Research Article

Factors Influencing Passengers' Preference towards Public Bus Transportation from Kelantan to Northern Region

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Article History: Received: 10 November 2020; Revised: 12 January 2021; Accepted: 27 January 2021; Published online: 05 April 2021

Abstract:A convenient and reliable transport system is integral for every country's development and this study investigates the factors that influence passengers' preference towards public bus transportation from Kelantan to Northern Region. The number of passengers who travel to Northern Region by public bus transportation is larger than using train and flight. This research adopted quantitative method where a total of 384 respondents who are using express bus to commute to their destinations. This study was performed in Kota Bharu, Kelantan using simple random sampling technique. The study tested the hypothesis that the factors are positively related to the passengers' preference. The reliability and Pearson Correlation was also tested with the help of Cronbach' Alpha. The findings of this study show that factorssuch as accessibility, convenience and safety, play considerable role in promoting the use of public bus transportation. However, the study revealed that price of the bus ticket was the leading factor that influence passengers' preference. The results of this study will be helpful to the management of bus operators in their effort to continuously upgrade their services for their customer services and recommends that future studies should be conducted using a large sample size and also involve other bus transport service providers in other states or Malaysia as a whole.

Keywords: Passengers' preference, Public bus transportation, Accessibility, Convenience andSafety

1. Introduction

Malaysia transportation has developed at a quick pacethough, it still needs to meet certain requirements in order to develop the country's economy. According to Associates (2008), a well-established system of transportation is vital for each and every country's development and cannot be isolated from any given society. The major choice of transport mode in Malaysia is primarily influenced by the country's geological settings as the development of transportation is progressing year by year. In this manner, choosing a mode of transport to travel is vital in order to save cost by choosing a suitable transport which can save a lot of time by the various forms oftransportation can be separated into a few modes of transport such as sea, air, road, railway and pipeline, (Nazry Yahya, 2016). There two most common sorts of road transport in Malaysia been public transport and private transport. Each mode of transport gives diverse benefits to travellers either the passengers need to reach their particular destinations as quick as possible, convenient and also to save money on their trip. For example, travelling within Peninsular Malaysia by flight is around 1 hour - 2 hours. Meanwhile, choosing the rail transport causing much more time than other modes of transport, but it brings numerous benefits to travellers, cargo, economy and most people however prefer to travel by using various modes of transport like bus, train among others for various reasons. An example is that passengers who travel by bus have the ability to get to most of the city terminal. Even though there are a few focal points which can be gained by passengers by utilizing public transportation, some people are still travelling utilizing private car which is known as the foremost convenient mode of transport. It gives more accessibility compared to public transport such as departure to most of the destinations, also refer to door to door accessibility and it's giving a more comfortable and private space (U.S Department of Transportation, Federal Railroad Administration, 2009). The accessible public transports utilized in Malaysia included buses, train services, aircraft and taxis. Each mode of transport has specific characteristics that influence its preference. In spite of the fact that there are numerous differences and benefits advertised by each mode of transport, but there are also a few restrictions on each mode of transport. For example, accessibility to the terminal of the bus is in some cases poor due to the transport terminals ordinarily are found around the border of the city and is still most preferred since the fare is more reasonable for all wage ranges of passenger for travelling long journeys. Besides, it offers more comfort and shorter travel time than train (Roza, Koting, Karim, 2013). There are numerous variables which will influence the mode and choice of transport to travel long distances which is more than 300km. For the passenger characteristics that may affect the choice of transport are age, income, gender and household location (urban vs rural) were inspected (Anderson and Simkins, 2012). And

Cho, (2013) demonstrate that other subjective factors may affect the choice and mode of transport like convenience, distance and privacy.

Public transportation is common in Malaysia because there are few rail transport network, ports and airport location of Peninsular, Sabah and Sarawak an indication that most people need a transport when they travel from a point of origin to another end of destinationand land route also is significant for people for medium travelling in Malaysia. The tourism sector is an important aspect that promote transportation in Kelantan by tourists or local people as Kelantan is known as a favourite and fascinating destination for international and domestic tourists because of its famous and natural attractions and SuliadiSufahani, Marinah Muhammad and Zuhaimy Ismail (2016), study revealed that most of the travellers use public bus transport rather than by choosing airline or train which is available at Kelantan because of the price, convenience and accessibility. Again, there are no train services in Kota Bharu that provide sufficient coverage of transportation because train services are only available in smaller towns at the other side of Kelantan River thereby placing a high demand for public bus transport in this city and is highly rated compared to other cities. (MadzlanNapiah&NoorfakhriahYaakub, 2010).

Although Public transport plays key role for people to travel from one destination to another even though there are other kinds of modes such as airway, waterway, railway, and roadway. People widely prefer to use public transport for long journeys rather than use private vehicles. However, there are some issues in terms of convenience, safety and accessibility of public transport occurred. Public transport services are the most well-known, reasonable and broadly provided public transport modes in numerous urban and rural zones of many nations. A great public transport service is vital to support economic development, the growing population and the extension of urban or rural activities (Bachok, Osman, &Ponrahono, 2014). This requires that bus transportation stakeholders have to ensure the accessibility of assets in giving successful and proficient buses journey. Furthermore, public transport service providers ought to give a great accessibility that leads to reliable, secure, intelligent, comfort and successful transportation system (Amiril, Nawawi, Takim, & Latif, 2014). However, there are a number of issues relating to public bus services such as limited facilities, the use of low quality of public bus facilities and interchanges, inconvenience fleets, despatching low passenger trips and long waiting time (Rohani,Wijeyesekera, & Karim, 2013).According to Salem, Almselati.,Rahmat., &Jaafar, (2011), the facilities of public transportation in Malaysia are modern but absences of service quality. Lack of service quality is the public transport such as lack of safety and comfort to the passenger that use that transportation.

Similarly, Sabeen, Anwar, & Noor, (2012) argued that issues passengers of public transport are considered to be many in urban areas in Malaysia from the problems of congestion, unreliable service and limited connectivity and accessibility. High congestion during peak hours constrained the bus driver resist to route schedules. This circumstance will give issues to passengers' time management. In addition, Jayaraman (2011) concluded in his study, people would often use public transport when public transport is more efficient, affordable, clean and convenient. Abdul Aziz Abdullah et al, (2013) also stated in their study that the negative behaviours shown by bus drivers make the passengers not feel convenient during the travel. However, the public transportation is still the most preferred choice of some category of passengers in Kelantan even though some passengers are of the view that public transportation in Malaysia is unsatisfactory. However, Safe Kids Malaysia executive director and Universiti Putra Malaysia (UPM) Department of Community Health, Assoc Prof. Dr. Kulanthayan KC Mani stated that to reduce road accidents, 'it would be better if passengers started using public transport for long-distance travel as it is quite safe compared to private transport due to the observance of limited speed compare to those driving personal cars." Furthermore, the Ministry of Transport, (2016) report indicate that in terms of the total number of road accidents in Malaysia, public bus involvement in accident is 1.6%.

This notwithstanding, there are few studies that focus on the factors like accessibility, convenience and safety that influence the choice of transport system. This study is therefore meant to focus on the factors that influence passengers to use public bus transportationfrom Kelantan to Northern Region which can also help researchers and the management team of bus operatorsto take further actions in realizing their vision and mission that are to receive excellent feedback, gain trust and loyalty of customers, expand their business, offer better services to customers.

2. Literature Review

According to Ismail, Hafezi, &Nor, (2012) paper on passengers'preference and satisfaction of public transport in Malaysia, it revealed that public transport provides easy access and lower costs to consumers. And it is therefore very vital for a study of this kind on passenger preference towards choosing the public bus transportation since that play an important role to classify which factors are been consideredin choosinga transport service in Malaysia and Kelantan in particular. On the other hand, Oliver (1980) said, "public transport

must have high service quality to satisfy and fulfil a wide range of different customer's needs." It is in order to attract and keep more passengers to use public bus transportation. On top of that, passengers can have numerous viewpoints when valuing a long journey such as travel time, waiting time, journey distances, the speed of public transport, the comfort offered, the value of price ticket and other difference views. From the article "Survey on Passenger Preferences and their Application in Public Transport Network Planning" by Ágoston Winkler (2009), the article illustrates that the different groups or layers of passengers may have different preferences. This can be seen that preference affects passengers to have various behaviours towards choosing their interest to use public bus transportation. YusakSusilo, Tri BasukiJoewono& Wimpy Santosa (2010) believe that attitudes and preferences of individuals towards policies are governed by their socio-demographic aspects and it is a learning process over time. This agree with the theory that the value of items or goods are based on consumers' preference of the same, "A Prediction Model of Airline Passenger Preference: Identifying factors that predict passenger preference between low cost and legacy carriers" by RianMahiar Mehta (2013). It can be relied that the value such as accessibility, convenience and safety that is been provided by the transport service could attract and be passengers' main preference of people using the bus for transportation. The preference from passengers' view would be the benchmark for bus operators to improve and establish their transportation management in the future.

On accessibility, Hart, (2012) argued that it is the main factor in public transport as it provides a good accessibility. The role of public transportation is to provide good public facilities to people. In addition, a good public transportation system must have an easier access to the passengers. Most of the public transportation systems still lack flexibility, direct access and safety during the travel and all these make some people to choose the private transport instead of using public means of transport (Ismail, Hafezi, Nor &Ambak, 2012). According to the research of Kamaruddin, Osman & Che Pei, (2012) done in Klang Valley, the main factors that influence the passenger's satisfaction on public transportation included reliability, fares, accessibility, trip experience, safety and communications, with accessibility ranked second which is19.7%. The ranking of the main factors that influence the passenger's satisfaction based on Kamaruddin, Osman & Che Pei, (2012) study shows safety (34.3%), followed by accessibility of (19.7%), reliability (17.3%), fares (17.1%), trip experience (8.2%) and communication (3.4%). The assessment of accessibility is the most important part which needs to prove the extent and is capable of becoming accessible by transport modes especially for developments among University students for travelling long distances (Taylor, B.D, 2002). And Hudson, (2004) indicated that the concern of accessibility may be considered as a secondary factor for students' transport mode choice except for those with the ownership of their own transport. Ibrahim, Adji& Karim (2013)found that the level of mobility and accessibility depends on the socioeconomic group that users belong to. This is because accessibility is the suitability of the public transportation system for passengers from one point to another point, (Murray, Davis, Stimson & Ferreira (1998). Ismail et al., (2012) stated that the reasons that people prefer private transport are because of the attractiveness of private transport such as flexibility, direct access and shorter travel time. Low quality of public transport service can result in inconvenience towards users and hence reduces the service competitiveness against private transport owners (Yaakub&Napiah, 2011). Therefore, accessibility has been identified as one of the vital roots that caused transport modes users, as transport accessibility refers to the ability of users or students to reach transit facilities that contribute reasonable proximity from their places of origin and the destination (Murray, Davis, Stimson, & Ferreira, 1998). Thus, the travel distance is taken more into account because of the unobserved perception of comfort and convenience of transport modes (Polat, 2012).

Convenience is another important factor that influencepassenger's preference on the use of public bus transport. Convenient is suitable or agreeable to the needs or purpose and also well-suited with respect to facility or ease in use favourable, easy, or comfortable for use, since convenience is known as a state of being able to proceed with something without difficulty and is very significant for customers when choosing public transportation (Liu Yao, FadilahSiali, Mohd Ridzuan Darun& Muhammad Firdaus Ismail, 2014). Liu Yao, FadilahSiali, Mohd Ridzuan Darun& Muhammad Firdaus Ismail, (2014 reiterated that the public transportation under the government sector of Malaysia is more convenient towards customers in urban and rural areas. However, private cars have been considered as the most attractive mode of transport because of their convenience, speed, comfort and individual freedom. As a result, users of the public mode of transportation needs to adjust their service to the attributes required by consumers in order to become more attractive such as increase their level of convenience. From here, the researchers concluded that the private cars are more preferred by consumers because of their characteristics which is convenient and comfortable (Ali Ahmed Mohammed & Alaa Shakir, 2013).

Travel time and cost are considered as a component of convenience which also heavily influence the choice of passengersin choosing the mode of transport. In general, as travel times and costs increased, the utility of any of the modes decreased (Gudzinas, 2012). Furthermore, a research of Ashiabor, Senanu, (2007) on the travel

costs for modes over the range of income levels in their research show those high-income travellers are less sensitive to travel cost, since public long-distance modes such as bus, train and airplane are inherently a part of inter/multimodal transportation system, they are associated with both access and egress time (Cho, 2013). Again, Budiono (2009) demonstrate thatpassengers feel inconvenienced when their journey was interrupted by "unwanted arousal" such as overload passengers, smoke from smoking passenger also bad habits and attitudes in the bus that was ride by them. Besides that, she also agreed that the passengers not only assumed that the technology will give them convenience, but attitudes as well as knowledge can give the impact on the convenience. This statement was proved by her research result that both on board security and bus comfort are the important elements in service quality factor. Other than that, the convenience should be considered especially to the long-distance journey. The long-distance journey will make the passengers feel tired and uncomfortable. To minimize the inconvenience, the bus should have comfy seat, air conditioner, internet facilities and media entertainment such as music and video player for people using the public transport which will often make public transportation seen as efficient, affordable, clean, comfortable and convenient. Lastly, RohanaSham,Suhana Mohamed., Norhayati Omar, Shaherah Abd Malik &Roha Mohamed Noah (2013) concluded that cleanliness and comfortable public transportation are most significant in order to choose public transportation to travel.

Safety is also termed as the freedom from danger, risk, or threat of harm, Injury, or loss to personnel and/or property, whether caused deliberately or accident. On the other hand, safety is related to the condition of being protected from or unlikely to cause danger, risk or injury. Element safety is the most important to keep ourselves in good condition. The Star (2017) concluded that all express buses must be equipped with the device by 2020 and reassigning the bus route to ensure safety. In addition, the Speed Limiter Device (SLD) was beneficial for public bus companies as the bus operators were able to do real-time monitoring on their fleet from the headquarters via the global positioning system (GPS). The use of unfamiliar roads are most factors of accidents in road transport and is supported by Plankermann (2013) research that, "An experienced driver who is driving in an unfamiliar environment would perform tasks such as shifting at the control / skill-based level and tasks such as turning at an intersection at the rule-based level. The more the driver gets familiar with the environment, the task turning at the intersection would move to the next lower level control / skill level)". Graham Currie, Alexa Delbosc and Sarah Mahmoud (2013), in their study revealed that people who have skilled or observed crime on public transport were more likely to rate their personal safety in bad condition. Besides that, safety is identified as an important element when considering about public transportation and that all what passengers will consider is about safety once they start to travel. According to Malaysia Institute of Road Safety Research (MIROS) (2009), drivers play an important role as the key personnel in delivering the products or passengers. The bus drivers are a main root to ensure the safety of the passengers. MIROS Director-general organized Safety Star Grading (SSG) a programme on July, 2018 in order to increase the level of safety by bus operator and through this programme, public know the safety level of bus operators. This programme was supported by Malaysia Transport Minister said over 36,000 permits had been issued for various bus operator. So, this programme is good as it gives confidence to the public. Genting Highland bus accident that happened in August 2013 and killed 37 people is one of the deadliest accidents in Malaysia. According to The Malay Mail (2018), Transport Minister announced that all new express and tour buses will have CCTV (Closed- circuit television) camera installed in their vehicle. Next, all the buses must install the brake retarder system and speed limit gadgets. Moreover, Kharola, and Dinesh Mohan (2010) analyzed that the buses are the safest mode of transportation because they have an advantage in having bigger size and mass compared to other road public transportation. However, there are also a few studies have another point of view which the buses face high risks of road accidents. The reasons above proved that safety element is very significant for public and express bus transportation. The passengers must avoid hazards and protect themselves by choosing a bus transport which is safer during travelling.

Studies shows that, though public transport provides easy access and lower costs to the passengers, the use of public bus transport in Malaysia is not a priority to users due to the reasons of ease, convenience and quality (Ismail et at., (2013). It can be concluded that the passengers will consider about convenience and quality when they are choosing transport for their trips. According to the research of Kamaruddin et at., (2012), the main factors that influence the passenger's satisfaction on public transportation included reliability, fares, accessibility, trip experience, safety and communications. The main factors that influence the passenger's satisfaction is safety (34.3%), followed by accessibility (19.7%) and others. Travel time and cost are considered as a component of convenience which is heavily influence the choice of passenger in mode of transport. In general, as travel times and costs increased, the utility of any of the modes decreased (Gudzinas, 2012). This study was proved by his research result that bus comfort is the important elements in choice of passenger in mode of transport. From the above discussion, it can be seen that the factors such as accessibility, convenience and safety are important when the passengers are choosing public transportation and as such, a new framework in Figure 1 is formulated based on passengers' preference. The framework has three independent variables (IV) and a dependent variable (DV)

chosen for this study. The dependent variable is passengers' preference while independent variables are accessibility, convenience and safety which this study used as the main factors that influence passengers' preference towards public bus transportation from Kelantan to Northern Region based on existing literature.Theresearcher therefore stated the following hypothesis that:

H1: There is a positiverelationship between accessibility and passengers' preference.
H2: There is a positive relationship between convenience and passengers' preference.
H3: There is a positive relationship between safety and passengers' preference.

2.1 Theoretical framework

According to Aziz and Rohaya, (2013), a theoretical framework explains the interrelationship among the variables that contribute to a study. Figure 1 therefore shows the theoretical framework below on the factors influencing passengers' preference towards public bus transportation from Kelantan to Northern Region.

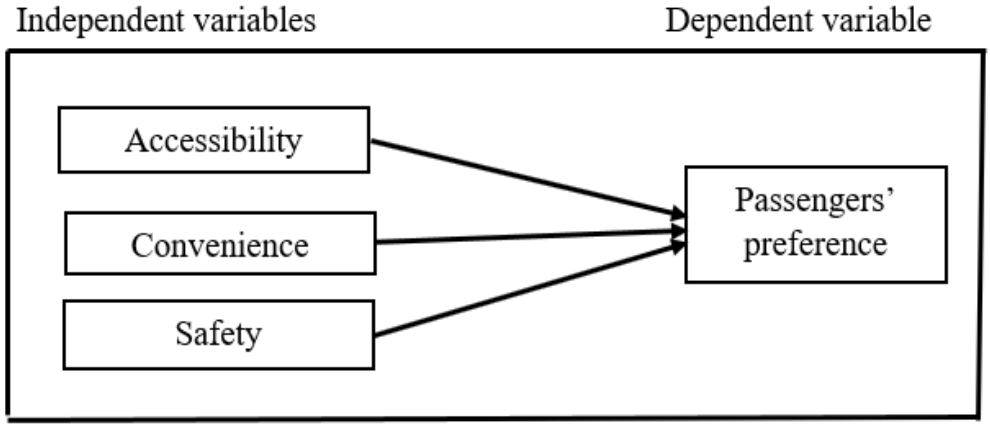

Figure 1. Theoretical Framework

3. Methodology

This study is a cross-sectional research design and applied the quantitative approach by distributing questionnaires to the respondentsat Kota Bharu Bus Terminal made of different categories of status like government workers, private workers, self-employed, students and retired people via Google form. The main reasons for choosing those people are their monthly income is influencing them towards using public bus transportation for travelling in long distance as reported by Jesus Barajas, Asha Weinstein Agrawal and Daniel Chatman, (2018) that the choices and behaviour of travelling by using public transportation is different between higher and lower income people and that the lower income people were more likely to use public transit than substitute themselves into driving options when compared to the people of higher level of income.

The study was conducted on express bus passengers travelling from Kelantan to Northern Region where 420 questionnaires was administered to the respondents based on the formula applied by Krejcie & Morgan (1970)entitled 'Determining Sample Size for Research Activities' (Educational and Psychological Measurement) and using a simple random sampling technique. The sample size for this study was obtained from the total number of population in Kelantan as 1.86 million based on statistics at Department of Statistics Malaysia Official Portal.Out of the 420-questionnaire administered, 354 respondents responded to the questionnaire constituting almost 84% of the total number of respondentsand 66 responses were filtered out because the respondents answered flight or train as their means of transport under the travelling information section.

The measuring instrument used for this study was the questionnaire made of closed-ended questions seeking the views of respondents on their background characteristics and on the key variables of the study and the Statistical Package for Social Sciences (SPSS) version 22 was used to analyze the data obtained from the sample population.

4. Results

In order to answer the research objectives of this study, three (3) types of data analysis method was used in this research to evaluate the results to answer the research objectives. The three data analysis methods used are descriptive analysis, reliability analysis, and Pearson Correlation analysis.

4.1 Descriptive Analysis

4.1.1 Respondent Demographic Profile

Demographic data		No. respondents	Percentage (%)
Gender	Male	142	40.1
	Female	212	59.9
Race	Malay	225	63.6
	Chinese	54	15.3
	Indian	67	19.2
	Others	7	2.0
Age group	18 – 27 years old	240	67.8
	28 – 37 years old	45	12.7
	38 – 47 years old	47	13.3
	48 – 57 years old	22	6.2
Status	Married	105	29.7
	Single	241	68.1
	Others	8	2.3
Work status	Government	30	8.5
	Private	59	16.7
	Self-employment	56	15.8
	Student	180	50.8
	Retired	11	13.1
	Others	18	5.1
Monthly income	Below than RM 1000	168	47.5
	RM 1001 – RM 2000	52	14.7
	RM 2001 – RM 3000	68	19.2
	RM 3001 – RM 4000	38	10.7
	RM 4001 – RM 5000	20	5.6
	RM 5000 and above	8	2.3

Table 4.1 shows the demographic profile of 354 respondents. From the data, most of the respondents are female which is 59.9% while male is 40.1%. Based on the questionnaire, Malay responded recorded as the highest of the races that prefer to use bus with 63.6% followed by Chinese with 15.3%, Indian with 19.2% and other races with 2.0%. As for the age, majority of them aged between 18 to 27 years old with 67.8%, followed by aged between 28 to 37 years old with 12.7%, 38 to 47 years old with 13.3% and 48 to 57 years with 6.2%. The status of respondents which the influence the most is single status with 68.1% meanwhile married status with 29.7% and other status with 2.3%. Concerning work status, the location of the bus terminal is close to universities and colleges shows that most of the respondents are students with 50.8% and government was with 8.5%, Private with 16.7%, self-employment with 15.8%, retired workers with 13.1% and other work status with 5.1%.

In terms of the monthly income of the respondents, the data shows the highest as RM 1000 or below with 47.5%. Between the income of RM 1001 to RM 2000 with 14.7%, RM 2001 to RM 3000 with 19.2%, RM 3001 to RM 4000 with 10.7%, RM 4001 to RM 5000 with 5.6% and finally above than RM 5000 with 2.3%. This shows that lower- and middle-class respondents prefer to ride the bus in a long journey.

4.2 Reliability Test

To test the reliability of the results, the value of the data was measured by using Cronbach Alpha value in the SPSS Software. According to Hair, Sartedt, Ringle and Mena (2012), measures of reliability that range from 0 to 1, with values of 0.60 to 0.70 are deemed the lower limit of acceptability while a good and an acceptable Cronbach Alpha value should be from 0.7 to 0.9 (Danel, da Silwa and Ferreira, 2015) as shown by Table 4.2.

Table 4.2. The Cronbach's Alpha value based on Danel, da Silwa and Ferreira, (2015)

Constructs	Croabach's Alpha	N of Items	Strength of Association

Passengers' preference	0.898	5	Very Good
Accessibility	0.927	5	Excellent
Convenience	0.905	5	Excellent
Safety	0.936	5	Excellent
All Variable	0.962	20	Excellent

The Cronbach's Alpha value for the pilot study in this studyillustrates the reliability of four variables. Cronbach's Alpha was used to measure the reliability of 20 items and used to examine the three constructs. Based on Table 4.1, the overall results for this pilot test shows 0.962 value as an excellent sign of strength of association. This meant that, this questionnaire was very reliable. The reliability for the dependent variable which is factors influencing passengers' preference shows a value of 0.898 which is a very good sign of strength of association. Accessibility as the first independent variable shows a value of 0.927 which is an excellent sign of strength of association while the second variable, convenience had a value of 0.905 which means it has an excellent sign of strength of association with the factors influencing passengers' preference. Lastly, safety shows an excellent sign of strength of association, 0.936. In conclusion, all the items in this study are understood by the target respondents because the value of Cronbach Alpha value for each construct exceeded 0.7 which reflects that the targeted respondents understood the items of each variable (Hair et al., 2012).

Table 4.3. Respondent Travelling Information

Travelling Information		No. respondents	Percentage (%)
Type of transport	Express bus Flight Train	354 0 0	100 0 0
Frequency of travel by bus in a year	1-3 times 4-6 times 7-9 times More than 10 times	116 94 72 72	32.8 26.6 20.3 20.3
Reason for travelling by express bus	Accessibility to the bus station Safety rate of the bus Convenience in the bus Price of ticket	87 26 71 170	24.6 7.3 20.1 48

Based on the distributed questionnaires via Google form by Table 4.3 above, 354 respondents used express bus for travelling from Kelantan to northern region which recorded 100%. The respondents also used the express bus for 1-3 times a year with 32.8%, followed by 4-6 times which was 26.6%, the frequency of using bus for 7-9 times and more than 10 times recorded the same percentage which was 20.3%. Accordingly, respondents take the express bus because of the ticket price which recorded 48% and the respondents made of 170 out of 354. It was followed by the accessibility to the bus station with the 87 respondents made of 24.6%, then the convenience preference to take bus was recorded 71 respondents with 20.1% and lastly the least recorded respondents were 26 with 7.3% which is safety of the express bus.

4.3 Central Tendencies Measurement of Constructs

Table 4.4. Central Tendency for Passengers' Preference

Item	Minimum	Maximum	Mean	Std'tdevt'n
1. I prefer to take the bus because the bus station is closer to my place.	1	4	3.59	0.587
2. I prefer to take the bus because riding the bus is more convenience.	1	4	3.27	0.648
3. I prefer to take the bus because it is safe.	1	4	3.18	0.718
4. Getting on the bus has always been my first choice for long journey trips.	1	4	3.25	0.818
5. My preference for getting on the bus is the right choice as I was very pleased with the service provided.	1	4	3.36	0.637

Table 4.4 shows the descriptive statistics which provides information about the average mean score of each item for "Passengers' Preference" dimension and the standard deviation values. In this questionnaire, there are 5 question items on the dependent variable. The findings indicate that the highest mean was scored by item 1 "I

prefer to take the bus because the bus station is closer to my place" with the lowest standard deviation of 0.587among all the other measures. The lowest mean was scored by item 3 "I prefer to take the bus because it is safe" with the second highest standard deviation. On the other hand, items 2, 4 and 5 achieved mean values of 3.27, 3.25 and 3.36 respectively. There have some disagreements happen on item "Getting on the bus has always been my first choice for long journey trips" because it had the highest standard deviation which is 0.818 and item 1 "I prefer to take the bus because the bus station is closer to my place" which had the lowest standard deviation of 0.587.

Table 4.5. Central Tendency for Accessibility

Item	Minimum	Maximum	Mean	Std'tdevt'n
1.Travel time is punctual	1	4	3.29	0.794
2. Bus station is located near at my place	1	4	3.41	0.606
3. I feel easy to purchase bus ticket by online	1	4	3.12	0.860
4. I feel the service counter make the communication easier between the staff and me at counter.	1	4	3.38	0.676
5. Service provider is easy to contact.	1	4	3.37	0.674

From Table 4.5 on theaccessibility of the bus to passengers, the highest mean value was 3.41 scored by item 2 "Bus station is located near at my place" and having the lowest standard deviation of 0.606 among the other measures. The lowest mean was scored by item 3 "I feel easy to purchase bus ticket by online" which is 3.12 with the highest standard deviation of 0.860. Purchasing bus ticket online is not effective and reliable to take the public bus transportation for a long drive. For the item "Bus station is located near at my place" the respondents consider about the location of the bus station which is near to their residency and at the same time they prefer the way the staff at counter communication with them.

Table 4.6. Central Tendency for Convenience

Item	Minimum	Maximum	Mean	Std'tdevt'n
1. The bus has good air conditioner.	1	4	3.61	0.548
2. The bus have enough and convenience seat.	1	4	3.41	0.568
3. Passengers are well treated by service provider.	1	4	3.31	0.626
4. The bus was clean when rode it.	1	4	3.50	0.579
5. I prefer bus express which provides WIFI and I can access it well.	1	4	3.05	0.928

Table 4.6 shows the mean and standard deviation analysis for convenience of using the bus by passengers. According to the results, the highest mean value of 3.61 was scored by item 1"The bus has good air conditioner" with the lowest standard deviation of 0.548 compared with the other measures. The lowest mean was scored by item 5 "I prefer bus express which provides WIFI and I can access it well" with the highest standard deviation value of 0.928. For the item "The bus has good air conditioner" the respondents had agreed that the air conditioner of the bus is in a good condition whereas in item 5 "I prefer bus express which provides WIFI and I can access it well", and indicate that the respondents do not necessarily prefer the bus which provides WIFI services.

Table 4.7. Central Tendency for Safety

Item	Minimum	Maximum	Mean	Std'tdevt'n
1. Bus driver drives according to speed limit designed.	1	4	3.19	0.695
2. I feel safer as there is CCTV (Closed-circuit television) camera installed in the bus.	1	4	3.12	0.819
3. The seatbelt provided on the bus works well for my safety.	1	4	3.26	0.739
4. I feel secure to keep my luggage in space provided in the bus.	1	4	3.35	0.679
5. I feel the driver is concern about passengers' safety while driving.	1	4	3.34	0.624

The mean and standard deviation analysis as shown in Table 4.7 on the safety on the use of bus demonstrate that item 4"I feel secure to keep my luggage in space provided in the bus" with the highest mean value of 3.35and the lowest mean value was scored by item 2 "I feel safer as there is a CCTV (Closed-circuit television) camera installed in the bus" with the highest standard deviation which is 0.819. For the item "I feel secure to keep my luggage in the space provided in the bus" the respondents believe that their luggage will be safe in space that has been provided. Whereas item 5 "I feel the driver is concerned about passengers' safety while driving" had achieved the lowest standard deviation which is 0.624.this clearly shows that most of the passengers used the bus because they feel that the driver is concerned about passengers' safety while driving.

4.4 Inferential Analysis

4.4.1 Pearson Correlation

Table 4.7. Pearson Correlation

Correlations					
		Mean Passengers' Preference	Mean Accessibility	Mean Convenience	Mean Safety
Mean Passengers' Preference	Pearson Correlation	1	.606**	.507**	. 477**
	Sig.(2- tailed)		.000	.000	.000
	N	354	354	354	354
Mean Accessibility	Pearson Correlation	.606**	1	.556**	.544**
	Sig.(2- tailed)	.000		.000	.000
	N	354	354	354	354
Mean Convenience	Pearson Correlation	.507**	.556**	1	.618**
	Sig.(2- tailed)	.000	.000		.000
	N	354	354	354	354
Mean Safety	Pearson Correlation	.477**	.544**	.618**	1
	Sig.(2- tailed)	.000	.000	.000	
	N	354	354	354	354
**. Correlation is significant at the 0.01 level (2-tailed).					

Pearson Correlation Analysis is used in this study to interpret the strength of association between the dependent and the independent variables. In correlation coefficient, the coefficient range of ±0.91 - ±1.00 shows that there was a very strong strength of association between the dependent variable and independent variables. While the range of ±0.00 - ±0.20 shows the slight and almost negligible correlation between the dependent variable and independent variable. From Table 4.7, the correlation between accessibility and passengers' preference with p-value of 0.000 which is less than 0.05 indicates that hypothesis 1 is being supported. Thus, there is a significant influence between accessibility and passengers' preference. Likewise, both variables had a moderate relationship among each other according to the estimated value which is 0.606. This result shows that accessibility has influence on passengers' preference. Therefore, H1 is accepted where there is a significant relationship between accessibility and passengers' preference. Additionally, the correlation between convenience and passengers' preference with the p-value of 0.000 indicates that hypothesis 2 is supported and confirm the hypothesis that there is a significant influence between convenience and passengers' preference where both of the variables had a moderate relationship among each other with a calculated value of 0.507.Lastly, the table shows the correlation between safety and passengers' preference with the p-value of 0.000 that suggest that hypothesis 3 is being supportedthus, there is a significant influence between safety and passengers' preferencewith both variables recording a moderate relationship among each other based on the value calculated which is 0.477.This result shows that H3 is accepted that is, a significant relation exists between safety and passengers' preference of using public bus by travellers from Kelantan to Northern region.

5. Discussion and Conclusion

The findings of this study on passengers' preference towards public bus transportation from Kelantan to Northern Region with the independent variables such as; accessibility, convenience and safety are based on survey questionnaires obtained from respondents at Kota Bharu Bus Terminal that involved government workers, private workers, self-employed, students and retired people via Google form. The findings from the users of express bus in Malaysia though the company need not be complacent but keep improving upon their service in order to get more passengers to patronise their service revealed that,among the three factors that influence passenger's preference towards public bus transportation from Kelantan to Northern Region such as accessibility, convenience and safety. With the correlation between accessibility and passengers' preference, both variables had a moderate relationship among each other which signify that there is a significant influence between accessibility and passengers' preference. Further, the results prove that there is a correlation between convenience and passengers' preference and shows that convenience is a major factor affecting passengers' preference of using the public bus for transportation. On the safety provided by public bus transportation service the study shows that there was a significant correlation between safety and passengers' preference where both variables had moderate relationship among each other.More so, onwhether the convenience provided by public bus transportation service has a significant influence to the passengers' preference, it revealed that there was a significant influence between safety and passengers' preference. In conclusion, all the independent variablesof the study were accepted and all have positive and significant association with the dependent variable, although there is still space for express bus transport companyto continue to improve upon their services to attract more customers. This study finally concludes that there was a moderate to strong positive and significant association with all the three independent variables towards passengers' preference of public bus transport from Kelantan to Northern Region and all the hypothesis of the study were accepted. Though this study only looks at respondents of express bus at Kota Bharu Bus Terminal, the study's findings may be limited. As a result, future researchers should focus on improving the factors such as accessibility, convenience and safety that influence passengers' preference towards public bus transportation from Kelantan to Northern Region and the entire of Malaysia. Again, the price of the ticket which was discovered to be a significant factor in this research should also be looked at in future. Researchers should also research in other related fields of studies using other transport service providers which was a limitation in this research. Another vital limitation of this research was that data was collected at once through distributing closed ended questions to the targeted respondents which restricted the respondents for expressing their own opinion or express their reasons and it may lead to a wrong conclusion. Finally, based on the major role of public bus transport services, future researchers should use face-to-face interviews to collect data from the respondents, include other states and transport services to gain more understanding onpassengers' preference of public bus transport in Kelantan and Malaysia in general.

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