

Contributing Factors of Consumer Willingness to Pay For Halal Transportation Cost

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Abstract

Halal transportation is one of the important elements in halal supply chain to preserve the Halal quality at the point of consumption. However, the adoption of Halal transportation could increase the price of the products. Literatures show that consumers were still willing to pay for Halal logistic cost, but never mentioned which factors that leading to their willingness to pay. Hence, by adopting the Theory of Planned Behavior with additional variables which is religiosity, this study will try to identify determinants to influence the consumer willingness to pay for halal transportation cost. Non-probability sampling technique with convenience sampling method was applied in the study. The findings found that attitude, perceived behavioural control and religiosity have positive effect on consumers' willingness to pay for Halal transportation cost. To conclude, by understanding the determinants of the consumer willingness to pay for Halal transportation cost, provider can built strategic planning to influence consumer in future.

Keywords: Willingness to Pay, Theory of Planned Behavior, Religiosity, Halal Transportation, Muslim Consumer.

1.0 Introduction

The worldwide Muslim population will increase to around 27 per cent of the world's total population which accounts for up to two billion Muslims. This expanding Muslim population will potentially reform the way economies work and organizations work. As Muslim consumers become more knowledgeable and aware of dietary laws and concerns about their religion, they will pay more attention to the type of products and services that they consume or utilize (Salleh & Ramli, 2011).

In line with Wilson and Liu (2010) these days, Halal has extended its definition to supply chain and logistics management rather than common understanding by the layman that Halal is only about food consumption. In a

greater picture, Halal industry mostly includes segments of food and beverages, pharmaceuticals, cosmetics, healthcare products and services such as logistics, banking and tourism (Pahim et al., 2012).

Halal transportation increase Muslim consumer confidence on consuming Halal products. Kamaruddin et al., (2012) expressed that the halal transportation are perplexing in light of the fact that they require particular guidelines and parameters in connection to the halal consistence. However, the adoption of Halal transportation could increase the price of products due to high capital investment by Halal transportation provider to be a Halal certified provider. On top of that, previous study from Kamaruddin et al., (2012) found that consumers were still willing to pay for Halal logistic cost, but never mentioned which factors that leading to their willingness to pay.

Though, by adopting the Theory of Planned Behavior with additional variable which is religiosity, this study will try to identify determinants that are likely to influence the consumer willingness to pay for halal transportation cost. Due to Halal is concerned by Muslims consumer, therefore religiosity was included with the theory of planned behavior. The findings of this study can be the reference point for manufacturers or businesses to plan further initiative to adopt halal transportation service in their business activities in the future. Besides, this study will only focus on the individual level. Since examining the effect of these factors on the end consumers' demand for that halal transportation is fairly important (Fathi et al., 2016).

2.0 Research Model

This research will study about what are factors that drive consumer willingness to pay for Halal transportation cost. By using Theory of Planned Behaviour, and one additional factor which is religiosity. This study will try to identify what are the factors of consumer willingness to pay for Halal transportation cost.

2.1 Attitude

Schiffman and Kanuk, (2007), defined that attitude is a learned tendency to act in a certain favorable or unfavorable manner. In other words, attitude of consumers is based on their belief and knowledge regarding a certain commodity, which is a result of information integration process and ultimately influences individual's aim to behave in a certain manner (Xiao et. al., 2011). Conclusively, for past research related to attitude, positive attitude score will directly impact the intention or willingness to do behaviour. Hence, this study yields following hypothesis:

H1: Attitude has a positive relationship with consumer willingness to pay for Halal transportation cost.

2.2 Subjective Norm

Subjective norm is a social pressure to perform or not to perform the behaviour or not to perform the target behavior (Ajzen, 1991). Besides, Subjective norm also defined as a belief of an important person or group of people will approve and support a particular behavior. Hence, the hypothesis for future testing is as below:

H2: Subjective norm has a positive relationship with consumer willingness to pay for Halal transportation cost.

2.3 Perceived Behavioural Control

Perceived behavioural control can define as an individual's belief about his or her capabilities of exhibiting certain behaviours (Brouwer et al., 2009). Perceived behavioural control is of superior interest than tangible control since it deliberates people's intuition of the comfort or struggle of performing the behaviour of curiosity (Verbeke and Vackier, 2005). Thus, the hypothesis for subjective norm is:

H3: Perceived behavioural control has a positive relationship with consumer willingness to pay for Halal transportation cost.

2.4 Religiosity

In simple term, religiosity may be referred to as the state of one's belief in God, characterized by his piety and religious zeal (Salleh, 2012). Hill and Hood (1999) broadly define religiosity as phenomena that include some relevance to traditional institutionalized searches to acknowledge and maintain some relationship with the transcendent. Therefore, my future hypothesis testing is as below:

H4: Religiosity has a positive relationship with consumer willingness to pay for Halal transportation cost.

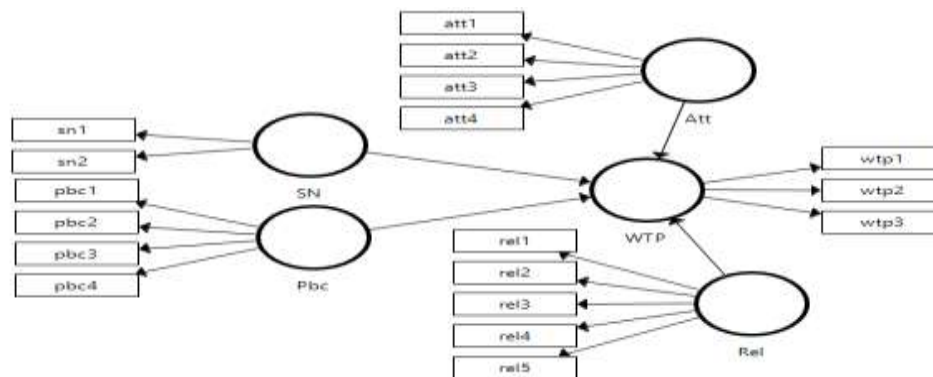


Figure 1. Research Model

Figure 1 is illustrated of literature review that mostly has been used before by scholars to study the consumer willingness to pay. Due to its sustainability within the scope of study, researcher intends to use the variables to further the research operations.

3.0 Research Methodology

The unit of analysis of this study is at the individual. The respondents of this study were Muslim consumers who have their own income and went to main shopping complex in east coast of Malaysia. Non-probability sampling technique with convenience sampling method was applied in the study. This study has applied the quantitative approach using a self-administered questionnaire. Out of the 200 potential respondents approached at the main shopping complex in east

coast of Malaysia which are Mydin Mall and Giant Hypermarket in Terengganu, East Coast Mall and Kuantan City Mall in Pahang, AEON Mall and Kota Bharu Mall at Kelantan. The malls were selected due to it were major mall in this region and it is believed that the visitors were come from all over Malaysia. Hence, the issue of representativeness is not a concern for the study. After sorting the questionnaires, only 186 questionnaires can be used for the data analysis purposes. Another fourteen of them were excluded due they have answered it in a straight line method and also due to outliers. The 186 responses are adequate to test the research model by referring to the requirement that G*power proposed to have at least 85 respondents to test the research framework.

3.2 Measures and Assessment of Goodness of Measure.

This survey used a structured questionnaire where a five-point Likert scale to measure the independent variables and seven-point Likert scale to measure the dependent variable. This is an approach suggested by Podsakoff et al., (2003) to avoid the issue of the common method variance since the study used a single source data.

4.0. Data Analysis And Results

The data were analyzed using the Smart PLS version 3.2.7 software (Ringle, Wende & Becker, 2015) which is a variance-based structural equation modelling (SEM). It is a better choice to present the analysis instead of covariance-based SEM due to the purpose of this study is to predict the relationship between variables tested in the research model (Urbach and Ahleman, 2010), rather than reproducing of covariance matrix to achieve model fit (Hair et al., 2017). As proposed by Hair et al. (2017), the study was tested the multivariate normality by looking at the skewness and kurtosis using the software available at: <https://webpower.psychstat.org/models/kurtosis/results.php?url=3d0c3c3ad7a1b646765a0cb123e45cc4>

The results showed the research data was multivariately not normal, Mardia's multivariate skewness ($\beta = 2.478$, $p < 0.01$) and Mardia's multivariate kurtosis ($\beta = 36.477$, $p < 0.01$), supporting the decision to use Smart PLS, which is a non-

parametric analysis software. Data was analyzed following Anderson and Gerbing (1988) the two-step analytical procedure. Firstly, is evaluating the measurement model which has two elements which are convergent validity and discriminant validity. Secondly, the structural model will be tested to test the hypothesis. The bootstrapping procedure with 5000 resamples which is higher than the original sample of the study, follows the procedure mentioned by Hair et al. (2017) to determine the significant level of loadings and path coefficients.

4.1 Measurement Model

Measurement model could be established by passing the convergent validity and discriminant validity. Convergent validity is the degree to which multiple items to measure the same concept are in agreement. Convergent validity is established if the loading and average variance explained (AVE) are higher than 0.5, and composite reliability (CR) is higher than 0.7 (Hair et al., 2017). As shown in the table 1, the loadings for all items are in range of 0.546 to 0.930, CR were between 0.806 and 0.940, and AVEs were in the range of 0.520-0.840. All of them were above the recommended value by hair et al. (2017), thus is can be concluded that the convergent validity has been met for the study.

Table 1. Measurement model

	Loadings	CR	AVE
ATT1	0.866	0.806	0.520
ATT2	0.546		
ATT3	0.846		
ATT4	0.563		
PBC1	0.821	0.864	0.616
PBC2	0.850		
PBC3	0.699		
PBC4	0.760		
REL1	0.771	0.847	0.526
REL2	0.722		
REL3	0.781		
REL4	0.705		
REL5	0.639		
SN1	0.878	0.868	0.767
SN2	0.873		

WTP1	0.905	0.940	0.840
WTP2	0.930		
WTP3	0.915		

4.2 Discriminant validity

Discriminant validity is the degree to which items differentiate among constructs or measure distinct concepts. Henseler et al., (2015) proposed to use multitrait-multimethod matrix, to assess discriminant validity in the form of heterotrait monotrait ratio of correlations. Discriminant validity is established if the Htmt values is lower than 0.85 (Henseler et al., 2015). Table 2 depicts the Htmt values which were lower than 0.85, thus confirming that the discriminant validity has been established in the study.

Table 2. Discriminant validity Htmt ratio

	1	2	3	4	5
1) ATT					
2) PBC	0.361				
3) REL	0.528	0.538			
4) SN	0.536	0.616	0.497		
5) WTP	0.480	0.434	0.481	0.386	

Before assessing the structural model, it is important to ensure that there are no collinearity issues in the structural model. Table 3 presents the outcome of the collinearity test. The VIF value for each of the constructs is lower than the offending value of 3.3 (Diamantopoulos and Siguaw, 2006), thus suggesting that there is no issue with collinearity in the study.

Table 3. Collinearity assessment

	WTP
ATT	1.388
PBC	1.428
REL	1.439
SN	1.431

From the proposed relationships two over three hypotheses supported were statistically significant at 99 per cent confidence interval (ATT→WTP, $\beta =$

0.307, $t = 4.736$; $LL = 0.197$, $UL = 0.447$; $PEL \rightarrow WTP$, $\beta = 0.197$, $t = 2.577$; $LL = 0.057$, $UL = 0.352$) and another relationship is significant at 95 per cent confidence interval ($PBC \rightarrow WTP$, $\beta = 0.185$, $t = 2.027$; $LL = 0.007$, $UL = 0.362$). Hence, it is surmised that attitude, religiosity and perceived behavioural control have positive effect on willingness to pay for Halal logistics. Meanwhile, for H4, the study found to be not significant ($SN \rightarrow WTP$, $\beta = 0.018$, $t = 0.232$, $LL = -0.131$, $UL = 0.164$). Table 4 illustrates the results of the hypothesis testing.

Table 4 Hypothesis testing

	Relationship	Beta	T value	P Values	LL	UL	Decision
H1	Att -> WTP	0.307	4.736	0.000	0.197	0.447	Support
H2	Pbc -> WTP	0.185	2.027	0.043	0.007	0.362	Support
H3	Rel -> WTP	0.197	2.577	0.010	0.057	0.352	Support
H4	SN -> WTP	0.018	0.232	0.817	-0.131	0.164	Not supported

Next is the report of the Coefficient of determination (R^2), the effect size (f^2) and the predictive relevance (Q^2) of exogenous variables on the endogenous variable. The R^2 value is 0.302 suggesting that, attitude, perceived behavioral control, and religiosity explained 30.2% of the variance in willing to pay for Halal logistic. Q^2 for willingness to pay is 0.227 which is higher than 0 (Hair et al., 2017) indicating that the model has a predictive ability on willingness to pay for Halal logistic. Among the endogenous variables, attitude has the biggest impact on willingness to pay for Halal logistic and followed by religiosity and perceived behavioral control.

Discussion and Result

The focus of this study was to identify what are the contributing factors of consumer willingness to pay for halal transportation cost. This study is using theory of perceived behavior and one additional factor which is religiosity. Theory of perceived behavior is used in this study to predict intention and behavior of Muslim consumer towards their willingness to pay for halal transportation cost.

This study reveals that the factors of consumer willingness to pay for halal transportation cost are consumer's attitude, perceived behavioral control and religiosity. While subjective norm, are not significant in this study. Which mean, subjective norm did not influence consumer to pay for halal transportation cost.

Attitude is one of the important factors that can influence or lead Muslim consumer to pay for halal transportation cost, because attitude is known as a stronger impact to influence consumer to make a decision in purchase intention. Thus, this study found that Muslim consumer who has a high attitude is willing to pay for halal transportation cost. This is because as Muslim consumer has knowledge and belief in halal transportation cost, thus they will behave in a certain manner where they were willing to pay for halal transportation cost. As a conclusion, attitude was found to have a significant relationship with the factors of consumer willingness to pay for Halal transportation cost.

These findings are supported by other studies in the consumer purchase intention towards halal food, for example (Lada et. al., 2010) and (Alam and Sayuti, 2011). It shows that attitude have a positive relation with consumer purchase intention of Halal food products and attitude also poses a strong impact on consumer purchase intention and consumers having more high or positive attitude seem to have greater intent to purchase Halal food.

Perceived behavioural control is the second variable that significant in this study. PBC is known as individual's belief about his or her capabilities of exhibiting certain behaviours. This study revealed that respondent has the capability to pay for halal transportation, that is why they willing to pay more for this cost. Besides, consumer also believe and have a high level of confidence with their decision to pay for Halal transportation cost. The result of this study can be supported by Khairi et al (2012) where in their study indicated that PBC was found positively related to the intention to choose halal products.

As predicted, religiosity was found to be a significant variable in this study. Religiosity is one of the essential variables in this study because it has a strong effect on Muslim consumer action and influence Muslim consumer

behavior to pay for halal transportation cost. This outcome can be supported by findings from (Weaver and Agle, 2002).. It mentions that religiosities also have a strong effect on consumer actions and behavior to buy Halal foods. Thus, religion even plays a significant role in many societies of the world pertaining to food choices (Dindyal, 2003). Moreover, studies from Bonne et al. (2007) found that a religion may influence consumer behavior particularly in food buying and consuming behavior.

In this study, subjective norm was found not to be significant towards consumer willingness to pay for halal transportation cost. But, most of the studies found that subjective norm is having a positive relationship. However, the result of previous study by Sapingi et al., (2011) showed that subjective norms did not have significant influence on their intention to pay zakah. As we know, subjective norm is a belief of an important person or group of people will approve and support a particular behavior. This mean that the consumer did not influence or cannot be influence to pay for halal transportation cost by people around them even that person is close to them, such as their family member or their close friends. To sum up, subjective norm is not the factors of consumer willingness to pay for halal transportation cost.

CONCLUSION

This paper is aim to propose an integrated framework on Theory of planned behavior and religiosity to discover what are the contributing factors of consumer willingness to pay for halal transportation cost. It is found that attitude, perceived behavioral control and religiosity is significant with the willingness to pay for halal transportation cost, while subjective norm found not to be significant factor on consumer willingness to pay for halal transportation cost. The findings of this study will primarily be beneficial to manufacturers and business such as halal transportation provider as this information can be the reference point for them to plan further initiative to adopt halal transportation service in their business activities in the future.

By using the result of this study, halal service provider can work together with government authority such as JAKIM (Department of Islamic Development) and HDC (Halal Development Corporation) to help them in increasing the determinants, which is attitude, perceived behavioral control and religiosity.

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