

[LOG 19] FACTOR INFLUENCE BEHAVIOR INTENTION TOWARDS RAIL TRANSPORTATION IN MALAYSIA

Wang Jian Zuo¹, Lee Hui Xin², Teo Hui Xin³ & Zulkufli Aziz⁴

¹⁻⁴*School of Technology Management and Logistics, College of Business, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah*
wangjianzuo@gmail.com¹, xin.lee1993@hotmail.com², huixinteo93@gmail.com³,
zulaziz@uum.edu.my⁴

ABSTRACT

Environmental concerns are growing trends as the number of private vehicles in Malaysia has increased every single year. Different types of pollutants can cause deficiencies of quality that affect mobility of life in general. Rail as sustainable transport able help in reduction of private vehicles used as well as achieve green environment. The study aimed to determine factor influence behavior intention towards rail transportation by using Ajzen's Theory of Planned Behavior as a theoretical framework. All of the predictor variables (service reliability, fares, safety and security) are involved in the study. The data were collected from 400 undergraduate students of University Utara Malaysia through questionnaire. The sampling method used in the study is non-probability. The outcomes of this study are expected to help develop awareness of sustainable rail transportation towards UUM students and the study could be encourage them to use the rail transportation services provided in Malaysia.

Keywords: *behaviour intention, Theory of Planned Behavior, rail transportation*

INTRODUCTION

Rail transportation is transportation in which for movement of people and freight from one location to another destination. Rail transport services taken an essential role in physical and economic development of urban cities in a country especially in China, Japan and it was developed over the world. Even though rail transport developed rapidly overseas but there are some factors made to citizens in Malaysia preferred on choosing other mode of transport like private vehicles and express buses provided (Elween, 2013). A good railway services that very encouraging people to take are needed to be cooperate with continuous improvement and is important to the passengers of getting the high standard quality of facilities from that service provided on trains and stations (Gleave, 2000). The future development to a railway transport system for a country is a critical instrument to affect passengers satisfaction or intention to use this transport services and thus can be related to the passenger response for the quality of services in the where they get.

An urban rail transportation system is initially aim to built for reduce congestion problems in cities by enhancing accessibility to a better mobility. A more efficient and effective urban rail transport mode was seen as important initiative to ensure a sustainability of public transportation in urban areas. Rail transport is still expected to a transportation which is considered as low-carbon and least of emissions from the

transport industry. But today, the congestion problem is among one of the significant issues which facing by many area in Malaysia, especially town of Klang Valley city. It is a blooming rapidly developing country with increasing ownership of private cars and least of people live in cities is by taking the public transportation services in Malaysia. In order to develop private transport services more realistic and used more by nations, public transports services needed become more systematic and make better continuously. Moreover, the railways services in Malaysia now are confront with the challenge to reform the reliability and the duration arrival to a destination due to provide competitive services and heighten their significance become a road alternative especially to the services from KTM Komuter unable to provide the high standard of the services required by train users. KTM Komuter confront with the challenges such as problems delays, punctuality, changing the ticketing machine systems, time of delays, replace frequency, rising of safety concerning condition, and level of convenience.

The standard service of rail transportation is can be measure through the services of transportation or infrastructure set up to be determined. It is considered as a holistic approach that might be involved some factors providing an entire speed of train route (Mannering, Walter & Scott, 2004). Malaysia in this always congestion situation especially in city Kuala Lumpur must be very encouraging the rail transportation greater use in future and supporting this sustainable transportation even though the rail transport system in Malaysia still need a lot of improve to provide their services. Hence, this research focuses on the outlining to the factor influence on behavior intention towards rail transportation as a sustainable public transport in Malaysia.

STATEMENT OF PROBLEM

Base on the facts, demand for public transportation services is increasing because of it's highly growth of population. In Malaysia, The number of registered private cars has increased by 41% from 2005 to 2010 and this situation is further intensified by highway developments into cities leading to traffic congestion (Suruhanjaya Pengangkutan Awam Darat, 2012). The increasing growth of motorization vehicles was recorded in Kuala Lumpur, the most prosperity city of Malaysia especially in the Klang Valley region which kept increase to private vehicle ownership is the highest in Kuala Lumpur contrast to the other state of Malaysia. There was an issue likes traffic jam, limited parking space, and pollution became issues which the most concern following by Klang Valley, particularly with the higher growth of private vehicle in the region (Almselati, 2011). The growth of economic and the mobility demand is growing in some countries are made to rising quantities ownership of private vehicles (Han and Hayashi, 2000). There are made to the serious issue congestion and leading the issues of increases the carbon release in Malaysia.

The rail company failed to provide a quality of services may results the number of passengers would be decreases. According to Zaherawati et al. (2010), the punctuality is use to measure for the time arrival and departure, is a crucial terms in identifying the services reliability. Now, the delay issue became a concerning problem in KTM commuter services. There is a lot of the transport users' complaining in punctuality, delay problem has become worse. These problem often happened during commuting time which is that peak hours. Service reliability is judged as low when the performance

was below expectation from passengers. For the instrument issue of service quality, it can be easily causing the revenue of company being reduced and directly cause they are not able to earn profit to continually their services because there are unable to provide an accessibility of needs to citizens (CfIT 2008). In this way, the rail company which is unable to provide a reliability of services to the passengers can made the passengers not making the decision to choose the rail transport system as their mode of journey. Furthermore, the problem to the poor ticketing system, the problems faces by Railway Company normally is that relating to insufficient of ticketing counters to serve and ticket vending machines utilization. These are made to increase of waiting and entire route of time especially during peak hour. Rail Transport Company which faced the finance problem might easily cause the deterioration of infrastructure. This is because there was need a high cost to maintain these rails ticketing system and including the other maintenance service on roads, bridge, terminal or road sign. It is necessary to the improvement of the operation for reduction of the track accidents which demand many hours of inactivity (J. E. S. Castelo & Ferreira, 2002). There are a lot of issues of public transports in Malaysia, in generally is became more extensive, and services provided are under a necessary levels, therefore the consumer needs and expectations are difficult to fulfill (Zaherawati et al., 2010).

Transportation sector consider still insufficient for serve the fastest growing population of our country. It is important to realize the preferences and requirement of the passengers and the study attempts for find the factors influence behavior intention towards rail transportation in Malaysia.

LITERATURE REVIEW

Service reliability

A service is available to a person used function. For a service is that considered satisfy if the transactions from the service able to achieve the level of standard. There is one of among aspects to this term of service reliability. Reliability is close to quality persistence, there is important to the role of time passage from the meaning of reliability. Those service characteristics include the consideration measure in a train services performance rather than seeking passenger performance. Reliability is delineated as, "being able to be trusted to do what is expected or has been promised." In addition, the criteria of reliability should not concentrate only to these initiatives of maintenance improvement or only maintenance of forecasting (Christer, n.d.). The customers' consciousness of quality provided from services mentioned by them which consists of reliability was a difference between the universal level anticipation of service performance by service providers and perception of actual fulfillment from a particular firm. A service reliability is discussed in a form qualitatively and quantitatively ways. Informal sense is used by term of reliability, or in widely linguistic sense, more preferable in a technically and concrete sense. However, Hou Xingqi (2008) believed a customer's subjective cognition from a service quality is, not an purposely appraisal, for the service providers given the evaluation after contrast with the disparity between the service quality in wish to get and the real obtaining service quality getting customers gaining. Service reliability components in different area are not alike then the service quality position is different of expectations from consumers and the real service consciousness for the people able to get approval.

According to Zeithml (2006), reliability is described as “the ability to perform the promised service dependably and accurately” or “delivering on its promises”. There is very critical because the consumers can bargain with an enterprise which is keeping the guarantee by them and there was keeping corresponded the relationship to the organization clients generally. According to Wilson et al., (2008), service reliability under term of service quality described with an entire adjudication to a service being offered and it was so close to a behavior among the service and it would be accepted totally. Gefen (2002) made the definition of the service quality as a capability and reliability in a subjective comparison that customers could make between quality of services and that they want and wish to receive and what actually they get. It is the gap among service quality, satisfaction and loyalty from consumers of getting the services (Vander Wal, Pampallis & Bond, 2002). The service reliability was the outcomes from the customers of expectations contrast with which is passenger used for the railway services to their service anticipations through the delivering firms. Once the wish getting good services from customers are larger than actual fulfillment, then perceived quality will become less than satisfaction and the consumer dissatisfaction possibly appeared (Gronroos, 2001).

Fares

Fares and price is one of the most critical attributes in buying products or services. Mostly fares are the key element towards satisfactions level of students towards rail transportation. According to Dovaliene and Virvilaite (2008), price can be defines as one of the most flexible marketing mix elements that can be quickly changed, after changing specific product and service characteristics. Besides, decisions for price are most effective when harmonized with other marketing mix elements such as product or service, place and promotion. In this study, price is the amount of money a consumer wills sacrifices to buy the product. Apart from that, price fairness has relationship with customer satisfaction (Hermann, Xia, Monroe, and Huber, 2007). However, consumers will get satisfaction with the price of the product if they think the price offered is fair consumers will gain price satisfaction of a product if they believe that the price offered was fair and favorable. Satisfied customers stay loyal longer with an organization, pay less attention to the competition, are less price sensitive, offer service ideas to the organization and require less cost for the organization to service them (Weinstein et al.,2011). Therefore, price is an important element in consumers’ purchases that has a large influence on consumers’ judgments regarding service.

Many consumers use price as an indicator of product quality (Völckner and Hofmann, 2007), mainly because their experience tends to tell them that more expensive products are of better quality than cheaper ones. Furthermore, prices are one-dimensional and easier to assess than other, multidimensional quality cues (Brucks et al., 2000). Prices may also mirror production costs; high quality products that are more expensive to produce should have a higher price.

According to Campbell (2007), price satisfaction is a implication of price fairness and price perception. Thus, the overall price satisfaction was influenced by relative prices, price fairness and price confidence. Price perceptions directly influence satisfaction judgments (Hermann, Xia, Monroe, and Huber, 2007). According to Monroe and Xia (2006), price fairness is the situation in which no discrepancies or inequalities exist. These inequalities occur when consumers compare the prices they pay with their reference prices, prices paid by other buyers or with those which are charged by other

sellers for the same product or service. On the other hand, Maxwell et al. (2009) establish that there is fairness in prices when a reasonable and fair price is fixed. They also point out that sometimes a price which is considered fair is the one found to be below the expected price. Some authors as Namkung and Jang (2010) define fair prices as the “global evaluation made by the consumer of the price based in comparing the current price with the acceptable prices which are determined by social standards (reference price) and personal interest.

However, fairness perception has a special interest in the service industry since it is here where marketing strategies based on price and product discrimination appear. As such, the majority of the research related to price perception in this sector considers attributes such as price discrimination, the application of yield management and the reference prices as the main precursor of unfairness of prices perception (Mathies and Gudergan, 2011) Pricing fairness constitute a unique source of fairness alongside price fairness considerations. Lien and Yu (2001) confirmed that perceived price can be measured by cost of equity or price fairness to be paid. The fares of train ticket must reasonable because the customers will feel more satisfied when they consider the price to be reasonable and fair. According to Clemes (2008), the price offered is fixed and fairness will have a great impact on satisfaction.

Thus, students perceived a reasonable price as an important variable in the choice of modes of transport. As a result, the researchers determined that price and value were key factors in the study to determine passenger satisfaction and behavioral intention factors.

Safety and security

According to Pietre and Chaudet (2010), safety is the relative freedom from danger, threat of harm, risk, loss or injury to personnel or property, whether intentional or unintentional. However security refers to the protection and prevention against assault, fraud, damage, invasion of privacy, theft, unlawful entry as well as occurrences caused by deliberate action. Safety defines as the proofs of mitigating the effect of unintentional failures in the system while security is the process of mitigating the effects of intentional attacks on the system (Matsika, Ricci, Mortimer, Georgiev, & O'Neill 2013).

The studies showed that 73.4% of the respondents on a survey about public transport of Petaling Jaya city responded to security issues while only 2.7% of them agreed that the public transport services within their area are safe according to Ibrahim (2013). Cases robbery and snatched-thieves are the most troublesome problem cited by most of the respondent. Apart from the above, overloading of passengers also brings fear, especially among women passengers, as this rush hour may lead to theft and sexual harassment also. In addition, overloading or overcrowding can also make passengers uncomfortable especially for those long-distance trips, as it takes more time reach the destination in crowded time periods (Ibrahim, 2013).

Therefore, safety and security management should carry out by transport service provider to ensure the safety of passenger. Well-trained personnel are required to carry out an effective security system based on the security procedures and to operate the security equipment properly. One of the important security tools is the installation of closed circuit televisions (CCTV). The CCTV systems are normally attached to

functioning of automatic recorders which can reproduce any frames or pictures of the events recorded. According to World Health Organization (2016), improved lighting can reduce incidents, such as dodge rates and the vandalism of public transport. Besides, “The ‘Women-Only Coach’” should be implementing to all rail transportation in Malaysia regarding to the issue of sexual harassment and comfortable of female passengers. The availability of security guards is also critical to security issues. The importance of having more uniformed and professional staff will enhance security awareness (Navarro, 2007). Moreover, the officer in charge in train station should run a tight operation. An IP-based access control system is ideal for keeping unauthorized individuals from entering restricted areas such as train maintenance facilities, ticket offices, mailrooms, and luggage storage areas (Bosch, 2016). Thus, safety and security of rail transportation is an important factor influence passenger behavior intention to give sense of safety to the passengers.

Behavior intention

Behavior Intention is the introduction of the notion of practical knowledge into contemporary philosophical discussion of action and it is said that what a person’s perform is not based on observation (Moran, 2004). The behavioral intention can be define as individual’s subjective awareness to performing a specified behavior and is the major determinant of actual usage behavior (Kuo & Yen, 2009). It expresses the possibility of an individual's acting relative to a particular action in a given environment in the expectation and operability of the action (Ajzen & Fishbein, 2005). According to Ajzen & Fishbein, (2005), if the intention measure correctly, it should provide the best predictions of behavior. In the present study, behavioral intent is defined as the expectation of a potential passenger of a transportation mode for future trip to arrive the desire destination (Chen & Tsai, 2007). Behavior Intention has been broadly used in academic and commercial research as it represents easy-to-collect proxies of behavior (Chandon, Morwitz & Reinartz, 2005).

The TPB will be adopted in the current study to predict and explain the psychological processes of travelers’ behavioral intentions. The TPB assumes a set of relationship between attitudes, subjective norms, perceived behavioral control and behavioral intentions. According to Ajzen (2002), attitude refers to beliefs about the degree to which the result are evaluated as positive or negative, whereas subjective norm indicates beliefs about others normative expectations as well as motivation to meet with those expectations. However, perceived behavioral control can be defined as the perceived ease or difficulty of performing a behavior. This factor is hypothesized to reflect past experience and the expected impediments of respondents in conducting a behavior (Ajzen, 2002). The stronger intention to perform a behavior is usually associated with the subjective norm and more favorable the attitude towards the behavior and the greater the perceived behavioral control. Because of its interpretation of human behavior, the theory of planned behavior not only predicting, it utilizes the antecedents of attitudes, subjective norms, and perceived behavioral control, in the context of assisting intention and action understanding.

Moreover, by targeting significant predictors of the behavioral intention of rail transportation, transportation engineers and planners can probably persuade potential commuters to change their commuting behavior from private car use to more sustainable transportation modes such as rail transport. A review of these studies shows

that the train service reliability, fares, and safety and security as factors could be the determinants of behavioral intention.

RESEARCH METHODOLOGY

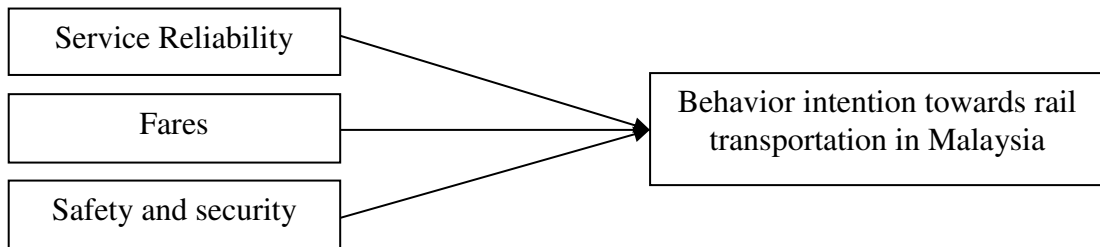


Figure 1
Research framework of behavior intention

Research hypotheses

H1 There is a significant relationship between service reliability and behaviour intention towards rail transportation in Malaysia.

H2 There is a significant relationship between ride fares and behaviour intention towards rail transportation in Malaysia.

H3 There is a significant relationship between safety & security and behaviour intention towards rail transportation in Malaysia.

Research design

The research is designed as non-experimental which do not involve manipulation of situation, circumstances or experience of respondents. A correlation study is chosen to examine the relationships between the predictor variables (service reliability, fares, safety and security) and criterion variable (behavior intention). Quantitative approach is used to conduct the research. A non-contrived setting is used in the research where events will normally occur in natural environment. The unit of analysis in the study is individual as the data is collected from individual students. In the research, a cross-sectional study is carried out over a short period or at single point in time.

Sampling and data collection

The primary data was collected using online survey that the questionnaire answers by the students of UUM through Google. The questions are set in the online method and the students are required to take part in answering the questionnaires. We are decided to use the non-probability sampling in this study. In the non-probability sampling method, it is based on the purposive sampling. This is because the purposive sampling technique is more accessible for this study because the information can be collected from any of the students study in UUM. This is because in the non-probability sampling method, it base on the purposive sampling (Sekaran, 2003). In purposive sampling, intended information is likely to be obtained from a specific group of people instead of obtaining from those who is readily available. In the study, population is divided into 3 strata which are gender, race and semester. The gender proportion is divided into 35.8% is male and 64.3% is female. In race aspect, the proportion for Malay was largest group which is 49.8%, Chinese is 40.8%, Indian is 6.3% and other is 3.3%. While in semester

proportion, semester 7 & above was the largest group which is 49.3%, semester 4-6 is 26 % and semester 1-3 is 24.8% based on researcher's observation.

Measurement scale

In this research, the instrument development was developed by the researchers. The questionnaires contains total of 30 questions that include demographic factors and each variables consists of average 5 to 6 questions. In this survey, five point Likert-Scale was used where anchored at each end only with descriptive labels. The Likert scale examine the correlation within dependent variable and independent variables which range from 1 meaning strongly disagree, 2 meaning disagree, 3 meaning neutral, 4 meaning agree and 5 meaning strongly agree. The construction of questionnaire is adopted from Ryu, Ho and Han (2003) which based on TPB model approach.

Data analysis

The reliability test was assessed in the study is to measure the internal consistency. The higher the Cronbach's alpha score, means the higher the internal consistency reliability. Pearson correlation is used to measure the strength and direction of linear relationship between independent variable and dependent variable involved in the study. The coefficient of correlation shows the extent to which changes in the value of one variable are correlated to changes in the value of the other (Udovičić, et al., 2007). In the study, multiple regression analysis will be used to determine the relationship of dependent variable with the three independent variables in the study. Multiple regression analysis is used to describe, estimate or predict causal relationships among a dependent variable with two or more independent variables.

RESULTS

The results show below from our study was analyzed using the Package for Social Sciences (SPSS) Version 20.0 software.

Table 1
Cronbach's alpha value for variables

Variables	Item	Alpha Cronbach Value
Service Reliability	5	.769
Fares	5	.704
Safety and Security	5	.715
Behavior Intention	8	.749

According to Bland and Altman (1997), reliability less than 0.4 are considered to be poor, while the value 0.4 to 0.6 are considered moderate, those in 0.6-0.8 is acceptable and those over 0.8 are almost perfect. In the research, Cronbach's alpha for the four variables score ranges from 0.704 to 0.769 as shown in Table 1. Therefore, all the variables have been proven to be good reliable and acceptable.

Table 2
Correlation between independent and dependent variables

		Service Reliability	Fares	Safety and Security	Behavior Intention
Service Reliability	Pearson Correlation	1	.832(**)	.419(**)	.325(**)
	Sig. (2-tailed)		.000	.000	.000
Fares	Pearson Correlation	.832(**)	1	.423(**)	.230(**)
	Sig. (2-tailed)	.000		.000	.000
Safety and Security	Pearson Correlation	.419(**)	.423(**)	1	.584(**)
	Sig. (2-tailed)	.000	.000		.000
Behavior Intention	Pearson Correlation	.325(**)	.230(**)	.584(**)	1
	Sig. (2-tailed)	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

From Table 2, the p-value for all of the four variables is equal to 0.000 at which it is less than α value of 0.01. Therefore, it is show a statistically significant correlation between the independent variables (service reliability, fares and safety & security) and the dependent variable (behavior intention) respectively. There is a positive relationship between all independent variables to the behavior intention.

Table 3
Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609a	.370	.366	.43416

Table 4
ANOVA table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	43.892	3	14.631	77.616	.000b
	Residual	74.646	396	.188		
	Total	118.537	399			

a. Dependent Variable: Behavior Intention

b. Predictors: (Constant), Safety and Security, Fares, Service Reliability

Table 5
Coefficient table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.891	.161		11.747	.000
	Service Reliability	.261	.061	.309	4.263	.000
	Fares	-.247	.067	-.267	-3.670	.000
	Safety and Security	.495	.039	.567	12.773	.000

Multiple regression analysis was conducted to test the extent to which the independent variables influence behavior intention. There is a significant relationship between the independent variables and dependent variable, where $F = 77.616$ (Table 4) and $p\text{-value} = 0.00$ ($\alpha < 0.05$). Generally it can say that the model in general has good predictive capabilities. R-square (R^2) value indicates how much of the dependent variable can be explained by the independent variables. Based on Table 3, it has revealed R^2 is 0.370, which means 37.0% variability of people behavior intention to use rail transportation services in Malaysia can be explained by three independent variables such service reliability, fares and safety & security. Based on Table 5, all of the predictors significantly contributed to predict behavior intention where safety and security is the best predictor ($\beta=0.495$), followed by service reliability ($\beta=0.261$) and fares ($\beta= -0.247$).

Table 5 shows the relationship between the independent variables and dependent variable.

H1: There is a significant relationship between service reliability and behavior intention towards rail transportation in Malaysia.

The p-value for service reliability is 0.000 at which it is less than α value of 0.05. Therefore, it can conclude that there is a significant relationship between service reliability and behavior intention towards rail transportation in Malaysia. Hence, H1 is accepted.

H2: There is a significant relationship between fares and behavior intention towards rail transportation in Malaysia.

The p-value for fares is 0.000 at which it is less than α value of 0.05. Therefore, it can conclude that there is a significant relationship between fares and behavior intention towards rail transportation in Malaysia. Hence, H2 is accepted.

H3: There is a significant relationship between safety & security and behavior intention towards rail transportation in Malaysia.

In addition, the p-value for safety & security control is 0.000 at which it is less than α value of 0.05. Therefore, it can conclude that there is a significant relationship between fares and behavior intention towards rail transportation in Malaysia. Therefore, H3 is accepted.

DISCUSSION

The research framework theorized that service reliability, fares and safety & security will influence behavior intention towards rail transportation in Malaysia based on Theory of Planned Behavior (TPB). The results of this study support the model where statistical results show all independent variables were significantly correlated with behavior intentions.

In the present study revealed that safety & security is the strongest predictor of behavior intention toward rail transportation in Malaysia. Safety & security exerted the strongest

impact on behavior intentions ($r = 0.584$, $p < 0.01$), followed by service reliability ($r = 0.325$, $p < 0.01$) and fares ($r = 0.230$, $p < 0.01$). From the findings of the study, safety & security has significant and positive effect on behavior intention. This is because those with high safety & security appeared to have greater behavior intentions to intent to use rail transportation in Malaysia which is supported by previous studies (Bohan, Syamsunur & Iamail, 2014). This meant that the passengers will firstly consider their safety & security before they decide on whether or not to use it. For example, when they feel safety and secure while using rail transportation, then they will intend to use it.

Besides safety & security, service reliability is the second significant predictor of the behavior intention towards rail transportation in Malaysia. From the finding of study, service reliability also made a particular contribution to the prediction of behavior intentions. Service reliability is also has significant and positive effect on behavior intention towards rail transportation. From the result, respondents tend to have stronger behavioral intentions to use the rail transportation system in Malaysia if railway transport system can enhance the punctuality and reduce the breakdown issue. Respondents will intend to engage the behavior when they believe that they able to reach their destination on time.

In addition, the result of this study show that fares had least influence on behavior intention compared to safety & security and service reliability. This is because of insufficient information and ticket promotion offer compare to other mode of transport such as flight ticket. Moreover, fares become weak predictor on behavior intention as passengers are able to afford the price ticket to using rail transport system to commuting for daily routine and this can avoid congestion issue especially in KL area. Therefore, passengers are more concerning about the safety & security than the fares provided.

LIMITATION

In this research study, the respondents involved the students in Universiti Utara Malaysia (UUM) and only local students being chosen to assist in this study. In the preparation of this project, we can collect the opinion and suggestion from UUM students to get the information by understanding how a passenger could be choosing use the sustainable transport themselves and what need to be improving the rail services system in Malaysia. In the preparation of the research, the restriction of time period taken and financial resources is also becomes one of our limitations. There was involved three months period to conduct the research paper to assure the data collected more accurately.

REFERENCES

- A. S. I. Almselati, R. A. O. K. Rahmat, & O. Jaafar. (2011). An overview of urban transport in Malaysia. *Social Sciences*, 6(1), 24-33.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In. D. Albarracin, B. Johnson, & M. Zanna (Eds.) *Handbook of attitudes and behavior*.

- Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32, 665-683.
- Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review*, 6(2), 107-122.
- Bland J.M. & Altman D.G. (1997) Cronbach's alpha. *British Medical Journal*, 314, 572.
- Bohan. N, Syamsunur. D., & Iamail. A. (2014). Applying the Theory of Planned Behavior (TPB) on Predicting the Use of Public Transportation: A Case Study from Putrajaya, Malaysia. *The Scientific World Journal*.
- Borsh, 2016. Train station Solutions for Security & Safety. Retrieved 07 October 2016, from http://resource.boschsecurity.com/documents/BIS_4.0_Application_note_enus_16864117003.pdf.
- Brucks, M., Zeithaml, V.A., & Naylor, G. (2000). Price and brand name as indicators of quality dimensions for consumer durables. *Journal of the Academy of Marketing Science*, 28(3), 359-374.
- Campbell, M. C. (2007). Says who? How the source of price information and affect influence perceived price (un)fairness. *Journal of Marketing Research*, 44(2), 261-271.
- CfIT. 2008. A new approach to rural public transport. Commission for Integrated Transport (CfIT) report. Available at: <http://www.scribd.com/doc/125768741/A-New-Approach-to-Rural-Public-Transport>.
- Chandon, P., Morwitz, V.G. & Reinartz, W.J. (2005). Do intentions really predict behavior? Self-generated validity effects in survey research. *Journal of Marketing*, 1-14
- Chen, C.F., & D.C. Tsai (2007). How Destination Image and Evaluative Factors Affect Behavioral Intentions? *Tourism Management* 28(4), 1115-1122.
- Christer, I. (n.d.). *What is reliability and asset management?* Retrieved 17 November 2016 from <http://www.reliableplant.com/Read/415/reliability-asset-management>.
- Clemes, M.D. et al. (2008). An Empirical Analysis of Customer Satisfaction in International Air Travel. *Innovative Marketing*, 4(2), 50-62.
- Dovaliene, A., & Virvilaite, R. (2008). Customer value and its contribution to the longevity of relationship with service provider: The case of theatre industry. *Engineering Economics* 1, 66-73.
- Elween, L. (2013). *Comfort and safety features*. Retrieved on 14 November 2016, from <http://www.thestar.com.my/news/community/2013/08/19/comfort-and-safety-features-among-reasons-why-passengers-like-ets/>.

- Gefen, D., (2002), Customer Loyalty in E-Commerce. *Journal of the Association for Information Systems*, 3, 27-51.
- Gleave, S. D., 2000. Rail Passenger Quality of Service Valuation, London.
- Gronroos, C. 2001. The perceived service quality concept—a mistake? *Managing Service Quality*, 3(11), 150-152.
- Herrmann, A., Xia, L., Monroe, K.B., & Huber. F. (2007). The Influence of Price Fairness on Consumer Satisfaction: An Empirical Test in the Context of Automobile Purchases. *Journal of Product & Brand Management*, 16(1), 49-58.
- Hou Xingqi. (2008). The Study on Service Quality Customer Satisfaction and Loyalty. Shandong University.
- Ibrahim, N.I., Adiji, B.M., & Karim, M.R. (2013). Public Transport Passengers' Perception and Demand Satisfaction: A Case Study at Petaling Jaya Municipal District, Malaysia. *Proceedings of the Eastern Asia Society for Transportation Studies*, 9.
- J. E. S. Castelo Branco, & R. Ferreira. (2002). Tratado de Estradas de Ferro. Prevenção e Investigação de Descarrilamento, Rio de Janeiro – Brasil. *Reflexus Estúdio de Produção Gráfica*, 2.
- J. Han, & Y. Hayashi. (2008). Assessment of private car stock and its environmental impacts in China from 2000 to 2020. *Transportation Research Part D*, 13(7), 471-478.
- Kuo, Y. F., & Yen. S. N. (2009). Towards an understanding of the behavioral intention to use 3G mobile value-added services. *Computers in Human Behavior*, 25(1), 103-110.
- Lien, T.B., & Yu, C.C. (2001). An Integrated Model for the effects of perceived product, perceived service quality, and perceived price fairness on customer satisfaction and loyalty. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behaviour*, 14, 125-140.
- Mannering, Fred L., Walter P. Kilareski, & Scott S. Washburn (2004). Principles of Highway Engineering and Traffic Analysis. 3rd ed. NJ: John Wiley & Sons; 170-219.
- Mathies, C., & Gudergan, S.P. (2011), The role of fairness in modelling customer choice. *Australasian Marketing Journal*, 19(1), 22-29.
- Matsika, E., Ricci, S., Mortimer, P., Georgiev, N., & O'Neill, C. (2013). Rail vehicles, Environment, safety and security. *Research in transportation economics*, 41(1), 43-58.
- Maxwell, S. , Lee, S. , Anselstetter, S., & Comer, L.B. (2009). Gender differences in the perception of unfairness in pricing: a cross- country analysis. *Journal of Consumer Marketing*, 26(7), 508-515.

- Monroe, K.B., & Xia, L. (2006). The price is unfair! Reforming pricing management, in does marketing need reform?”, in Sheth, J.N. and Sisodia, R.S. (Eds), Does Marketing Need Reform? Fresh Perspectives on The Future, Sharpe, New York, NY, pp. 158-165.
- Moran, R. (2004). Anscombe on 'Practical Knowledge'. In J. H. (eds.), Royal Institute of Philosophy Supplement (pp. 43-68). Cambridge University Press.
- Namkung, Y., & Jang, S.C. (2010). Effects of perceived service fairness on emotions, and behavioral intentions in restaurants. *European Journal of Marketing*, 44(9/10), 1233-1259.
- Navarro, L. (2007). Train employees - your best defense - for security awareness. Retrieved on 9 November 2016, from <https://www.scmagazine.com/train-employees--your-best-defense--for-security-awareness/article/552839/>.
- Pietre-Cambacedes, L., & Chaudet, C. (2010). The SEMA referential framework: avoiding ambiguities in the terms “security” and “safety”. *International Journal of Critical Infrastructure Protection*, 3(2), 55-66.
- Ryu, S., Ho, S.H. & Han, I. (2003). Knowledge sharing behavior of physicians in hospitals. *Expert Systems with Applications*, 25(1), 113-12.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach* (4th ed.).
- Suruhanjaya Pengangkutan Awam Darat. 2012. National Land Public Transport Master Plan (Draft dated 30th January, 2012). Malaysia.
- Udovičić, M., Baždarić, K., Bilić-Zulle, L. & Petrovečki, M. (2007). What we need to know when calculating the coefficient of correlation. *Biochemia Medica*.
- Van der Wal, R. W. E., Pampallis, A. & Bond, C. (2002). Service quality in a cellular telecommunications company: a South African experience. *Managing Service Quality*, 12(5), 323-335.
- Völckner, F., & Hofmann, J. (2007). The price-perceived quality relationship: a meta-analytic review and assessment of its determinants. *Marketing Letters*, 18(3), 181-196.
- Weinstein, Art, & Johnson, W. (2011). Designing and Delivering Superior Customer Value: Concepts, Cases, and Applications. Boca Raton: CRC Press.
- Wilson A., Zeithaml V.A., Bitner M.J., & Gremler D.D. (2008) Services Marketing, McGraw-Hill Education.
- World Health Organization. (2016). Violence Prevention the Evidence. Retrieved on 3 November 2016. From http://apps.who.int/iris/bitstream/10665/77936/1/9789241500845_eng.pdf?ua=1.

Zaherawati Z., Zaleha H., Mohamed Fajil AB., & Zuriawati Z. (2010). Service Quality of Malaysian Public Transports: A Case Study in Malaysia. *Cross-Cultural Communication*, 6(2), 84-92.

Zeithaml, V.A., Bitner, M.J., & Gremler, D.D. (2006). Services marketing: Integrating customer focus across the firm (4th ed., pp.117). Singapore: McGraw-Hill.