes

   - In some cases driver habits need some attention

What should be done for you to continue/ start using public transport?

   - Online time table + Real time bus tracking + Information availability

   -Free Internet connection in all buses

   - Dedicated Bus lanes could be, as in many countries, attracting and also viewed to really prioritize buses

  - Prepaid fare payment or online booking (if possible)

   - Still better quality Buses (seats, leg rooms, information about destination, pamphlet for tourist)

   - Cleanliness is an important element

 - Punctuality of bus is essential

   - Careful selection of personnel on some routes (language barrier)

   - More important remains this element of information availability and also personel interactions

III. Summary of Focus group Discussion: Bus Conductors, Drivers, Traffic Officers and Supervisors:

3 Focus groups with Bus conductors and Drivers from different major bus companies (10-12 participants) in Curepipe, Quatre Bornes and Port Louis respectively were conducted in July /August 2018 (Anonymous)

Participants were asked to discuss about:

If and why the general public is increasingly using less of bus public transport

What should be at the level of the operators and the authorities to encourage the use of bus public transport?

Main findings

Ai) Is there a decrease in passengers?

- Overwhelming majority agreed there is a problem w.r.t to public bus transport usage in general in the country and that usage is on the decreasing trends as witnessed by the bus occupancy rates. This is more pronounced for passengers traveling to and from the capital city of Port Louis.

- For some very specific routes usage is not a relatively big problem, especially long distance routes which are economically not viable for alternative operators where passengers do not have the alternative to use other modes of transport (or very few options available) (eg Route 197, Riv Des Galets Port Louis, NTC); or for few RHT which give some dedicated service to the capital city with just in time services in very modern buses which are well equipped (Rt 174 & other routes).

- Private Bus Operators are of the opinion that there has been a drop in passengers as well, although relatively less as compared to the main operators, i.e NTC, RHT and UBS

Aii) Why a decrease?

- For the main operators (UBS and NTC), they mainly face disloyal completion from Illegal mini vans and cars (Taxi Marron) which operate on their most profitable routes. Authorities have failed to control this phenomenon and it has accentuated through years. This is the main issue for a drop in passengers.

Characteristics for such Illegal operators:

They offer express services and are better able to circumvent traffic problems.

They charge nearly the same price/fare as public bus transport.

They have already secure a dedicated clientele (they still remain illegal as they do not have permit

Some even operate on a stage (bus stop) to stage or even door to door basis.

They operate on the same schedules as public buses (as they are well documented wrt to the time tables). They thus operate a minute ahead of the public bus transport.

They have a good network among themselves and are at times aggressive vis a vis public bus operators staff.

- Too many school services during the peak time and thus less bus force on the road at this much required time (disturbing operational planning). This result in issue of adherence to time table, punctuality and thus lack of confidence in the service.

- Increased Car Pooling.

- Respondents are however well awared of the constraints that the companies face and which may have 'pushed' away passengers to some extent (mostly for UBS and NTC)

- Issues related to i) Age of bus fleet (related to problems of breakdown and reliability) ii) Interior Quality and Amenities of Buses and iii) Inadequate amount of bus force to serve the routes (punctuality problem).

What should be at the level of the operators and the authorities to encourage the use of bus public transport?

Most participants were of the opinion that the authorities should really be tracking the illegal operators in a sustained effort (actually there are adhocs attempts). Authorities need to be much more stringent wrt to regulations and laws. After all illegal operators have safely and insurance cover issues as well. Political will is important as well.

At the same time, Operators should urgently upgrade their service and 5 aspects are important wrt to that

- Additional buses to join the existing fleets of bus companies (to ensure adherence to time table and reliability) coupled with immediate scrapping of old buses.

- Good quality and comfortable buses (similar to European quality and standards)

- Adoption of innovative instruments/processes (including Real time table and Bus tracking system, Smart bus stops and Stations, computer aided bus scheduling and staff allocation, smart card payment, loyalty card, season cards)

- Constant Training of bus transport staff (wrt customer care and passenger management in buses and also wrt to innovative processes).

- Increased Security aspect in buses, stations and in general.

- Many respondents discussed and commended the successful case study of one of their peers with respect of its recent strategy based on the above. They believed that this has resulted in an enhanced perception of the bus company and its services during the last few years. Moreover, this has also led to increased loyalty and reliability.

- Public bus transport (As well as MetroExpress transport) is crucial in the tackling of congestion in the country and government should realise that it should support this sector to a large extent as the benefits of reduced congestions and accidents are far more that any kinds of government transfers (subsidies or investment) to the public transport sector. A large injection fund is required to upgrade this sector on the overall and government should make a special effort for that.

- While they agree that car pooling is desirable, authorities should restrict to some extent car entry (with low occupancy) in the capital city (as this is where the biggest problem lies) by considering a toll system. This is important to encourage a switch to public transport (including bus and metro). However, this should only arise after a major upgrading of the public transport system and infrastructure.

PART 3

QUANTITATIVE RESEARCH ON DETERMINANTS OF BEHEVIOURAL INTENTIONS TOWARDS PBT IN MAURITIUS

PROFILE OF RESPONDENTS

Gender

Gender	Frequency	Percentage
Male	202	44.9
Female	248	55.1
Total	450	100

The majority of respondents were female (55.1%, n = 248). The distribution of respondents with regards to gender is quite close to the population characteristics.

Age

The mean age of respondents was found to be 33.94. The standard deviation of 12.5 indicates that the age was fairly well distributed. However, it can be observed that the distribution is positively skewed.

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Age	17	73	33.94	12.522	.656	-.570
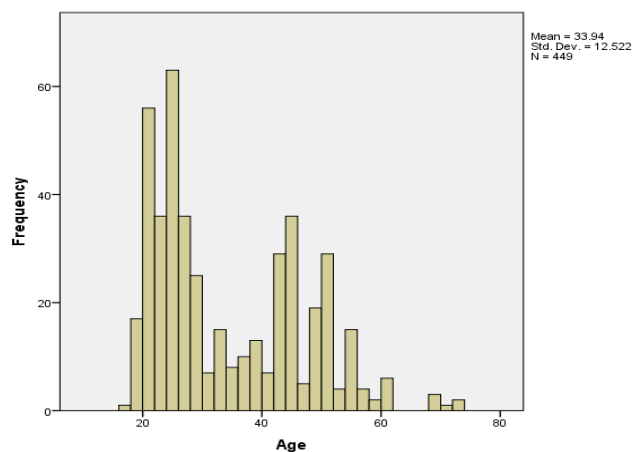
Education Level

The respondents were reasonably well distributed with regards to their level of qualifications. 22.2% reported to possess a school certificate and 18.4% reported to have completed their higher school certificate. 22% were graduates and 9.8% of them had a master's degree. Only one respondent was a PhD holder.

Education	Frequency	Percentage
Primary	44	9.8
SC	100	22.2
HSC	83	18.4
Diploma	59	13.1
Bachelors	99	22.0
Masters	44	9.8
PHD	1	.2
Others	20	4.4
Total	450	100.0
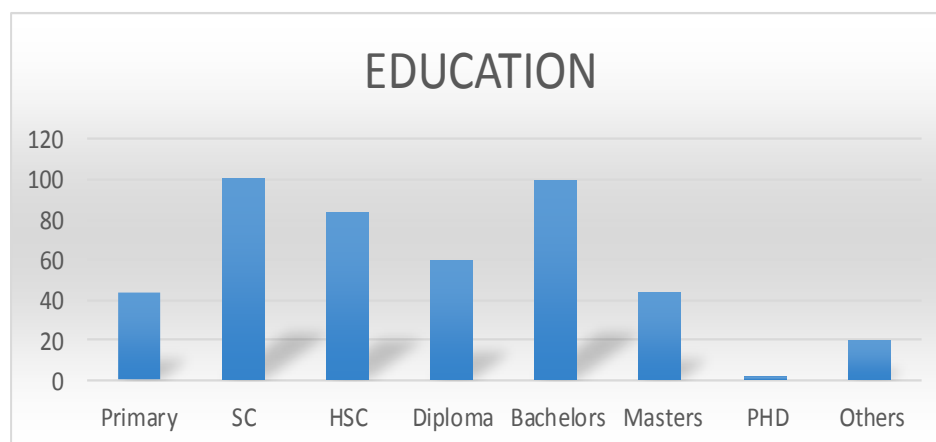
Income Level

The majority of respondents reported to have an ranging from 5000 to 25 000 (69.6%). 9.6% reported to have an income greater than Rs 35 000.

Income Level	Frequency	Percentage
<5000	65	14.4
5000-15000	156	34.7
15001-25000	157	34.9
25001-35000	29	6.4
>35000	43	9.6
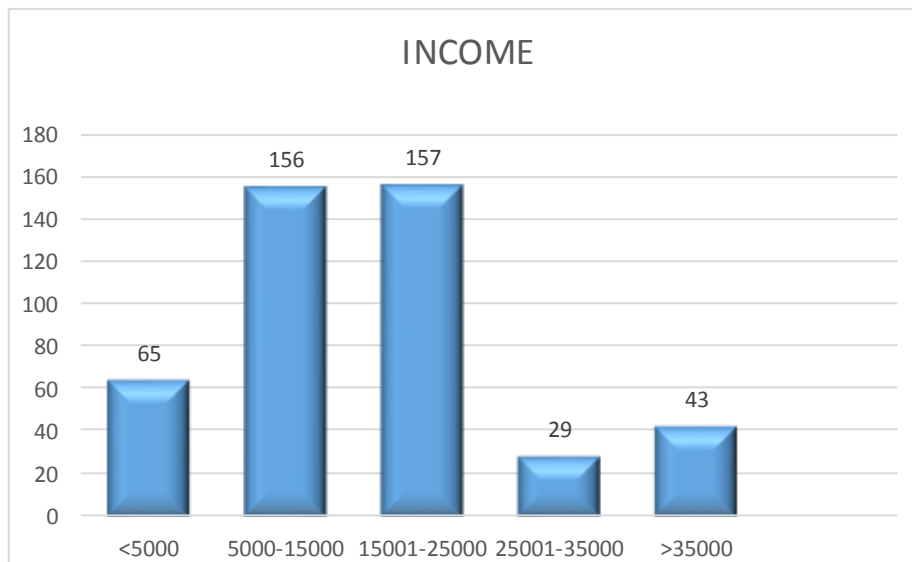
Total	450	100.0

Region

District	Frequency	Percentage
Riv du Rempart	51	11.3
Port Louis	32	7.1
Moka	112	24.9
Savanne	36	8.0
Flacq	46	10.2
Black River	22	4.9
Grand Port	31	6.9
Pamplemousses	30	6.7
Plaine Wilhems	90	20.0
Total	450	100.0

Most respondents surveyed were from either the Plaines Wilhems (20%) or the Moka district (24.9%).
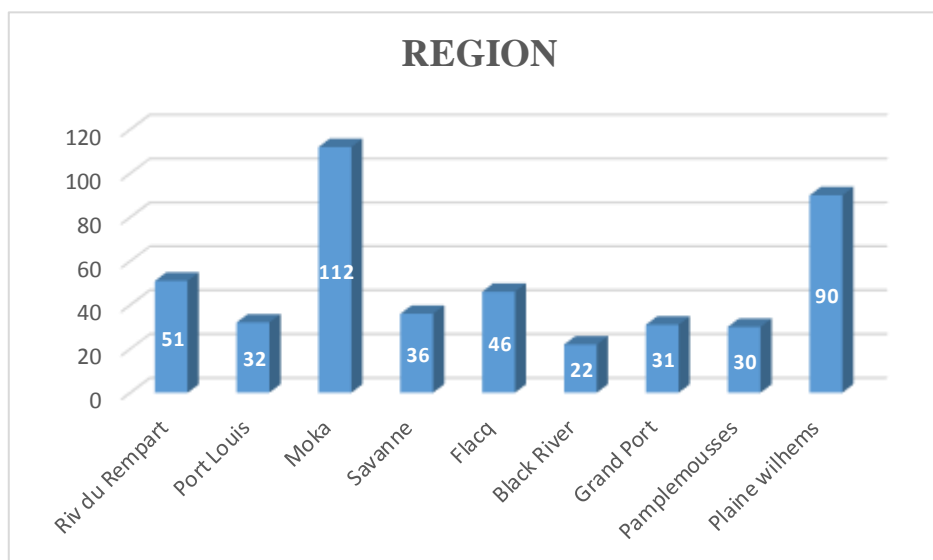
Employment Status

Among the 450 individuals surveyed, a vast majority of 62.9% reported to be employed in an organisation. 7.6% stated that they were self-employed and 2.7% were unemployed.

Employment Status	Frequency	Percentage
Self-employed	34	7.6
employee	283	62.9
unemployed	12	2.7
student	85	18.9
housewife	19	4.2
other	13	2.9
retired	4	.9
Total	450	100.0

UNIVARIATE ANALYSIS

ACCESS TO CAR

Access To car	Frequency	Percentage
Yes	270	60.0
No	180	40.0
Total	450	100.0

The majority of the respondents surveyed (60%; n = 270) reported to have access to a car as their transportation mode. While the remaining 40% (n = 180) stated that they did not have car access as a personal mode of transport.

REASON FOR TAKING PUBLIC BUS TRANSPORT

	Responses		% of cases
	n	%	
Price	153	14.5%	34.4%
Comfort	37	3.5%	8.3%
Speed	44	4.2%	9.9%
Frequency	73	6.9%	16.4%
Environmental Reasons	52	4.9%	11.7%
Do not have driving licence	124	11.7%	27.9%
Do not have vehicle	108	10.2%	24.3%
It is my unique alternative	96	9.1%	21.6%

lack of parking	129	12.2%	29.0%
Traffic congestion	103	9.7%	23.1%
You cannot use your vehicle	67	6.3%	15.1%
Other	71	6.7%	16.0%

MOTIVATION TO TAKE PBT

	Responses		**% of cases**
	n	**%**	
online information system	83	10.3%	19.0%
Smartcard	106	13.2%	24.3%
Daily/Monthly Pass	165	20.5%	37.8%
Wifi Availability	133	16.6%	30.5%
Bus(Priority Lanes)	191	23.8%	43.8%
Others	125	15.6%	28.7%

BUS SERVICE PROVIDER

Bus Service provider				
	Frequency	Percent	Valid Percent	Cumulative Percent
TBS	41	9.1	9.1	9.1
UBS	65	14.4	14.4	23.6
RHT	70	15.6	15.6	39.1
NTC	126	28.0	28.0	67.1
Individual bus	128	28.4	28.4	95.6

MBS	20	4.4	4.4	100.0
Total	450	100.0	100.0	

Out of the total 450 respondents, the majority (28.4%, n=128) stated that the bus service provider they used the most was individual or coorperative followed closely by the National Transport Corporation (28.0%, n = 126). The other bus service providers were all fairly well represented.
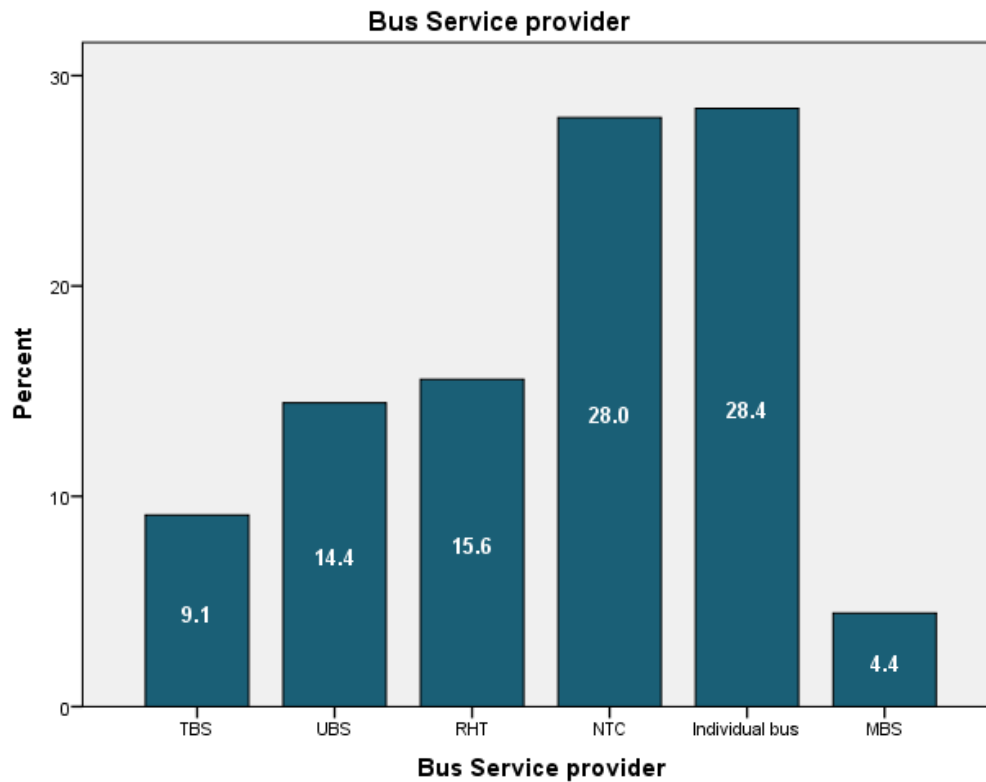
SERVICE QUALITY DIMENSIONS

Service quality comprises of eight dimensions. These are tangible services;

Tangible Services

Statements	Mean	SD	Skewness	Kurtosis
Cleanliness of the stations	3.27	1.381	.100	-.545
Lightning in stations	3.53	1.446	-.016	-.587
Lightning on vehicle	3.96	1.313	-.167	-.344
Temperature and ventilation on vehicle	3.61	1.290	-.156	-.315
Temperature and ventilation in stations	3.66	1.298	-.285	-.137
Appropriate and safe driving	3.59	1.302	-.446	-.437
Composite Score	*3.56*	*.892*	*-.213*	*.233*
$\alpha = 0.781$				

From the above table, it can be observed that lighting on vehicles has the best rating with the highest mean of 3.96 and SD of 1.313 as compared to cleanliness of the station with the lowest mean of 3.27 and SD of 1.381. Overall the services pertaining to the physical infrastructure of transport services were found to be below moderate standards with a composite score of mean 3.56 with a standard deviation of .892.

Accessibility

Statements	Mean	SD	Skewness	Kurtosis
Easy access of persons with reduced mobility	3.67	1.361	-.131	-.469
Easy access to the bus from the streets/bus stops	3.73	1.545	.013	-.529
Ease of purchasing tickets	4.30	1.537	-.169	-.514
Easy connection with other transportation modes such as bike rental, taxis, private cars, etc	3.80	1.449	-.220	-.266
Composite score	*3.87*	*1.07*	*-.008*	*.126*

Overall accessibility was given a relatively a rating close to moderate by the respondents surveyed (M = 3.87, SD = 1.07). It is to be noted that accessibility in terms of ease of purchasing ticket was quite high (M = 4.30) compared to easy access of persons with reduced mobility with a mean of 3.67.

Reliability of Services

Statements	Mean	SD	Skewness	Kurtosis
Frequency of the bus service	3.74	1.535	.001	-.594
Waiting time at the bus station/stop	3.52	1.610	.211	-.560
Average duration of the trip	3.78	1.465	.040	-.161
Operating hours of the service	3.76	1.428	.044	-.212
Regularity of the service (absence of interruptions caused by breakdown or incidents)	3.59	1.383	-.025	-.444
Punctuality of the service	3.63	1.506	.024	-.566
Proximity of stops to origin and/or destination	3.69	1.476	-.134	-.474
Composite score	*3.67*	*.937*	*-.149*	*.770*

The above table shows a composite mean of 3.67 which imply that most of the respondent responded slightly negatively with regards to the reliability of service. Waiting time at the bus station has the lowest mean of 3.59.

Customer care

Statements	Mean	SD	Skewness	Kurtosis
The employees (driver/conductor/others) willingness to help passengers	3.47	1.455	.217	-.337
Effectiveness and speed of employees to respond, give information and deal with user´s daily problems	3.57	1.373	-.062	-.175
Employees understanding of passengers' need	3.41	1.440	.199	-.159
Courtesy of the employees	3.31	1.214	-.182	-.045
The appearance of the employees	3.55	1.362	-.011	-.080
The degree of familiarity with employees (drivers/ conductors. etc)	3.30	1.335	-.194	-.716
Performance of the Customer Service (offices, web site, contact by phone, deal with complaints, etc.)	3.18	1.365	.033	-.349
Composite score	*3.40*	*.860*	*-.470*	*.226*

The above table shows the performance of customer care based on the interactions that customers have with the employees of the bus service providers. Overall the composite mean is 3.40 which imply that most of the participants believe that the quality of customer care quite low.

Security

Statements	Mean	SD	Skewness	Kurtosis
Sense of security against theft and aggression in stations and on vehicles	3.50	1.458	.041	-.660
Sense of security against accidents while traveling (crash/vehiclederailment)"	3.59	1.404	.200	-.152
Sense of security against slipping, falling and accidents at vehicle doors	3.50	1.432	.096	-.618
Signage of emergency exit and extinguishers	3.67	1.535	.022	-.400
Composite score	*3.57*	*1.08*	*-.163*	*-.206*

From the above table, it can be evaluated that security has a composite mean of 3.57 which implies that respondents are of the view that security level is quite low.

Environmental Pollution and Disturbance

Statements	Mean	SD	Skewness	Kurtosis
Noise level on the vehicle	3.66	1.678	.133	-.686
Vibration level on the vehicle	3.75	1.644	-.047	-.808
Noise level in stations	3.84	1.604	.116	-.739
Composite score	*3.75*	*1.41*	*.132*	*-.430*

The results show that overall respondents view environmental pollution and disturbance has being of moderate level. Thus noise level in stations has a highest mean whereas noise level on the vehicle has a lowest mean of 3.66.

Individual Comfort

Statements	Mean	SD	Skewness	Kurtosis
Seat availability in stations and bus stops	3.32	1.407	.186	-.180
Level of comfort on vehicle (seat availability or enough room while standing up)"	3.07	1.420	.141	-.917
Adequacy of leg space between seats	3.34	1.484	.010	-.924
Composite score	*3.24*	*1.14*	*.122*	*-.222*

Overall respondents rated the quality of individual comfort to be quite low, with an overall mean of 3.24. The standard deviation of 1.14 further show that most respondents tend to agree with

this level of rating of individual comfort. Comfort on vehicle, is the indicator which obtain the lowest rating with a mean of 3.07.

Information

Statements	Mean	SD	Skewness	Kurtosis
Updated, precise and reliable information in stations (price. Operating hours. stops. service interruptions. etc.)	3.33	1.425	.186	-.180
Updated, precise and reliable information on vehicles (operating hours, stops, service interruptions, etc.)	3.25	1.417	.176	-.917
Clear and simple notice boards with information and directions in stations	3.38	1.396	.002	-.924
Information available through other communication technologies (internet, phone, mobile applications, etc	2.89	1.488	.293	-.888
Composite score	*3.21*	*1.15*	*-.065*	*-.459*
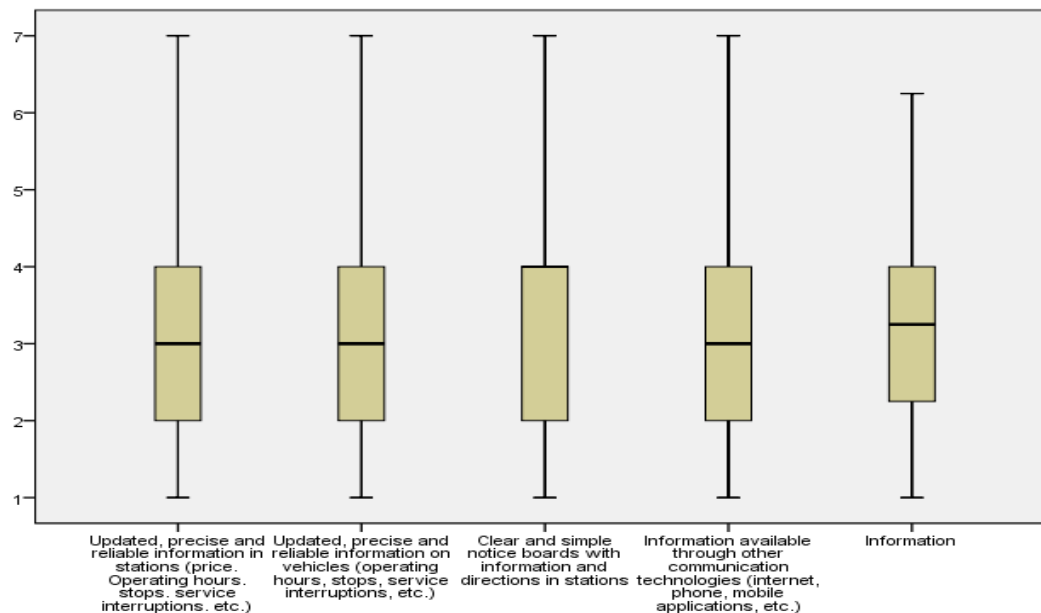
The adequacy of information provided by bus service providers is considered to be of quite low standard by the respondents (M = 3.21). The lowest mean is attributed to information obtained using ICT with a mean of 2.89, indicating that the PBT service providers are failing to efficiently use these modes of communication.

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Attitude towards Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
I find that traveling by Public Bus Transport is: Bad - Good	3.23	1.021	-.430	-.131
I find that traveling by Public Bus Transport is: Unpleasant-Pleasant	3.10	1.124	-.208	-.553
I find that traveling by Public Bus Transport is: Awful-Nice	3.04	1.102	-.150	-.426
I find that traveling by Public Bus Transport is: Unenjoyable-Enjoyable	3.16	1.118	-.256	-.627
Composite score	*3.13*	*.921*	*-.241*	*.053*

Measured on a five-point Likert scale, a mean of 3.13 indicates that overall the respondents report a neutral attitude towards public bus transport in Mauritius (SD = 0.921). The relatively low standard deviation further indicates that the responses tend to be clustered around the mean and henceforth demonstrate that most respondents have a moderately good attitude towards public bus transport in Mauritius.
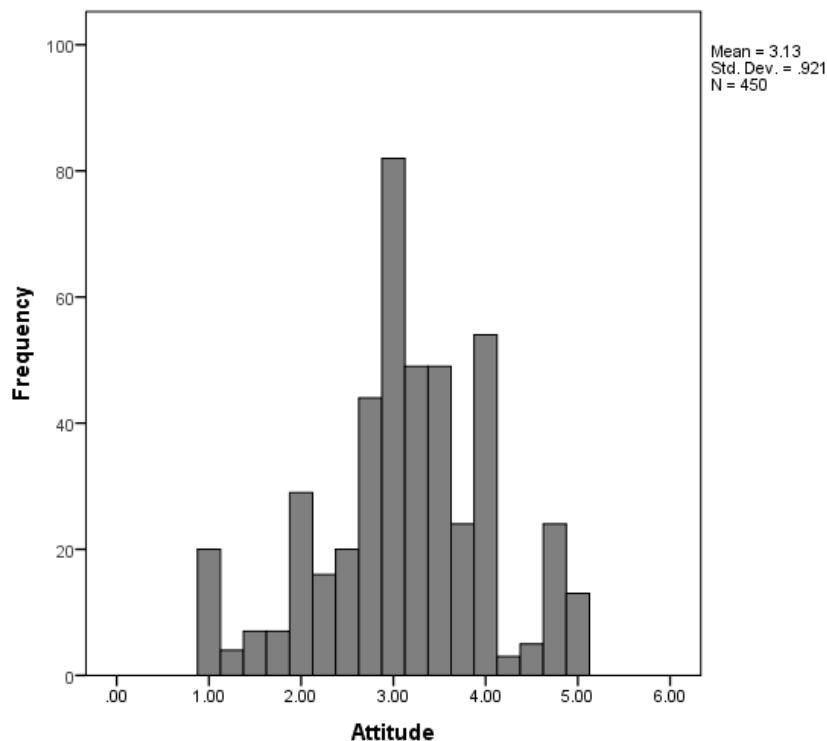
Subjective Norms towards Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
Most people who are important to me would support that I take PBT to travel	3.67	1.466	.076	-.393
Most people who are important to me think I should take PBT to travel	3.65	1.533	-.063	-.702
Composite score	*3.66*	*1.37*	*-.054*	*-.477*

A composite score of 3.66 for subjective norms indicates that overall respondents rated the extent to which people they knew view the usage of public bus transport as a good behaviour is lower than moderate. The standard deviation of 1.37 does show that there are substantial deviations from the average and that a relatively large number of respondents perceive subjective norm to be higher than at moderate level while others perceive it to be even lower than the mean.

Personal Norms towards Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
Because of my own values/principles I feel an obligation to use PT instead of the car for everyday trips"	3.70	1.454	.018	-.447
Regardless of what other people do, because of my own values/principles I feel an obligation to use PT instead of the car for everyday trips"	3.60	1.576	.030	-.535
Composite score	*3.65*	*1.38*	*-.068*	*-.474*

The surveyed respondents express a quite low level of personal norms with regards to the use of public bus transport with a mean value of 3.65. There is however, a relatively high level of variation in the responses as indicated by the standard deviation 1.38.

Perceived Behavioural Control towards Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
For me to take PBT to travel is easy	4.13	1.537	-.144	-.862
My freedom to take PBT to travel is high	4.29	1.558	-.332	-.669
Composite score	*4.21*	*1.39*	*-.247*	*-.513*

Respondents report a relatively high level of perceived behavioural control with regards to the use of public bus transport services in Mauritius (M = 4.21).

Perceived Negative Consequences of Car Usage

Statements	Mean	SD	Skewness	Kurtosis
"When I use the car, exhaust gases are emitted which have a negative effect on the global climate system"	5.08	1.527	-.573	-.322
When I use the car, exhaust gases are emitted which endanger the health specially of children and older people	4.93	1.605	-.398	-.725
My personal car use has negative impacts on the living quality of later generations	4.35	1.645	.017	-.902
Composite score	*4.79*	*1.438*	*-.146*	*-.687*

With a composite score of 4.79 on a seven point Likert scale, the results show that respondents perceive the usage of case to have negative consequences. The negative impact towards the environment had the highest mean (M=5.08), whereas perception with regards to the negative impacts on the quality of life of future generations obtained a lower mean score of 4.35.

Perceived Value of Public Bus Transport Services

Statements	Mean	SD	Skewness	Kurtosis
Appropriateness of PBT price under given quality	3.38	1.425	-.027	-.707
Overall value I get from the PBT services for what I give	3.45	1.326	-.174	-.658
Overall value I get from the PBT services for my money	3.61	1.502	-.078	-.619
Composite score	*3.48*	*1.277*	*-.236*	*-.436*

The perceived value of public bus transport in Mauritius by the respondents is quite low. The mean score of 3.48 indicates that respondents opine that they do not obtain high enough quality for what they pay for.

Satisfaction with Public Bus Transport Services

Statements	Mean	SD	Skewness	Kurtosis
I feel satisfied with the PBT system overall performance	3.63	1.559	.045	-.838
The performance of PBT system has met my expectations	3.35	1.464	.227	-.376
The PBT system is quite close to my ideal	3.15	1.465	.159	-.787
Composite score	*3.38*	*1.373*	*.151*	*-.533*

The results show that the surveyed respondents have a quite low level of satisfaction with respect to the services provided by public bus transport services in Mauritius (M = 3.38).

Attractiveness of alternatives to Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
There are good alternatives of public transportation to the Public Bus Transport (e.g. car, motorcycle)	4.50	1.792	-.653	-.448
There are other modes of transportations that meet my needs well	4.90	1.508	-1.015	.535
Other modes of transport (e.g car, motorcycle) offer more advantages than PBT.	5.30	1.541	-.981	.659
Composite score	*4.90*	*1.326*	*-.985*	*1.309*

Respondents perceive alternatives to public us transport to be very much attractive, with a mean score of 4.90. The indicator with the highest mean score is "other modes of transport offer more advantages than public bus transport." Respondents therefore believe that bus transportation falls short of the benefits offered by alternative modes of transports such as car.

Intention to Use Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
My intention to use PBT in the next few weeks for usual trips here in Mauritius is	3.40	1.150	-.512	-.440
How likely is it, that in the next weeks you will use PBT for usual routes here in Mauritius	3.60	1.146	-.804	.021
I intend to use PBT in the next few weeks for my usual trips here in Mauritius	3.65	1.127	-.771	.045
Composite score	*3.55*	*1.029*	*-.688*	*.084*

Intention to use public bus transport was measured using a five-point Likert scale. The mean score of 3.55 shows that respondents are moderately likely to make use of public bus transport in the near future. However, this can be due to the lack of access to alternative modes of transportation. Further analysis is conducted in the next section.

Actual Usage Behaviour

Usage of Bus Public Transport During the last Week

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	158	35.1	35.1	35.1
Valid	Yes	292	64.9	64.9	100.0
	Total	450	100.0	100.0	
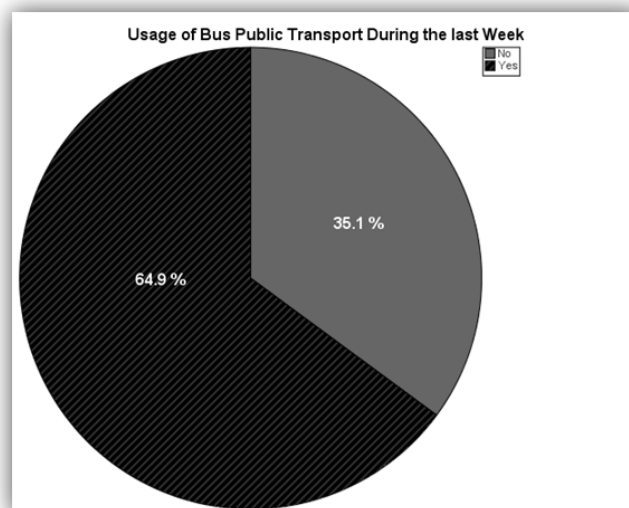
Habit

	Frequency	**Percentage**
Did not Use	13	2.9
One Day	48	10.7
Two Days	111	24.7

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Three Days	91	20.2
Four Days	88	19.6
Five Days	35	7.8
Six Days	38	8.4
Seven Days	25	5.6
Missing Data	1	0.2
Total	450	449

	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Usage of A(Summated Score)	0	5	2.34	1.522	.609	-1.028

	Responses		% of cases
Usage of PBT to:	**n**	**%**	
Shop	174	16.6%	39.6%
Cinema	186	17.7%	42.4%
Restaurant	142	13.5%	32.3%
Place of work	337	32.1%	76.8%
Relative's place	210	20.0%	47.8%

Switching Intention from Alternative Mode of Transport to Public Bus Transport

Statements	Mean	SD	Skewness	Kurtosis
My intention to switch from motorcycle/ car to Bus Transport when traveling in the near future is strong	4.21	1.784	-.116	-.850
The likelihood of my switching to the Public Transport when traveling in the near future is high	4.06	1.610	-.242	-.509
I will make an effort to switch to the Public Bus when traveling in the near future	3.95	1.569	.012	-.465
Composite score	*4.07*	*1.354*	*-.071*	*-.157*

The score of 4.07 indicates that responds report to the overall quite likely to switch from alternative modes of transports to public bus transport. Again this finding needs to be interpreted with caution since some respondents might already be using bus public transport. Further analysis to delineate between the current users and prospective users is presented in the next section.

BIVARIATE ANALYSIS

Further Examination of the Intention to Use Public Bus Transport

Gender Differences:

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Swithching Intentions	Male	142	4.0845	1.44532	.12129
	Female	308	4.0639	1.31195	.07476
Usage Intentions	Male	142	3.6009	1.13003	.09483
	Female	308	3.5271	.98062	.05588

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Swithching Intentions	Equal variances assumed	1.615	.204	.150	448	.881	.02065	.13748	-.24953	.29084
	Equal variances not assumed			.145	251.785	.885	.02065	.14248	-.25994	.30125
Usage Intentions	Equal variances assumed	6.815	.009	.707	448	.480	.07388	.10448	-.13144	.27921
	Equal variances not assumed			.671	242.478	.503	.07388	.11007	-.14293	.29069

Income Level Differences:

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	11.026	4	2.756	1.511	.198
Swithching Intentions	Within Groups	811.968	445	1.825		
	Total	822.994	449			
	Between Groups	2.371	4	.593	.557	.694
Usage Intentions	Within Groups	473.431	445	1.064		
	Total	475.803	449			

Further Examination of the Actual Usage of Public Bus Transport

Gender Differences

**Gender * Usage of Bus Public Transport During the last Week
Crosstabulation**

Count

		Usage of Bus Public Transport During the last Week		Total
		No	Yes	
Gender	Male	46	96	142
	Female	112	196	308
Total		158	292	450

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.672[a]	1	.412		
Continuity Correction[b]	.509	1	.475		
Likelihood Ratio	.677	1	.411		
Fisher's Exact Test				.457	.238
Linear-by-Linear Association	.671	1	.413		
N of Valid Cases	450				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 49.86.

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b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.039	.412
	Cramer's V	.039	.412
N of Valid Cases		450	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Education Level Differences

Education * Usage of Bus Public Transport During the last Week Crosstabulation

Count

		Usage of Bus Public Transport During the last Week		Total
		No	Yes	
Education	Primary	21	23	44
	SC	36	64	100
	HSC	19	64	83
	Diploma	26	33	59
	Bachelors	30	69	99
	Masters	14	30	44
	PHD	0	1	1
	Others	12	8	20
Total		158	292	450

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.819[a]	7	.013
Likelihood Ratio	18.049	7	.012
Linear-by-Linear Association	.026	1	.872
N of Valid Cases	450		

a. 2 cells (12.5%) have expected count less than 5. The minimum expected count is .35.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.199	.013
	Cramer's V	.199	.013
N of Valid Cases		450	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.
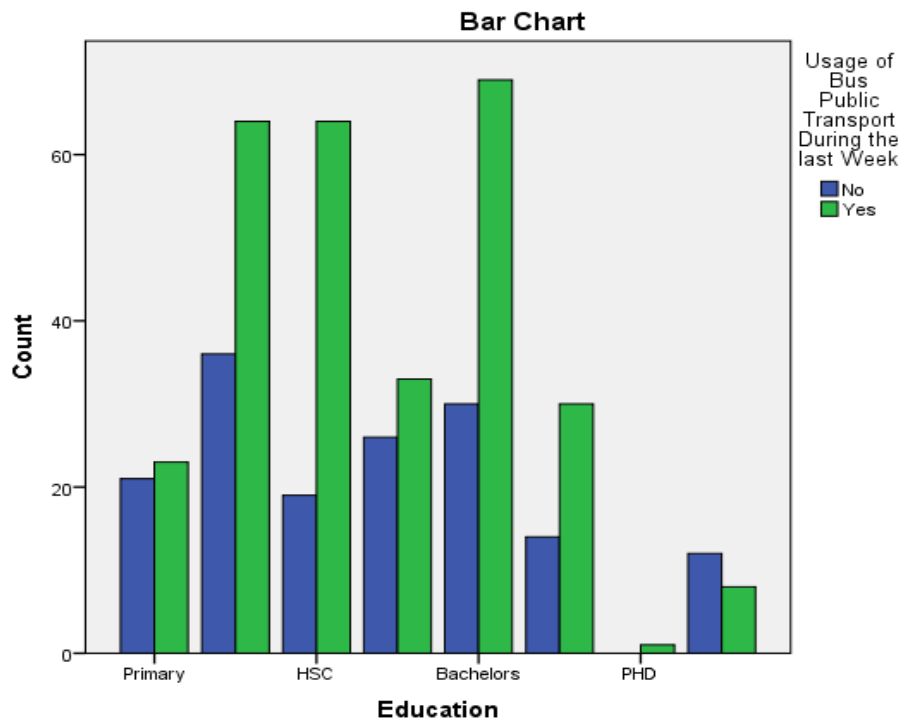
Income Level Differences

Income Level * Usage of Bus Public Transport During the last Week

Crosstabulation

Count

	Usage of Bus Public Transport During the last Week	Total

		No	Yes	
	<5000	20	45	65
	5000-15000	50	106	156
Income Level	15001-25000	44	113	157
	25001-35000	18	11	29
	>35000	26	17	43
Total		158	292	450

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.021[a]	4	.000
Likelihood Ratio	24.902	4	.000
Linear-by-Linear Association	12.719	1	.000
N of Valid Cases	450		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.18.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.240	.000
	Cramer's V	.240	.000
N of Valid Cases		450	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Employment Status Differences

Employment Status * Usage of Bus Public Transport During the last Week Crosstabulation

Count

		Usage of Bus Public Transport During the last Week		Total
		No	Yes	
Employment Status	Self-employed	13	21	34
	employee	108	175	283
	unemployed	3	9	12
	student	17	68	85
	housewife	15	4	19
	other	0	13	13
	retired	2	2	4
Total		158	292	450

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.809[a]	6	.000
Likelihood Ratio	38.111	6	.000
Linear-by-Linear Association	2.102	1	.147
N of Valid Cases	450		

a. 4 cells (28.6%) have expected count less than 5. The minimum expected count is 1.40.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.274	.000
	Cramer's V	.274	.000
N of Valid Cases		450	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Bar Chart
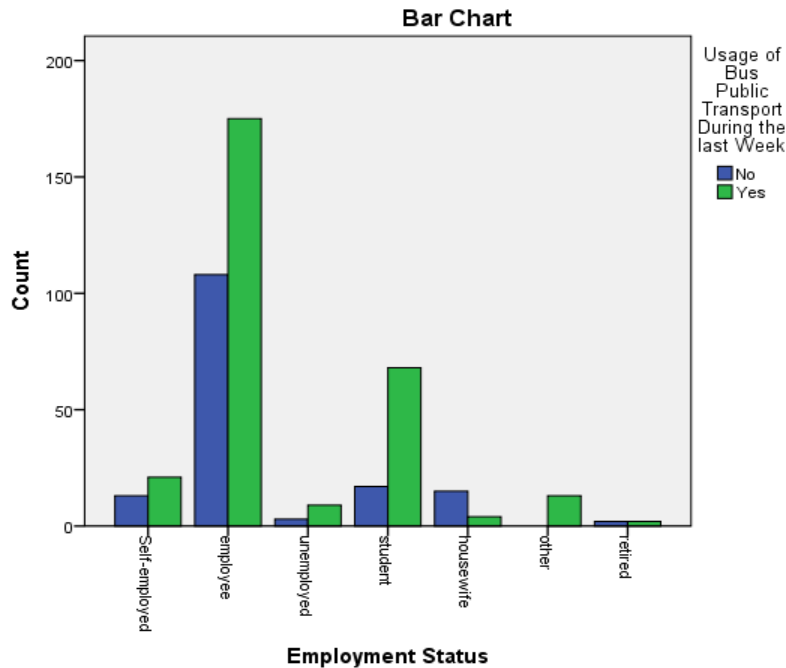
Further Examination of the Determinants of PBT Usage

Gender Differences

	Gender	N	Mean	Std. Deviation	Std. Error Mean
			Group Statistics		
Tangibles	Male	142	3.4890	.83940	.07044
	Female	308	3.5925	.98026	.05586
Accessibility	Male	142	3.9313	.93596	.07854
	Female	308	3.8482	1.12705	.06422
Availability and reliability	Male	142	3.6714	.89408	.07503
	Female	308	3.6746	.95111	.05419
Support Services - Interaction	Male	142	3.3955	.85060	.07138
	Female	308	3.3975	.86565	.04932
Security	Male	142	3.6004	1.11568	.09363
	Female	308	3.5487	1.05992	.06039
Environmental Pollution	Male	142	3.7606	1.37887	.11571
	Female	308	3.7446	1.42558	.08123
Individual Comfort	Male	142	3.1643	1.15453	.09689
	Female	308	3.2814	1.14566	.06528
Information	Male	142	3.1461	1.07033	.08982

	Female	308	3.2435	1.17865	.06716
Attitude	Male	142	3.0423	.93255	.07826
	Female	308	3.1745	.91438	.05210
Subjective Norm	Male	142	3.7993	1.34752	.11308
	Female	308	3.5958	1.37678	.07845
Perceived Behavioural Control	Male	142	4.0739	1.36177	.11428
	Female	308	4.2711	1.40162	.07986
Customer Satisfaction	Male	142	3.4272	1.32881	.11151
	Female	308	3.3528	1.39449	.07946
Perceived Value	Male	142	3.5047	1.25712	.10550
	Female	308	3.4675	1.28722	.07335
Attractiveness of Alternatives	Male	142	4.7042	1.15477	.09691
	Female	308	4.9859	1.39105	.07926
Perceived Negative Consequences of Car	Male	142	4.6714	1.38265	.11603
	Female	308	4.8420	1.46188	.08330
Personal Norms	Male	142	3.7782	1.55002	.13007
	Female	308	3.5958	1.29069	.07354

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Tangibles	Equal variances assumed	3.779	.053	-1.088	448	.277	-.10351	.09517	-.29054	.08352
	Equal variances not assumed			-1.151	316.570	.250	-.10351	.08990	-.28039	.07336
Accessibility	Equal variances assumed	5.110	.024	.765	448	.444	.08312	.10860	-.13030	.29654
	Equal variances not assumed			.819	325.687	.413	.08312	.10146	-.11647	.28272
Availability and reliability	Equal variances assumed	.423	.516	-.034	448	.973	-.00319	.09469	-.18929	.18291
	Equal variances not assumed			-.034	290.224	.973	-.00319	.09256	-.18536	.17898

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Support Services - Interaction	Equal variances assumed	.413	.521	-.022	448	.982	-.00196	.08733	-.17358	.16967
	Equal variances not assumed			-.023	278.626	.982	-.00196	.08676	-.17275	.16884
Security	Equal variances assumed	.278	.598	.472	448	.637	.05165	.10932	-.16320	.26650
	Equal variances not assumed			.464	261.928	.643	.05165	.11141	-.16773	.27103
Environmental Pollution	Equal variances assumed	.001	.974	.112	448	.911	.01597	.14313	-.26531	.29726
	Equal variances not assumed			.113	282.682	.910	.01597	.14138	-.26231	.29426
Individual Comfort	Equal variances assumed	.257	.613	-1.005	448	.315	-.11707	.11649	-.34601	.11188
	Equal variances not assumed			-1.002	272.307	.317	-.11707	.11683	-.34706	.11293
Information	Equal variances assumed	.542	.462	-.838	448	.402	-.09738	.11621	-.32576	.13100
	Equal variances not assumed			-.868	299.706	.386	-.09738	.11215	-.31808	.12333
Attitude	Equal variances assumed	.285	.594	-1.417	448	.157	-.13226	.09333	-.31569	.05117
	Equal variances not assumed			-1.407	269.390	.161	-.13226	.09402	-.31736	.05284
Subjective Norm	Equal variances assumed	1.215	.271	1.467	448	.143	.20352	.13873	-.06912	.47615
	Equal variances not assumed			1.479	279.631	.140	.20352	.13763	-.06740	.47444
Perceived Behavioural Control	Equal variances assumed	2.790	.096	-1.399	448	.162	-.19716	.14091	-.47409	.07977
	Equal variances not assumed			-1.414	281.524	.158	-.19716	.13942	-.47160	.07728
Customer Satisfaction	Equal variances assumed	1.603	.206	.534	448	.594	.07442	.13939	-.19952	.34835
	Equal variances not assumed			.543	286.598	.587	.07442	.13693	-.19509	.34392
Perceived Value	Equal variances assumed	.324	.569	.287	448	.774	.03716	.12962	-.21757	.29189

		F	Sig.	t	df	Sig.	Mean Diff.	Std. Error	Lower	Upper
	Equal variances not assumed			.289	280.189	.773	.03716	.12849	-.21576	.29008
Attractiveness of Alternatives	Equal variances assumed	5.651	.018	-2.102	448	.036	-.28171	.13402	-.54509	-.01832
	Equal variances not assumed			-2.250	325.797	.025	-.28171	.12519	-.52799	-.03542
Perceived Negative Consequences of Car	Equal variances assumed	2.676	.103	-1.170	448	.243	-.17063	.14580	-.45717	.11591
	Equal variances not assumed			-1.195	288.587	.233	-.17063	.14283	-.45176	.11050
Personal Norms	Equal variances assumed	7.163	.008	1.305	448	.192	.18239	.13973	-.09223	.45701
	Equal variances not assumed			1.221	234.548	.223	.18239	.14943	-.11200	.47678

Education Level Differences

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Tangibles	Between Groups	35.799	7	5.114	6.286	.000
	Within Groups	359.590	442	.814		
	Total	395.389	449			
Accessibility	Between Groups	5.166	7	.738	.641	.722
	Within Groups	508.991	442	1.152		
	Total	514.156	449			
Availability and reliability	Between Groups	7.696	7	1.099	1.270	.264
	Within Groups	382.734	442	.866		
	Total	390.430	449			
Support Services - Interaction	Between Groups	11.413	7	1.630	2.247	.030
	Within Groups	320.653	442	.725		
	Total	332.066	449			
Security	Between Groups	17.065	7	2.438	2.140	.038
	Within Groups	503.596	442	1.139		
	Total	520.661	449			
Environmental Pollution	Between Groups	48.503	7	6.929	3.631	.001

	Within Groups	843.510	442	1.908		
	Total	892.014	449			
	Between Groups	9.027	7	1.290	.977	.447
Individual Comfort	Within Groups	583.195	442	1.319		
	Total	592.222	449			
	Between Groups	18.902	7	2.700	2.094	.043
Information	Within Groups	570.037	442	1.290		
	Total	588.939	449			
	Between Groups	19.457	7	2.780	3.398	.002
Attitude	Within Groups	361.547	442	.818		
	Total	381.004	449			
	Between Groups	45.972	7	6.567	3.647	.001
Subjective Norm	Within Groups	796.008	442	1.801		
	Total	841.980	449			
	Between Groups	59.924	7	8.561	4.680	.000
Perceived Behavioural Control	Within Groups	808.441	442	1.829		
	Total	868.364	449			
	Between Groups	55.868	7	7.981	4.462	.000
Customer Satisfaction	Within Groups	790.635	442	1.789		
	Total	846.503	449			
	Between Groups	70.761	7	10.109	6.761	.000
Perceived Value	Within Groups	660.879	442	1.495		
	Total	731.640	449			
	Between Groups	36.999	7	5.286	3.103	.003
Attractiveness of Alternatives	Within Groups	752.786	442	1.703		
	Total	789.785	449			
	Between Groups	81.940	7	11.706	6.112	.000
Perceived Negative Consequences of Car	Within Groups	846.530	442	1.915		
	Total	928.470	449			
	Between Groups	69.924	7	9.989	5.635	.000
Personal Norms	Within Groups	783.496	442	1.773		
	Total	853.420	449			

Income Level Differences

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Tangibles	Between Groups	3.401	4	.850	.965	.426
	Within Groups	391.988	445	.881		
	Total	395.389	449			
Accessibility	Between Groups	11.528	4	2.882	2.552	.039
	Within Groups	502.628	445	1.130		
	Total	514.156	449			
Availability and reliability	Between Groups	11.219	4	2.805	3.291	.011
	Within Groups	379.211	445	.852		
	Total	390.430	449			
Support Services - Interaction	Between Groups	2.111	4	.528	.712	.584
	Within Groups	329.955	445	.741		
	Total	332.066	449			
Security	Between Groups	18.893	4	4.723	4.189	.002
	Within Groups	501.768	445	1.128		
	Total	520.661	449			
Environmental Pollution	Between Groups	10.624	4	2.656	1.341	.254
	Within Groups	881.390	445	1.981		
	Total	892.014	449			
Individual Comfort	Between Groups	11.426	4	2.857	2.189	.069
	Within Groups	580.796	445	1.305		
	Total	592.222	449			
Information	Between Groups	4.495	4	1.124	.856	.491
	Within Groups	584.444	445	1.313		
	Total	588.939	449			
Attitude	Between Groups	1.574	4	.394	.462	.764
	Within Groups	379.430	445	.853		
	Total	381.004	449			
Subjective Norm	Between Groups	12.118	4	3.029	1.624	.167
	Within Groups	829.862	445	1.865		
	Total	841.980	449			
Perceived Behavioural Control	Between Groups	37.458	4	9.365	5.015	.001
	Within Groups	830.906	445	1.867		
	Total	868.364	449			

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	3.222	4	.805	.425	.791
Customer Satisfaction	Within Groups	843.281	445	1.895		
	Total	846.503	449			
	Between Groups	12.167	4	3.042	1.881	.113
Perceived Value	Within Groups	719.472	445	1.617		
	Total	731.640	449			
Attractiveness of Alternatives	Between Groups	19.420	4	4.855	2.804	.025
	Within Groups	770.365	445	1.731		
	Total	789.785	449			
Perceived Negative Consequences of Car	Between Groups	45.008	4	11.252	5.668	.000
	Within Groups	883.462	445	1.985		
	Total	928.470	449			
	Between Groups	26.470	4	6.618	3.561	.007
Personal Norms	Within Groups	826.950	445	1.858		
	Total	853.420	449			

Region Differences

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	29.947	8	3.743	4.517	.000
Tangibles	Within Groups	365.442	441	.829		
	Total	395.389	449			
	Between Groups	12.554	8	1.569	1.380	.203
Accessibility	Within Groups	501.602	441	1.137		
	Total	514.156	449			
	Between Groups	7.820	8	.978	1.127	.344
Availability and reliability	Within Groups	382.610	441	.868		
	Total	390.430	449			
Support Services - Interaction	Between Groups	18.847	8	2.356	3.317	.001
	Within Groups	313.219	441	.710		
	Total	332.066	449			
	Between Groups	38.192	8	4.774	4.364	.000
Security	Within Groups	482.470	441	1.094		
	Total	520.661	449			
Environmental Pollution	Between Groups	52.652	8	6.581	3.458	.001

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	Within Groups	839.362	441	1.903		
	Total	892.014	449			
	Between Groups	22.844	8	2.855	2.212	.026
Individual Comfort	Within Groups	569.378	441	1.291		
	Total	592.222	449			
	Between Groups	25.325	8	3.166	2.477	.012
Information	Within Groups	563.614	441	1.278		
	Total	588.939	449			
	Between Groups	28.156	8	3.520	4.399	.000
Attitude	Within Groups	352.848	441	.800		
	Total	381.004	449			
	Between Groups	51.789	8	6.474	3.613	.000
Subjective Norm	Within Groups	790.191	441	1.792		
	Total	841.980	449			
Perceived Behavioural Control	Between Groups	29.539	8	3.692	1.941	.052
	Within Groups	838.826	441	1.902		
	Total	868.364	449			
	Between Groups	50.462	8	6.308	3.494	.001
Customer Satisfaction	Within Groups	796.041	441	1.805		
	Total	846.503	449			
	Between Groups	42.415	8	5.302	3.392	.001
Perceived Value	Within Groups	689.225	441	1.563		
	Total	731.640	449			
Attractiveness of Alternatives	Between Groups	33.087	8	4.136	2.410	.015
	Within Groups	756.698	441	1.716		
	Total	789.785	449			
Perceived Negative Consequences of Car	Between Groups	71.064	8	8.883	4.569	.000
	Within Groups	857.407	441	1.944		
	Total	928.470	449			
	Between Groups	62.868	8	7.858	4.384	.000
Personal Norms	Within Groups	790.552	441	1.793		
	Total	853.420	449			

MULTIVARIATE ANALYSIS

Effect of Service Quality Dimensions on Satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.570[a]	.324	.312	1.13874	1.823

a. Predictors: (Constant), Information, Environmental Pollution, Security, Accessibility, Individual Comfort, Support Services - Interaction, Availability and reliability, Tangibles; b. Dependent Variable: Customer Satisfaction

ANOVA[a]

| Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	274.648	8	34.331	26.475	.000[b]
1	Residual	571.855	441	1.297		
	Total	846.503	449			

a. Dependent Variable: Customer Satisfaction b. Predictors: (Constant), Information, Environmental Pollution, Security, Accessibility, Individual Comfort, Support Services - Interaction, Availability and reliability, Tangibles

Coefficients[a] (DV:CUSTOMER SATISFACTION)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.237	.316		-.751	.453		
	Tangibles	.245	.072	.168	3.415	.001	.637	1.570
	Accessibility	.178	.060	.139	2.966	.003	.697	1.435
	Availability and reliability	-.097	.071	-.066	-1.366	.173	.663	1.508
	Support Services - Interaction	.342	.076	.214	4.489	.000	.672	1.487
	Security	.055	.055	.043	.996	.320	.817	1.223
	Environmental Pollution	-.051	.040	-.053	-1.270	.205	.896	1.116
	Individual Comfort	.151	.054	.127	2.821	.005	.760	1.316
	Information	.233	.058	.194	4.019	.000	.657	1.523

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Diagnostic Tests

The assumptions of the multiple regression analysis were tested using relevant diagnostic tests. First as can be observed in the table above, all VIF values were well below the threshold value of 5 (Field, 2012). Residuals are also found to be independent as indicated by the Durbin-Watson statistic of 1.83 which is quite close to the neutral value of 2 (Hair et al., 2006). From the figure below, it can be observed that the residuals do approximately follow a normal distribution, or at least there is no severe departure from normality. The standardised residual value v/s standardised predicted value plot shows that there is evidence of homoscedasticity, given that the observations are more or less randomly scattered.

Normality of Residuals		Homoscedasticity
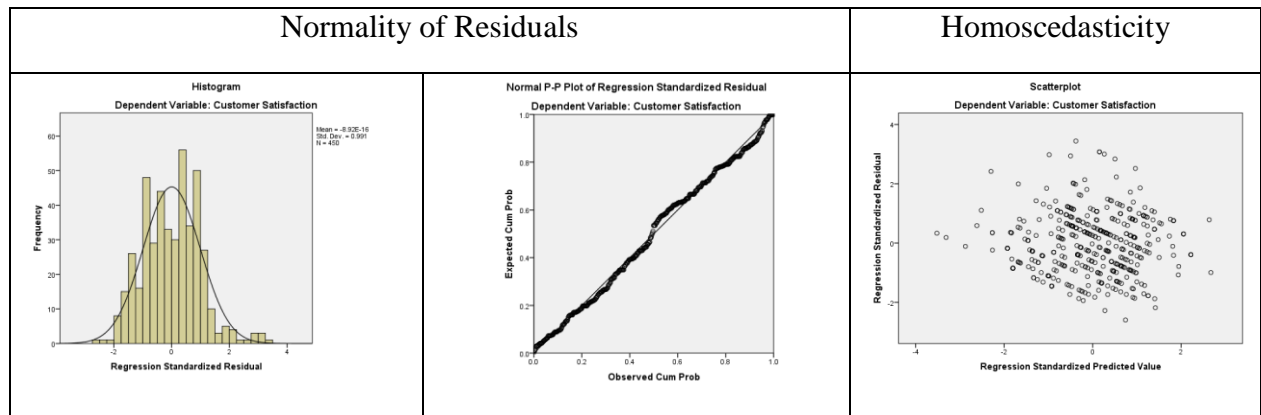
Predicting Usage of Public Bus Transport

Classification Table[a,b]

	Observed		Predicted		
			Usage of Bus Public Transport During the last Week		Percentage Correct
			No	Yes	
Step 0	Usage of Bus Public Transport During the last Week	No	0	158	.0
		Yes	0	292	100.0
	Overall Percentage				64.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.614	.099	38.671	1	.000	1.848

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
	Step	69.527	17	.000
Step 1	Block	69.527	17	.000
	Model	69.527	17	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	513.792ᵃ	.143	.197

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Tableᵃ

	Observed		Predicted		
			Usage of Bus Public Transport During the last Week		Percentage Correct
			No	Yes	
	Usage of Bus Public Transport During the last Week	No	72	86	45.6
Step 1		Yes	43	249	85.3
	Overall Percentage				71.3

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
	SQ1	.238	.154	2.397	1	.122	1.269
	SQ2	.158	.127	1.548	1	.213	1.171
Step 1ᵃ	SQ3	.092	.145	.401	1	.527	1.096
	SQ4	-.385	.169	5.199	1	.023	.680
	SQ5	.138	.116	1.425	1	.233	1.148
	SQ6	-.266	.084	9.937	1	.002	.766

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SQ7	-.046	.114	.161	1	.688	.955
SQ8	-.258	.127	4.155	1	.042	.772
ATT	-.029	.146	.041	1	.840	.971
SN	.157	.106	2.224	1	.136	1.170
PBC	.179	.108	2.745	1	.098	1.195
CS	-.150	.117	1.647	1	.199	.861
PV	-.276	.123	5.005	1	.025	.759
AA	.115	.090	1.649	1	.199	1.122
UI	.626	.126	24.735	1	.000	1.870
PCCNC	-.066	.081	.662	1	.416	.936
PN	-.142	.088	2.636	1	.104	.867
Constant	.004	.799	.000	1	.996	1.004

a. Variable(s) entered on step 1: SQ1, SQ2, SQ3, SQ4, SQ5, SQ6, SQ7, SQ8, ATT, SN, PBC, CS, PV, AA, UI, PCCNC, PN.

PART 4

QUANTITATIVE RESEARCH - PERCEPTION OF
TOURISTS ON PUBLIC TRANSPORT IN MAURITIUS
AND ITS IMPACT ON DESTINATION SATISFACTION
AND LOYALTY

SECTION A: PBT ASSESSMENT

1. **Did you use Public Transport during your stay in Mauritius?**

	Frequency	Percent
No	34	31.8
Yes	73	68.2
Total	107	100.0
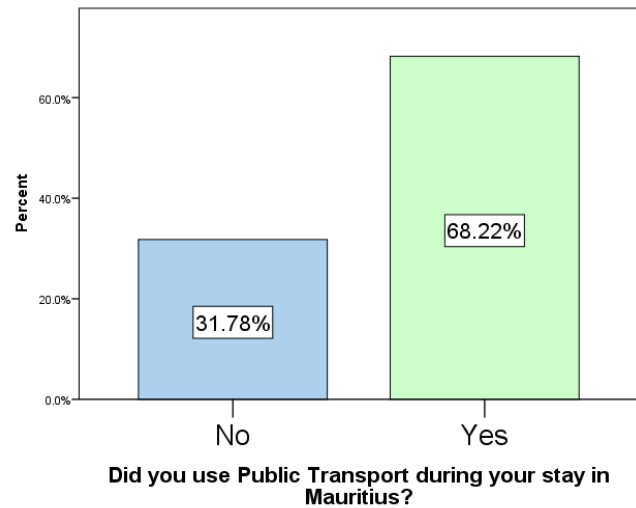
The majority of tourists interviewed reported to have made use of Public Bus Transport during their stay in Mauritius with 73% reporting to have done so.

2. **Please rate the performance level of the Public Bus Transport service provider with regards to each of the following items?**

	Strongly Disagre	Disagre e	Slightly Disagre	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
Public transport in Mauritius is easy to use		1.9	3.7	4.7	16.8	27.1	12.1	N: 71 Mean: 5.51 Std. dev.: 1.206
I am able to find information I need to make journeys by public transport in Mauritius			5.6	14.0	14.0	22.4	10.3	N: 71 Mean: 5.27 Std. dev.: 1.207

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
Any problems or questions I had were dealt with effectively by the Public Services Providers	.9	2.8	1.9	19.6	15.9	16.8	8.4	N: 71 Mean: 4.97 Std. dev.: 1.341
It is easy to buy the right ticket for your journey in Mauritius		.9	5.6	6.5	23.4	24.3	5.6	N: 71 Mean: 5.23 Std. dev.: 1.111
Public transport staff are helpful in Mauritius		1.9	5.6	7.5	20.6	20.6	10.3	N: Mean: Std. dev.:

As can be seen from the summary table above, the surveyed tourists report that Bus Public Transport in Mauritius is quite easy and helpful, with mean values above the mid-point value of 4 indicating moderate level of usefulness.

3. Efficiency and Safety

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
Public transport in Mauritius is a fast way to travel	.9	.9	4.7	18.7	15.9	15.9	9.3	N: 71 Mean: 5.00 Std. dev.: 1.320
Public transport in Mauritius arrives on time	.9	.9	6.5	20.6	14.0	16.8	6.5	N: 71 Mean: 4.85 Std. dev.: 1.305
Public transport vehicles in Mauritius are safe		.9	.9	8.4	29.0	20.6	6.5	N: 71 Mean: 4.85 Std. dev.: 1.305

	Very poor	Poor	Slightly Poor	Moderate	Slightly Good	Good	Excellent	Statistics
I would feel safe travelling alone on public transport in Mauritius	.9	1.9	2.8	7.5	24.3	20.6	8.4	N: 71 Mean: 5.23 Std. dev.: 1.244

With regards to efficiency of Public Bus Transport, the respondents reported that the latter is just above moderate with a couple of mean scores exceeding 4 but still below 5 which indicates a quite good performance level.

SECTION B: OVERALL EVALUATION OF THE DESTINATION

	Very poor	Poor	Slightly Poor	Moderate	Slightly Good	Good	Excellent	Statistics
Accommodation			0.9	2.8	6.5	54.2	35.5	N: 107, Mean: 6.21; Std. dev.: .0.762
Hospitality				1.9	18.7	36.4	43.0	N: 107, Mean: 6.21 Std. dev.: 0.810
Food service				6.5	27.1	43.9	22.4	N: 107, Mean: 5.82 Std. dev.: 0.856
Value for money			1.9	4.7	28.0	41.1	24.3	N: 107, Mean: 5.81 Std. dev.:0.923
Things to see & do			1.9	12.1	31.8	37.4	16.8	N: 107, Mean: 5.55 Std. dev.: 0.974
Signage		0.9	2.8	11.2	27.1	43.0	15.0	N: 107, Mean: 5.53 Std. dev.:1.031
Shopping			0.9	3.7	32.7	33.6	29.0	N: 107, Mean: 5.86 Std. dev.:.0916
Cleanliness			0.9	9.3	18.1	41.1	29.9	N: 107, Mean: 5.90 Std. dev.:0.971

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
Safety			1.9	3.7	22.4	47.7	24.3	N: 107, Mean: 5.89 Std. dev.:0.883
Cultural events		0.9	2.8	10.3	22.4	32.7	30.8	N: 107, Mean: 5.76 Std. dev.: 1.140
Attractions		0.9	2.3	9.3	19.6	30.8	36.4	N: 107, Mean: 5.86 Std. dev.: 1.153
Shopping products			0.9	3.7	15.0	37.4	43.0	N: 107, Mean: 6.18 Std. dev.: 0.88
Family-oriented		0.9	0.9	1.9	11.2	31.8	53.3	N: 107, Mean: 6.31 Std. dev.: 0.975

Perception of tourists with regards to various destination attributes was also captured. Some particular attributes such as accommodation and hospitality obtained high scores indicating a good level of quality. While others such as signage and cultural events were obtained lower ratings.

SECTION C: PERCEPTION ABOUT PRICES IN MAURITIUS

	Strongly Disagre	Disagre e	Slightly Disagre	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
Hotel prices are high	4.7	8.4	17.8	10.3	25.2	28.0	5.6	N: 107 Mean: 4.5 Std. dev.: 1.610
Restaurant prices are high	4.7	8.4	15.9	17.8	29.0	15.9	8.4	N: 107 Mean: 4.39 Std. dev.:1.571

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
Prices for attractions are high	4.7	4.7	21.5	19.6	27.1	18.7	2.8	N: 106 Mean: 4.28 Std. dev.: 1.433
Prices for events are high	4.7	5.6	15.0	27.1	28.0	15.0	4.7	N: 107 Mean: 4.32 Std. dev.: 1.418
Sales taxes are high	4.7	4.7	9.3	26.2	31.8	19.6	2.8	N: 107 Mean: 4.94 Std. dev.: 5.071
Prices for shopping goods are high	4.7	4.7	10.3	20.6	31.8	23.4	4.7	N: 107 Mean: 4.59 Std. dev.: 1.434

Perception about the appropriateness of prices in Mauritius. Most items were rated just above the mid-value of 4 which indicates that tourists view the products and services offered in Mauritius to be adequately priced.

SECTION D: SATISFACTION WITH MAURITIUS AS A DESTINATION

	Strongly Disagre	Disagre e	Slightly Disagre	Neutral	Slightly Agree	Agree	Strongly agree	Statistics
I think I did the right thing to come to Mauritius				2.8	27.1	62.6	7.5	N: 107 Mean: 5.75 Std. dev.: 0.631

				3.7	36.4	52.3	7.5	N: 107 Mean: 5.64 Std. dev.: 0.678
I happy with my stay in Mauritius				3.7	36.4	52.3	7.5	N: 107 Mean: 5.64 Std. dev.: 0.678
The destination experience I got in Mauritius has met my expectations				3.7	36.4	49.5	10.3	N: 107 Mean: 5.66 Std. dev.: 0.713

Tourists report a quite high level of satisfaction with Mauritius as a destination on average as can be observed from the above table.

SECTION E: DESTINATION LOYALTY

	Very Unlikely	Unlikely	Neutral	Likely	Very Likely	Statistics
How likely are you to recommend Mauritius as a destination to people you know	0.9	0.9	15.9	56.1	26.2	N: 107 Mean: 4.06 Std. dev.: 0.738
How likely is it, that you will revisit Mauritius		3.7	13.1	57.9	25.2	N: 107 Mean: 4.05 Std. dev.: 0.732
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Statistics

I intend to use PBT in the next few weeks for my usual trips here in Mauritius	4.7	16.8	13.1	44.9	20.6	N: 107 Mean: 3.60 Std. dev.: 1.132

The level of loyalty of tourists with Mauritius as a destination is seen to be at average level while their level of loyalty with Public Bus Transport appears to be quite low.

SECTION F: DEMOGRAPHICS

Variables	Categories	Count	Percentage
Gender	**Male**	64	59.8%
	Female	43	40.2%
Age	19-25	8	7%
	26 – 32	25	23%
	33 – 39	15	14%
	40 – 46	21	20%
	47 – 53	15	14%
	54 – 60	8	7%
	61 – 67	6	6%
	68 – 74	8	7%
	75 and above	1	1%

	Less than $ 25,000	55	51.4%
	$ 25,000 - $ 49,000	40	37.4%
Income Level	$ 50,000 - $ 74,999	2	1.9%
	$ 75,000 - $ 99,000	3	2.8%
	$ 100,000 and higher	0	
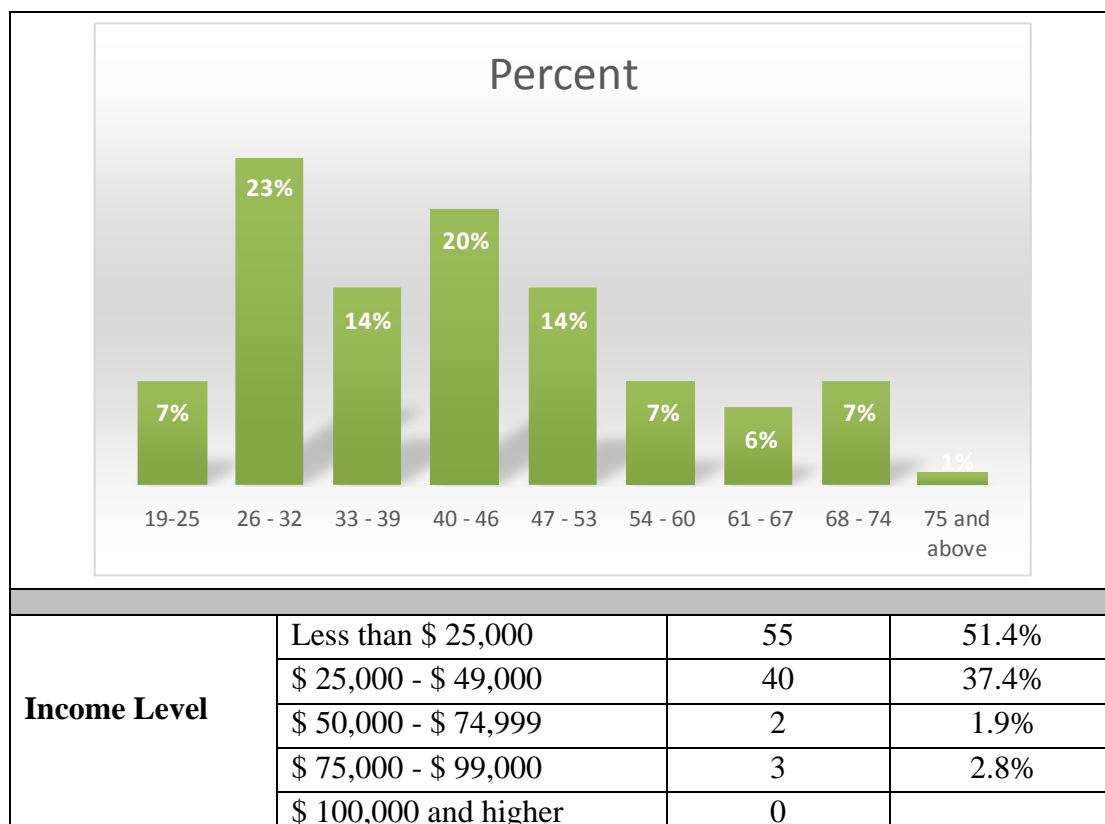
Mode of transport utilized during stay in Mauritius

Mode	Yes (%)	No (%)	N
Public Bus	65 (60.7%)	23 (21.5%)	88
Car (taxi)	56 (52.3%)	39 (36%)	95
Car (rented)	62 (57.9%)	37 (34.6%)	99
	Tour operator		18
Others	Private chauffeur		2
	Private Scooter		2

Mode of transport utilized the most during stay in Mauritius

Mode	N	%
Public Bus	25	25%
Car (taxi)	30	29%
Car (rented)	31	30%
Tour operator	13	13%
Scooter (rented)	2	2%
Private Chauffeur	1	1%

Country of Residence

Country	Count
England	10
France	8
India	7
Reunion Island	7
Italy	6
Belgium	5
Spain	5
Australia	4
China	4
Germany, Portugal, Russia, Seychelles, South Africa,	3
Bangladesh, Dubai, Durban, Japan, Malaysia, Namibia, Netherland, New Zealand, Nigeria, Suisse, Switzerland, and United Kingdom	2
Brazil, Canada, Egypt, Holland, Ireland, Kenya, Madagascar, Maldives, Scotland, and Wales	1

What would motivate you to take PBT in Mauritius?

	Yes (%)	No (%)
Online Information System	33 (30.8%)	73 (6802%)
Smart Card	3 (2.8%)	102 (93.3%)
Daily/Monthly Pass	51 (47.7)	54 (50.2%)
WIFI Availability	35 (32.7%)	70 ((65.4%)
Bus (Priority) Lanes	0	107 (100%)

TESTING THE STRUCTURAL MODEL

We tested the structural model, linking service quality of public transport, overall destination quality, destination satisfaction as predictors of destination loyalty. Price of the destination was also included as a moderator variable.

The results show that quality of public transport has a significant direct positive effect on overall destination quality with a path coefficient of 0.605 ($p < 0.05$). As expected, overall destination quality also has a strong positive direct effect on destination satisfaction with a path coefficient of 0.362 ($p < 0.05$). Satisfaction of tourists with the destination in turn has a positive influence on their loyalty with the destination.

We also investigated into the moderating effect of cost which was measured as a formative construct. The results show that that destination price acts as a moderator variable with regards to the destination satisfaction → destination loyalty link. The more costly tourists' perceive Mauritius to be as a destination, the weaker the relationship between destination satisfaction and destination loyalty. In other words, the more tourists view the destination to be costly the less impact their satisfaction with the destination will positively impact on their loyalty.
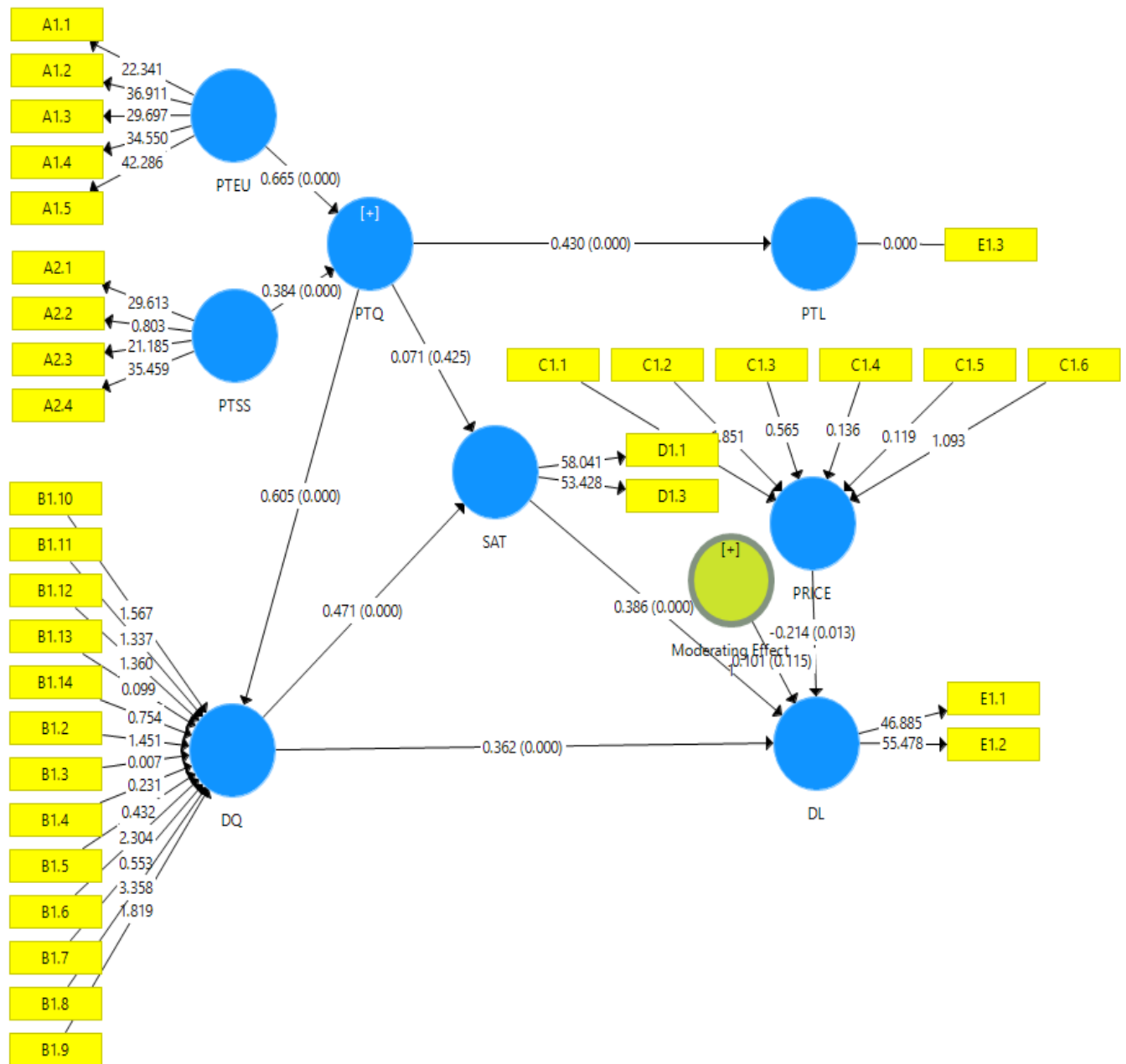
CONCLUSIONS AND REFERENCES

CONCLUSIONS

The purpose of this study was to construct a comprehensive framework for predicting behavioural intentions of local citizens and tourists in the context of public transport in Mauritius and to test the resulting integrated structural model using SEM. Using the survey methodology and relevant statistical techniques for data analysis the specific objectives set were met.

Identification of Public Transport Service Quality Attributes

Based on a thorough review of the literature and qualitative research involving interviews and focus group discussions with various stakeholders we identified comprehensive set of Public Transport Service Quality Attributes. The attributes were used to design an instrument and following data collection, factor analysis was used to test for the dimensions identified. The scales were tested for their validity and reliability using confirmatory factor analysis.

Identification and Assessment of other key determinants of behavioural intentions of public transport users in Mauritius

Additional determinants of public bus transport usage was identified such as subjective norms, materialism, perceived behavioural control, attitude, perceived value, attractiveness of alternatives, perceived environmental impact. The effects of each of those determinants were assessed.

Development and empirical testing of an integrated structural model linking service quality dimensions of public transport, satisfaction with public transport, other determinants of public transport and behavioural intentions using Structural Equation Modelling (SEM).

The results show that quality of public transport has a significant direct positive effect on overall destination quality. As expected, overall destination quality also has a strong positive direct effect on destination satisfaction. Satisfaction of tourists with the destination in turn has a positive influence on their loyalty with the destination.

REFERENCES

Aarts, H. and Dijksterhuis A. (2000). Habits as knowledge structures: automaticity in goal-directed behavior. Journal of Personality and Social Psychology, 78(1):53-63.

Aarts, H., Paulussen, T. and Schaalma H. (1997). Physical exercise habit: on the conceptualization and formation of habitual health behaviours. Health Education Research, Volume 12, Issue 3, Pages 363–374

Abou-Zeid, M., Witter, R., Bierlaire, M., Kaufmann, V., and Ben-Akiva, M. (2012). Happiness and travel mode switching: Findings from a Swiss public transportation experiment. Transport Policy, Vol. 19, (1), pp. 93-104.

Aidoo, E.N., Agyemang, W., Monkah J.E. and Afukaar F.K. (2013). Passenger's satisfaction with public bus transport services in Ghana: a case study of Kumasi–Accra route. Theoretical and Empirical Researches in Urban Management, Vol. 8, No. 2, pp. 33-44

Baidoo, I., & Nyarko, E. (2015). A Discrete Choice Modeling of Service Quality Attributes in Public Transport. *Research Journal of Mathematics and Statistics, 7*(1), 6-10.

Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In: Kuhl J., Beckmann J. (eds) Action Control

Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes 50, 179-211.

Babin, B.J., Lee, Y., Kim, E. and Griffin, M. (2005). Modeling consumer satisfaction and word- of- mouth: restaurant patronage in Korea. Journal of Services Marketing, Vol. 19 Issue: 3, pp.133-139

Bai, B., Law, R. and Wen, I. (2008). The impact of website quality on customer satisfaction and purchase intentions: Evidence from Chinese online visitors. International Journal of Hospitality Management, Volume 27, Issue 3, Pages 391-402

Bamberg, S., Ajzen, I. and Schmidt P. (2003). Choice of Travel Mode in the Theory of Planned Behavior: The Roles of Past Behavior, Habit, and Reasoned Action. Basic and Applied Social Psychology, Volume 25, 2003 - Issue 3

Bamberg, S. Rolle, D. and Weber, C. (2003). Does Habitual Car Use Not Lead to More Resistance to Change of Travel Mode? Transportation, Volume 30, Issue 1, pp 97–108

Bamberg, S., and Schmidt, P. (2001). Theory-driven, subgroup-specific evaluation of an intervention to reduce private car use. Journal of Applied Social Psychology, 31, 1300-1329.

Bamberg, S. and Schmidt, P. (2003). Incentives, Morality, Or Habit? Predicting Students' Car Use for University Routes With the Models of Ajzen, Schwartz, and Triandis. Environment and Behavior, Volume: 35 issue: 2, page(s): 264-285

Bearden, W. and Teel, J.E. (1983). Selected Determinants of Consumer Satisfaction and Complaint Reports. Journal of Marketing Research 20(1)

Bei, L.-T. and Chiao, Y.-C. (2001). An Integrated Model for the Effects of Perceived Product, Perceived Service Quality, and Perceived Price Fairness on Consumer Satisfaction and Loyalty. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 14, 125

Berry, L.L., Parasuraman A., and Zeithaml V.A. (1988). The Service Quality Puzzle, Business Horizons

Bettencourt, L. A. (1997). Customer voluntary performance: Customers as partners in service delivery. Journal of Retailing; Greenwich Vol. 73, Iss. 3, pp383-406.

Bitner, M.J., Booms, B.H. and Stanfield Tetreault, M. (1990). The Service Encounter: Diagnosing Favorable and Unfavorable Incidents. Journal of Marketing, Vol. 54, No. 1, pp. 71-84

Burton, S., Sheather, S. and Roberts, J. (2003). Reality or Perception? The Effect of Actual and Perceived Performance on Satisfaction and Behavioral Intention. Journal of Service Research Vol 5, Issue 4

Cantwell, M., Caulfield, B. and O'Mahony, M. (2009). Examining the Factors that Impact upon Public Transport Commuting Stress , Journal of Public Transportation, 12, 1 - 21

Chiung- Ju Liang and Wen- Hung Wang, (2007). An insight into the impact of a retailer's relationship efforts on customers' attitudes and behavioral intentions. International Journal of Bank Marketing, Vol. 25 Issue: 5, pp.336-366

Cronin, Jr., J.J. and Taylor S.A. (1992). Measuring Service Quality: A Reexamination and Extension. Journal of Marketing, Vol. 56, No. 3, pp. 55-68

Domarchi, C., Tudela, A., and González, A. (2008). Effect of attitudes, habit and affective appraisal on mode choice: an application to university workers. Transportation, vol. 35, issue 5, 585-599

Eboli, L., & Mazzulla, G. (2007). Service Quality Attributes Affecting Customer Satisfaction for Bus Transit. *Journal of Public Transportation, 10*(3).

Eriksson, L. Friman, M. and Norman, A.C. (2007). Electronic Service Quality: Public Transport Information on the Internet. Journal of Public Transport, Vol. 10, No. 3

Eriksson, L., Garvill, J. and Nordlund, A.M. (2008). Interrupting habitual car use: The importance of car habit strength and moral motivation for personal car use reduction. Transportation Research Part F: Traffic Psychology and Behaviour, Volume 11, Issue 1, Pages 10-23

Fellesson, M. and Friman, M. (2008). Perceived Satisfaction with Public Transport Service in Nine European Cities. Journal of the Transportation Research Forum, Vol. 47, No. 3, pp. 93- 103

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley

Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. Journal of Marketing, Vol. 56, No. 1, pp. 6-21

Friman, M., Edvardsson, B. and Gärling, T. (2001). Frequency of negative critical incidents and satisfaction with public transport services. Journal of Retailing and Consumer Services, Volume 8, Issue 2, Pages 95-104

Gärling, T., S. Fujii, and O. Boe (2001). Empirical tests of a model of determinants of script-based driving choice. Transportation Research Part F: Traffic Psychology and Behaviour, 4(2): 89-102.

Gärling, T., Fujii, S., Gärling, A. and Jakobsson Bergstad, C. (2003). Moderating Effects of Social Value Orientation on Determinants of Proenvironmental Behavior Intention. Journal of Environmental Psychology 23(1):1-9

Gorter, C., Nijkamp, P., & Vork, R. (2000). Analysis of Travellers' Satisfaction with Transport Chains. *Transportation Planning & Technology*, *23*(4), 237-258.

Gounaris, S., Dimitriadis, S. and Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e- shopping. Journal of Services Marketing, Vol. 24 Issue: 2, pp.142-156

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

Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. European Journal of Marketing, Vol. 18 Issue: 4, pp.36-44.

Haiyan, S., Van der Veen, R., Li, G. and Chen, J.L. (2012). The Hong Kong tourist satisfaction index. Annals of Tourism Research 39(1): 459-479.

Han, H., Hsu, L.J., Lee, J. and Sheu, C. (2011). Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions. International Journal of Hospitality Management. Volume 30, Issue 2, Pages 345-355

Hart, C.W., Heskett, J.L. and Sasser, W.E. (1990). The profitable art of service recovery. Harvard Business Review, 68(4):148-156

Hensher, D. (2015). Customer service quality and benchmarking in public transport contracts.

International Journal of Quality Innovation, 1(4).

Heskett, J.L., Jones, T.O., Loveman, G.W., Sasser, Jr., W.E. and Schlesinger, L.A. (2008). Putting the Service- Profit Chain to Work. Harvard Business Review.

Høst, V. and Knie-Andersen, M. (2004). Modeling customer satisfaction in mortgage credit companies. International Journal of Bank Marketing 22(1):26-42

James F. Engel, J.F., Kegerreis, R.J. and Blackwell, R.D. (1969). Word-of-Mouth Communication by the Innovator. Journal of Marketing, Vol. 33, No. 3, pp. 15-19

John, T. and Snaith, T. (1998). From SERVQUAL to HOLSAT: Holiday satisfaction in Varadero, Cuba. Tourism Management 19(1): 25-34.

Kandampully, J., and Suhartanto, D. (2000). Customer loyalty in the hotel industry: the role of customer satisfaction and image. International journal of contemporary hospitality management, 12(6), 346-351.

Kilbourne, W.E., Duffy, J.A., Duffy,M. and Giarchi, G. (2004). The applicability of SERVQUAL in cross- national measurements of health- care quality", Journal of Services Marketing, Vol. 18 Issue: 7, pp.524-533

Lai, W.T. and Chen, C.F. (2011). Behavioral intentions of public transit passengers—The roles of service quality, perceived value, satisfaction and involvement. Transport Policy, Volume 18, Issue 2, Pages 318-325

Marco, D. (2012). Measuring the satisfaction of multimodal travelers for local transit services in different urban contexts. Transportation Research Part A: Policy and Practice, Volume 46, Issue 1, Pages 1-11

Mazzulla, G., & Eboli, L. (2006). A Service Quality experimental measure for public transport.

European Transport, 34, 42-53.

Michael A. Jones, Jaebeom Suh, (2000) "Transaction- specific satisfaction and overall satisfaction: an empirical analysis", Journal of Services Marketing, Vol. 14 Issue: 2, pp.147-159

Holmes, J.H. and John, D.L. (1977). Product Sampling and Word of Mouth. Journal of Avertising Research, 17(5), 35-40

Molinari, L.K., Abratt, R. and Dion, P. (2008). Satisfaction, quality and value and effects on repurchase and positive word- of- mouth behavioral intentions in a B2B services context. Journal of Services Marketing, Vol. 22 Issue: 5, pp.363-373

Morfoulaki, M., Tyrinopoulos, Y., & Aifadopoulou, G. (2007). Estimation of Satisfied

Customers in Public Transport Systems: A New Methodological Approach. *Journal of the Transportation Research, 46*(1).

Ojo, T. K., Mireku, D. O., & Dauda, S. (2014). Service Quality and Customer Satisfaction of

Public Transport on Cape Coast - Accra Route, Ghana. *Developing Country Studies, 4*(18), 142-150.

Oliver, R.L. (1999). Whence Consumer Loyalty? Journal of Marketing, Vol. 63, Fundamental Issues and Directions for Marketing, pp. 33-44

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

Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin, 124(1), 54-74.*

Parasuraman, A., Zeithaml, V., & Berry, L. (1991). Refinement and Reassessment of The

SERVQUAL Scale. *Journal of Retailing, 67*(4), 420-450.

Parasuraman, V.A., Zeithaml, A., Berry, L. (1985). A Conceptual Model of Service Quality and Its Implications for the Future Research. Journal of Marketing, Vol. 49, pp.41-50.

Paulley, N., Balcombe, R., Mackett, R., Titheridge, H., Preston, J., Wardman, M., Shires, J., and White, P. (2006). The demand for public transport: The effects of fares, quality of service, income and car ownership. Transport Policy, vol. 13, issue 4, 295-306

Pedersen, T., and Friman, M. (2011). Affective Forecasting: Predicting and Experiencing Satisfaction With Public Transportation. Journal of Applied Social Psychology, Volume41, Issue8, Pages 1926-1946

Randheer K., AL-Motawa, A.A. and Prince, V.J. (2011). Measuring Commuters' Perception on Service Quality Using SERVQUAL in Public Transportation. International Journal of Marketing Studies, 3(1): 1-14

Ravichandran, K., Tamil Mani, B., Arun Kumar, S. and Prabhakaran S. (2010) Influence of Service Quality on Customer Satisfaction Application of Servqual Model. International Journal of Business and Management Vol. 5, No. 4.

Reichheld, F., and W. E. Sasser Jr. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review* 68, no. 5, pp105–111.

Richins, M.L. (1983). Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study. Journal of Marketing, Vol. 47, No. 1, pp. 68-78

Rust, R.T., Zahorik, A.J. and Keiningham, T.L. (1995). Return on Quality (ROQ): Making Service Quality Financially Accountable. Journal of Marketing, Vol. 59, No. 2, pp. 58-70

Ruswanti,E. and Lestari, W.P. (2016). The Effect of Relationship Marketing towards Customers' Loyalty Mediated by Relationship Quality (Case Study in Priority Bank in Niaga). Development Research of Management Vol 11, No 2

Sivadas, E. and Baker- Prewitt, J.L. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. International Journal of Retail & Distribution Management, Vol. 28 Issue: 2, pp.73-82

Söderlund, M. and Vilgon, M. (1999). Customer Satisfaction and Links to Customer Profitability: An Empirical Examination of the Association Between Attitudes and Behavior. SSE/EFI Working Paper Series in Business Administration No. 1999:1

Sumaedi, S., Bakti, G., & Yarmen, M. (2012). The empirical study of public transport passengers' behavioral intentions: the roles of service quality, perceived sacrifice, perceived value, and satisfaction (case study: paratransit passengers in jakarta, indonesia). *International journal for traffic and transport engineering, 2*(1), 83-97.

Sultan, F. and Simpson, Jr, M.C. (2000). International service variants: airline passenger expectations and perceptions of service quality. Journal of Services Marketing, Vol. 14 Issue: 3, pp.188-216

Thøgersen, J. and Møller, B. (2008). Breaking car use habits: The effectiveness of a free one-month travelcard. Transportation, Volume 35, Issue 3, pp 329–345

Tyrinopoulos, Y. and Antoniou, C. (2008). Public transit user satisfaction: Variability and policy implications. Transport Policy, Volume 15, Issue 4, Pages 260-272

Valeri, E., Stathopoulos, A., Marcucci, E., & Gatta, V. (2012). *Urban Sustainable Mobility, Chapter: Local public transport: service quality and tendering contracts.* (E. Venezia, Ed.) Franco Angeli.

Vanhanen, K., & Kurri, J. (n.d.). *Quality factors in public transport.* Retrieved September 20, 2016, from

file:///C:/Users/user/Downloads/Quality%20factors%20in%20public%20transport.pdf

Verma, M., Verma, A., Ajith, P., & Sindhe, S. (2013). Urban bus transport Service quality and sustainable development- understanding the gaps. *World Conference on Transport Research*, (pp. 1-16). Rio de Janeiro.

Verplanken, B. and Aarts, H. (1999). Habit, Attitude, and Planned Behaviour: Is Habit an Empty Construct or an Interesting Case of Goal-directed Automaticity? European Review of Social Psychology, Volume 10, Issue 1

Verplanken, B., Aarts, H. Knippenberg, A. and Moonen, A. (1998). Habit versus planned behaviour: A field experiment. British Journal of Social Psychology Volume37, Issue1, Pages 111-128

Westbrook, R.A. (1987). Product/consumption-based affective responses and postpurchase processes. Journal of marketing research, 258-270

Wijaya, D. (2009). Study of Service Quality in the Public Bus Transport: Customer Complaint Handling and Service Standards Designs. Retrieved September 11, 2016, from Master's Thesis: https://www.diva-portal.org/smash/get/diva2:232162/FULLTEXT01.pdf

Wirtz, J. and Chew, P. (2002). The effects of incentives, deal proneness, satisfaction and tie strength on word- of- mouth behavior. International Journal of Service Industry Management, Vol. 13 Issue: 2, pp.141-162

Wisniewski, N., Klitzman, B., Miller B., and Reichert W. M. (2001). Decreased analyte transport through implanted membranes: Differentiation of biofouling from tissue effects. Journal of Biomedical Materials Research, Volume57, Issue4, Pages 513-521.

Yang, Z. and Peterson, R.T. (2004). Customer perceived value, satisfaction, and loyalty: The role of switching costs. Psychology and Marketing Volume21, Issue10

Yaya, L., Forta, M., Canals, C. S., & Marimon, F. (2014). Service quality assessment of public transport and the implication role of demographic characteristics. *Public Transport*.

Zeithaml, V.A., A. Parasuraman, A. and Berry L.L. (1985). Problems and Strategies in Services Marketing. Journal of Marketing, Vol. 49, No. 2, pp. 33-46

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996). The Behavioral Consequences of Service Quality Journal of Marketing, Vol. 60, No. 2, pp. 31-46

Thank you for giving your time and effort to contribute to this study. Your help is highly appreciated. Please answer honestly and with due diligence. All your answers will be kept strictly confidential and anonymous. The quality of this study depends a lot on your contribution.

UNIVERSITY OF MAURITIUS (SURVEY INSTRUMENT)

Identification and Assessment of Key Determinants of Public Transportation Behavioural Intentions of Local Citizens and Tourists in Mauritius: Predicting Transportation Behaviours and Its Policy Implications

Which bus service provider do you use the most? .... *
*** Please refer to this bus service provider when answering to all of the following questions**

SECTION Ai: SERVICE QUALITY

Please rate the performance level of the Public Bus Transport service provider with regards to each of the following items?	Extremely Low	Low	Slightly Low	Moderate	Slightly High	High	Extremely High
Tangible Sevice Equipment							
1.Cleanliness of the stations	1	2	3	4	5	6	7
2.Lightning in stations	1	2	3	4	5	6	7
3.Lightning on vehicle	1	2	3	4	5	6	7
4.Temperature and ventilation on vehicle	1	2	3	4	5	6	7
5.Temperature and ventilation in stations	1	2	3	4	5	6	7
6. Appropriate and safe driving	1	2	3	4	5	6	7
7. Cleanliness of the vehicle	1	2	3	4	5	6	7
Accessibility							
1.Easy access of persons with reduced mobility	1	2	3	4	5	6	7
2.Easy access to the bus from the streets/bus stops	1	2	3	4	5	6	7
3.Ease of purchasing tickets	1	2	3	4	5	6	7
4. Easy connection with other transportation modes such as bike rental, taxis, private cars, etc.	1	2	3	4	5	6	7
Availability and Reliability of Service							
1. Frequency of the bus service	1	2	3	4	5	6	7
2. Waiting time at the bus station/stop	1	2	3	4	5	6	7
3. Average duration of the trip	1	2	3	4	5	6	7
4. Operating hours of the service	1	2	3	4	5	6	7
5. Regularity of the service (absence of interruptions caused by breakdown or incidents)	1	2	3	4	5	6	7
6. Punctuality of the service	1	2	3	4	5	6	7
7. Proximity of stops to origin and/or destination	1	2	3	4	5	6	7
Customer Service							
1.The employees (driver/conductor/others) willingness to help passengers	1	2	3	4	5	6	7
2.Effectiveness and speed of employees to respond, give information and deal with user´s daily problems	1	2	3	4	5	6	7
3.Employees understanding of passengers' need	1	2	3	4	5	6	7
4.Courtesy of the employees	1	2	3	4	5	6	7
5. The appearance of the employees	1	2	3	4	5	6	7
6. The degree of familiarity with employees (drivers/ conductors. etc)	1	2	3	4	5	6	7
7. Performance of the Customer Service (offices, web site, contact by phone, deal with complaints, etc.)	1	2	3	4	5	6	7
Security							
1. Sense of security against theft and aggression in stations and on vehicles	1	2	3	4	5	6	7
2. Sense of security against accidents while traveling (crash/vehicle derailment)	1	2	3	4	5	6	7
3. Sense of security against slipping, falling and accidents at vehicle doors	1	2	3	4	5	6	7
4. Signage of emergency exit and extinguishers	1	2	3	4	5	6	7

Environmental Pollution

	1	2	3	4	5	6	7
1. Noise level on the vehicle	1	2	3	4	5	6	7
2. Vibration level on the vehicle	1	2	3	4	5	6	7
3. Noise level in stations	1	2	3	4	5	6	7

Individual Space

	1	2	3	4	5	6	7
1. Seat availability in stations and bus stops	1	2	3	4	5	6	7
2. Level of comfort on vehicle (seat availability or enough room while standing up)	1	2	3	4	5	6	7
3. Adequacy of leg space between seats	1	2	3	4	5	6	7

Information

	1	2	3	4	5	6	7
1. Updated, precise and reliable information in stations (price. Operating hours. stops. service interruptions. etc.)	1	2	3	4	5	6	7
2. Updated, precise and reliable information on vehicles (operating hours, stops, service interruptions, etc.)	1	2	3	4	5	6	7
3. Clear and simple notice boards with information and directions in stations	1	2	3	4	5	6	7
4. Information available through other communication technologies (internet, phone, mobile applications, etc.)	1	2	3	4	5	6	7

SECTION A(ii) : Overall service quality

Please rate the overall service quality with ratings 1=Very poor to 5=Excellent

	Very poor	Poor	Neutral	Good	Excellent
1.Overall service quality	1	2	3	4	5

SECTION B: ATTITUDE

I find that traveling by Public Bus Transport is:

		1	2	3	4	5	
Bad		1	2	3	4	5	Good
Unpleasant		1	2	3	4	5	Pleasant
Awful		1	2	3	4	5	Nice
Unenjoyable		1	2	3	4	5	Enjoyable

SECTION C: SUBJECTIVE NORM

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. Most people who are important to me would support that I take PBT to travel	1	2	3	4	5	6	7
2.Most people who are important to me think I should take PBT to travel	1	2	3	4	5	6	7

SECTION D: PERCEIVED BEHAVIOURAL CONTROL

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1.For me to take PBT to travel is easy	1	2	3	4	5	6	7
2.My freedom to take PBT to travel is high	1	2	3	4	5	6	7

SECTION E: CUSTOMER SATISFACTION

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1.I feel satisfied with the PBT system overall performance	1	2	3	4	5	6	7
2.The performance of PBT system has met my expectations	1	2	3	4	5	6	7
3.The PBT system is quite close to my ideal	1	2	3	4	5	6	7

SECTION F: PERCEIVED VALUE

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1.Appropriateness of PBT price under given quality	1	2	3	4	5	6	7
2. Overall value I get from the PBT services for what I give	1	2	3	4	5	6	7
3. Overall value I get from the PBT services for my money	1	2	3	4	5	6	7

SECTION G: ATTRACTIVENESS OF ALTERNATIVES

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1.I believe that there are good alternatives of public transportation to the Public Bus Transport (e.g. car, motorcycle)	1	2	3	4	5	6	7
2.Other than Public Bus Transport, there are other modes of transportations that meet my needs well	1	2	3	4	5	6	7
3.I think that other modes of transport (e.g car, motorcycle) offer more advantages than PBT.	1	2	3	4	5	6	7

SECTION H: SWITHCHING INTENTIONS

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1.My intention to switch from motorcycle/ car to Bus Transport when traveling in the near future is strong	1	2	3	4	5	6	7
2.The likelihood of my switching to the Public Transport when traveling in the near future is high	1	2	3	4	5	6	7
3. I will make an effort to switch to the Public Bus when traveling in the near future	1	2	3	4	5	6	7

SECTION I : HABIT

1(i)How often on average do you use a motorcycle/car when traveling within a week?
_____times

(ii)Please indicate whether you would use PBT to go the following places:
□ Shop; □Cinema; □Restaurant; □Place of work; □Relative's place

SECTION J: USAGE INTENTION

	Very Weak	Weak	Neutral	Strong	Very Strong
1.My intention to use PBT in the next few weeks for usual trips here in Mauritius is	□	□	□	□	□

	Very Unlikely	Unlikely	Neutral	Likely	Very Likely
2.How likely is it, that in the next weeks you will use PBT for usual routes here in Mauritius	□	□	□	□	□

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3.I intend to use PBT in the next few weeks for my usual trips here in Mauritius	□	□	□	□	□

SECTION K: ACTUAL USAGE BEHAVIOUR

1.During the two weeks how often have you used PBT

□ Less than one day a week; □One day a week; □Two days a week; □Three days a week; □ Four days a week; □Five Days or More a Week

SECTION L: PERCEIVED CONSEQUENCCES OF CAR USAGE

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
When I use the car, exhaust gases are emitted which have a negative effect on the global climate system	1	2	3	4	5	6	7
2. When I use the car, exhaust gases are emitted which endanger the health specially of children and older people	1	2	3	4	5	6	7
3. My personal car use has negative impacts on the living quality of later generations	1	2	3	4	5	6	7

SECTION M: PERSONAL NORMS

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. Because of my own values/principles I feel an obligation to use PT instead of the car for everyday trips	1	2	3	4	5	6	7
2. Regardless of what other people do, because of my own values/principles I feel an obligation to use PT instead of the car for everyday trips	1	2	3	4	5	6	7

SECTION N: Demographics

1.Gender

Male ☐   Female ☐

2. Age: ___

3.Education

Primary ☐   SC ☐   HSC ☐   Diploma ☐   Bachelor ☐   Masters ☐   PhD ☐   Others ☐

4.Income Level

    < Rs 5000 ☐   Rs 5000-Rs15000 ☐   Rs 15001 - Rs 25000 ☐   Rs 25001 - Rs 35000 ☐   > Rs 35 000 ☐

5.Access to Car

    Yes ☐   No ☐

6. Walking Time from Home to Nearest PBT Stop: ___

7.Distance (Km) from Work to Nearest PBT Stop: ___

8.Walking Time from Work to Nearest PBT Stop: ___

9.Distance (Km) from Home to Nearest PBT Stop: ___

10. Region (District): _____

11. Type of Operator:

    Coorperative/Individual ☐   CNT ☐   UBS☐   RHT ☐   TBS ☐   MBS ☐

12. Average Trip Time: _____ Hrs

13. Average Trip Distance: _____ Km

14. Reason for taking public bus transport:

Price ☐ , comfort ☐ , speed ☐ , frequency ☐ , environmental reasons ☐ , do not have driving license ☐ , do not have vehicle ☐ , it is my unique alternative☐ , lack of parking ☐ , traffic congestion ☐ , you cannot use your vehicle for any reason ☐ , other ☐

15: Emloyment Status

    Self-employed ☐ , employee ☐ , unemployed ☐ , student ☐ , housewife ☐   other ☐ , retired ☐

16: What would motivate you to take PBT:

Online Information System ☐ ; Smart Card ☐ ; Daily/ Monthly Pass ☐ ; WIFI Availability ☐; Bus (Priority) Lanes ☐

Others (Please Specify): _____