



## An Empirical Analysis on the Importance of Self-Efficacy, Resource Facilitating Condition and Perceived Behavioural Control in Propelling One's Intention to Purchase Halal Personal Care Products: The Moderating Role of Spiritual Intelligence

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### Abstract

**Objective:** The objective of the study is to empirically validate the impact of self-efficacy, resource facilitating condition and perceived behavioural control in influencing one's intention to purchase halal personal care products. Additionally, it also aims to examine the moderating role of spiritual intelligence on the relationship between perceived behavioural control and purchase intention.

**Design/Methodology/Approach:** Data were collected from 405 Muslim respondents in Klang Valley, Malaysia using a combination of purposive and quota sampling method. The data were subsequently analysed using the Statistical Package for Social Sciences (SPSS) – Version 21 and Partial Least Square–Structural Equation Modelling (PLS-SEM) – Smart PLS 3

**Findings:** The findings of the study showed that self-efficacy and resource facilitating condition were the significant antecedents of perceived behavioural control. It was also discovered that one's intentions to purchase halal personal care products was positively and significantly influenced by perceived behavioural control. As expected, the positive relationship between perceived behavioural control and intention to purchase was found to have been moderated by spiritual intelligence.

**Practical Implications:** This study would be significant and meaningful for marketers, manufacturers and product managers as the findings of the study would help them formulate and pursue the relevant marketing strategies for their companies' promotional activities.

**Originality/Value:** Using the Decomposed Theory of Planned Behaviour (DTPB) as the underpinning theory of the study, this paper empirically validated the impact of self-efficacy and resource facilitating condition on perceived behavioural control, which will eventually influence one's behavioural intention in the context of halal personal care products. Additionally, the results of the study further authenticated the moderating role of spiritual intelligence on the relationships between perceived behavioural control and purchase intention.

**Keywords:** Self-Efficacy; Resource Facilitating Condition; Perceived Behavioural Control; Purchase Intention; Halal Personal Care Products; Decomposed Theory of Planned Behaviour (DTPB)

### Introduction

Halal personal care product industry has turned out to be one of the most tremendous and fastest growing industry [1]. For instance, in 2013 alone, Muslim customers consumed US\$46 billion on halal personal care products which is 6.78% of the global expenditure,

and this figure is predicted to increase to US\$73 billion by 2019, making up over 8.2% of the global expenditure [2]. This growing halal personal care products industry is deemed by analysts as the next in line for growth after the profitable halal food and Islamic financial services [3].

In the local scene, halal personal care products contribute 10 to 20 per cent of the local personal care products market [1]. As of third quarter of 2015, Malaysia's export value for halal personal care products stood at RM1.7 billion, reflecting 5.5 per cent of the total halal exports which is valued at RM31.1 billion [4]. In addition, Malaysia's halal personal care products industry recorded sales of approximately RM3 billion in 2013 with the growth rate of 13 per cent annually [5].

However, in a world that is becoming more spiritually conscious, the acceptance and awareness level towards halal personal care products is still low within the Muslim community [6]. For instance, in the Middle East, a survey conducted by KasehDia Consulting [7], showed that customers' awareness toward halal personal care products in Saudi Arabia and United Arab Emirates (UAE) was relatively low in comparison with their counterparts in Europe and Asia. Another report by World Halal Forum [8] also revealed that the customers' level of awareness towards halal personal care products in these two countries was comparatively low at 18-30 per cent compared to halal meat and meat-based products and halal food which was estimated at 94-98 per cent and 40-64 per cent respectively. According to KasehDia Consulting, this scenario happened due to the customers' misconceptions that the halal concept is only meant for meat and food-related products and that it has nothing to do with non-food products segments such as personal care products [9].

In the local front, a research by Halal Development Corporations [10] also found that the customers' acceptance and awareness towards halal personal care products in Malaysia was comparatively low. For instance, both Muslim and non-Muslims in Malaysia are familiar and aware with the concept of halal foods products but the term halal personal care products are relatively new even for Muslim consumers [11]. Additionally, not all Muslims look for the halal certifications when they purchase personal care products [12] and majority of them would purchase these products without the halal certifications when there were no alternatives [6].

Due to their lack of awareness and understanding on this halal concept, Muslim customers in Malaysia, therefore, have turned to conventional and imported brands whose halal status and safety issues are questionable and doubtful [13]. For example, according

to EuroMonitor's Trade Sources and National Statistics 2012, only 0.5 percent of the Muslim customers in Malaysia are using Safi, the leading halal local brand for personal care products [14]. This particular brand carries a comprehensive range of personal care products aimed at catering and meeting the needs of both Muslim men and women [15]. It seems that the local halal personal care products have yet to become a "household brand" for Muslim customers in Malaysia [16].

Therefore, it is essential to explore and identify what are the factors that may actually influence the customers' behavioural intention to purchase halal personal care products. Currently, an abundance of halal personal care products are widely available in the market. These include Qu Puteh, D'Herbs (Terlajak Laris), HalalGel, Jamu Mak Dara, Zaitun, Shurah, Safi Rania, Mukmin, Syahirah, Natasha Gold, Dinas Lutox, TanaMera and SimplySiti, to name a few [17]. Hence, it is questionable as to why Muslims' purchasing behaviour nowadays are still not inclined towards this halal personal care products whose ingredients have been proven to be halal and safe. This raises the issue of examining what factors that may actually affect their behavioural intention to purchase these halal products.

Theoretically speaking, this study extends the purchase intention research on halal personal care products by applying the decomposed theory of planned behaviour (DTPB) as the underpinning theory of the study. By decomposing the attitudinal, normative, and perceived control beliefs into relevant multidimensional constructs, the researcher expects to have a higher explanatory power and a more precise understandings of the antecedents of behaviour. According to Ali, Halim and Ahmad [18] applying TRA and TPB in a study makes it impossible for researchers to deeply understand and explore the context-specific determinants of behaviour. In other words, pure TRA and TPB model will diminish exploratory power of the proposed model if a research is mainly dealing with a behaviour whose perspective is very specific. Therefore, this study attempts to close this theoretical gap by incorporating the relevant antecedents of attitude, subjective norm, and perceived behavioural control in DTPB model as a new approach in predicting customers' behavioural intention in the context of halal personal care products.

On top of that, the understanding of DTPB was further extended in this study by incorporating the moderating role of spiritual intelligence into the framework. The main reason to integrate this particular construct into the framework was to enhance the predictive power of DTPB and facilitate its application in the context of halal personal care products. No halal-related studies, in general, and halal personal care products study, in particular, has examined the moderating role of spiritual intelligence on the effect of TPB constructs (i.e. attitude, subjective norm, and perceived behavioural control) and behavioural intention. Therefore, this study goes the extra miles by incorporating the moderating role of spiritual intelligence into the framework, thus, providing a significant contribution to the body of knowledge and literature on halal personal care products.

## Methods

### Sampling

The target population of this study was all Muslim respondents over the age of 20 to 60 years old at six major cities in Klang Valley namely Kuala Lumpur, Klang, Kajang, Subang Jaya, Petaling Jaya and Shah Alam. Based on the natures and objectives of the research, the present study used a combination of purposive and quota sampling method in choosing the appropriate respondents for the study. These two sampling techniques were utilized so as to provide findings of a higher degree of accuracy and generalizability.

With regards to the sample size, the researcher referred to the sample size as recommended by [19] whose calculation was based on the Precision Levels where the Confidence Level was 95% and  $P = 0.5$ . According to Israel [19], a sample size for a population of more than one hundred thousand with precision level of  $\pm 5\%$  was 400 observations. This provided the researcher with a sample size that exceeded the minimum sample size as recommended by most researchers [20-24]. To avoid biases and possibility of unreturned questionnaires, 450 questionnaires were distributed at the identified locations.

### Measurement and questionnaire development

In this study, a self-administered questionnaire was used as the main research instrument. The advantages of self-administered questionnaire is that it can provide high response rates, reduce the

missing data, and shorten the data collection period [25]. Meanwhile, a 10-point Likert scale, ranging from 1 to 10 where 1 denotes "strongly disagree", 2 for "disagree", 3 for "moderately disagree", 4 for "slightly disagree", 5 for "mildly disagree", 6 for "mildly agree", 7 for "slightly agree", 8 for "moderately agree", 9 for "agree", and 10 for "strongly agree", were used to measure the proposed constructs in this study. Items used to measure perceived behavioural control were adapted from the scale used by Hashim and Musa [15] and [26]. In addition, items used to measure self-efficacy and resource facilitating condition were adapted from the instruments used by Khalid and John [27], while, items used to measure purchase intention were generated based on the work of Rahman, *et al.* [5] and Haque, Sarwar, Farzana, Tarofder and Hossain [28]. Finally, items used to measure spiritual intelligence were generated from the instruments used by Pyeman, Azreen Jihan and Rosidah [29].

### Data collection and administration

The data collection process was conducted at six major cities in the Klang Valley area namely Kuala Lumpur, Klang, Kajang, Subang Jaya, Petaling Jaya, and Shah Alam. Meanwhile, the questionnaires of the study were pre-tested and refined prior to field work and the respondents were conveniently intercepted at shopping centres. Shopping centres were chosen due to the fact that most of the packaged and fast-moving consumer goods such as halal personal care products are easily available at these places.

The administration of the data collection in this study followed the subsequent steps. Firstly, the researcher would approach the potential respondents and asked whether or not they were willing to participate in the study. Secondly, once they agreed to participate, the screening questions would be asked so that the researcher would be able to reach the right respondents for the study. The key factors for inclusion of the participants in this study was that they must be a Muslim and aged between 20 to 60 years old. Finally, the questionnaires would be handed out to them if they fulfilled all the stipulated criteria.

## Results

A total of 450 copies of the questionnaires were distributed to target respondents. Out of the 450 copies, 430 copies were returned and only 405 copies could be used for further analysis, thus, yielding a response rate of 90 per cent.

**Measurement model analysis**

To assess the measurement model, two types of validity were examined namely convergent validity and discriminant validity.

**Convergent validity**

Convergent validity is the degree to which a measure correlates positively with another measures of the same construct [30]. Establishing convergent validity involves satisfying the conditions imposed upon indicators' loadings, composite reliability, and the average variance extracted (AVE) [31]. Based on an established rule of thumbs, the indicators' loadings of an item should exceed the threshold value of 0.60 [32,33], while, the cut-off point for

both the composite reliability and AVE is 0.70 and 0.50 respectively [34]. In the initial round of the analysis, two items (i.e. HR1 and PBC1) were found to have low factor loadings, thus, making these two items to be excluded in the subsequent round of the analysis. Meanwhile, in the second round of analysis, another one item (i.e. HR2) was found to have low factor loadings (<0.60), thus, making this item to be excluded in the final round of analysis. Finally, in the final round of analysis, no item was found to have low factor loadings, thus, allowing the researcher to proceed with the analysis of composite reliability and AVE. Table 1 summarizes the indicators' loadings, AVE and composite reliability of all the constructs in the final round of analysis.

Constructs	Items	Loadings	AVE	CR
Self-Efficacy	GE1	0.814	0.575	0.871
	GE2	0.798		
	GE3	0.796		
	GE4	0.700		
	GE5	0.673		
Resource Facilitating Condition	HR3	0.866	0.830	0.936
	HR4	0.927		
	HR5	0.938		
Perceived Behavioural Control	PBC2	0.748	0.731	0.915
	PBC3	0.863		
	PBC4	0.881		
	PBC5	0.919		
Intention to Purchase	ITP1	0.732	0.625	0.909
	ITP2	0.784		
	ITP3	0.777		
	ITP4	0.855		
	ITP5	0.805		
	ITP6	0.786		

**Table 1:** Convergent validity.

Based on Table 1, all the indicators' loadings, AVE, and composite reliability for all the constructs under study surpass the 0.60, 0.50 and 0.70 cut-off point respectively, thus, fulfilling all the three criterions of convergent validity.

**Discriminant Validity**

The second criterion to be fulfilled for the measurement model analysis is to evaluate the discriminant validity of the indicators. Discriminant validity is the degree to which a construct is truly different from other constructs in the model. In this study, the cross-loadings analysis, Fornell-Larcker criterion analysis and Heterotrait-Monotrait (HTMT) criterion analysis will be used to measure the discriminant validity [34].

Specifically, an indicators' loading on the associated construct should be greater than any of its cross-loadings (i.e. its correlation) on other constructs [34]. Based on Table 2, the indicators' loadings on the associated construct (bolded) are all greater than its cross-loadings on other constructs, thus, indicating an adequate level of discriminant validity.

	<b>Efficacy</b>	<b>Resource</b>	<b>ITP</b>	<b>PBC</b>
Efficacy1	<b>0.814</b>	0.445	0.473	0.49
Efficacy2	<b>0.798</b>	0.301	0.269	0.305
Efficacy3	<b>0.796</b>	0.294	0.257	0.247
Efficacy4	<b>0.700</b>	0.263	0.195	0.234
Efficacy5	<b>0.673</b>	0.315	0.208	0.236
Resource3	0.421	<b>0.866</b>	0.468	0.416
Resource4	0.389	<b>0.927</b>	0.452	0.497
Resource5	0.415	<b>0.938</b>	0.485	0.504
ITP1	0.239	0.134	<b>0.732</b>	0.303
ITP2	0.334	0.142	<b>0.784</b>	0.329
ITP3	0.404	0.204	<b>0.777</b>	0.394
ITP4	0.437	0.167	<b>0.855</b>	0.392
ITP5	0.447	0.213	<b>0.805</b>	0.359
ITP6	0.409	0.215	<b>0.786</b>	0.378
PBC2	0.326	0.464	0.425	<b>0.748</b>
PBC3	0.412	0.479	0.621	<b>0.863</b>
PBC4	0.383	0.41	0.595	<b>0.881</b>
PBC5	0.356	0.432	0.55	<b>0.919</b>

**Table 2:** Cross loadings.

Next, the discriminant validity of the measurement model was tested using the criteria suggested by Fornell and Larcker [35]. Specifically, this criteria requires that the square root of each construct's AVE should be greater than its highest correlation with any other construct [34]. Based on Table 3, the square root of AVE (bolded) are all greater than the off-diagonal elements in their corresponding row and column, thus, suggesting a sufficient level of discriminant validity.

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Efficacy	<b>0.758</b>			
2. Resource	0.447	<b>0.911</b>		
3. ITP	0.253	0.513	<b>0.791</b>	
4. PBC	0.435	0.521	0.647	<b>0.855</b>

**Table 3:** Fornell-Larcker Criterion.

The final criterion to establish discriminant validity of the measurement model is through HTMT criterion analysis, a more advanced method of detecting discriminant validity [36]. Henseler, *et al.* [36] suggest a threshold value of 0.90 if the path model includes the constructs that are conceptually very similar. However, when the constructs in the path model are theoretically more distinct, a lower thresholds value of 0.85 is acceptable. This study followed the latter since the path model in this study was theoretically more different. Table 4 shows that all the HTMT values in this study were less than the cut-off point of 0.85, thus, suggesting an acceptable level of discriminant validity.

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Efficacy	<b>0.471</b>			
2. Resource	0.583	<b>0.348</b>		
3. ITP	0.702	0.532	<b>0.269</b>	
4. PBC	0.793	0.614	0.296	<b>0.296</b>

**Table 4:** Heterotrait-Monotrait (HTMT) Criterion.

In total, the measurement model in this study demonstrates both the convergent validity and discriminant validity, thus, permitting the researcher to proceed with the structural model analysis.

**Structural model analysis**

Assessing the structural model involves evaluating R<sup>2</sup>, beta and the corresponding t-values [37]. To obtain the t-values, a

bootstrapping procedure with 1000 resamples was applied [32]. In addition, researchers should also report predictive relevance (Q<sup>2</sup>) and effect sizes (f<sup>2</sup>) [37,38]. The results of the structural model analysis in this study is shown in Table 5.

Hypo	Relationships	Std Beta	Std Error	t-value	R <sup>2</sup>	f <sup>2</sup>	Q <sup>2</sup>	Decision
H1	PBC --> ITP	0.377	0.057	6.790	0.209	0.130	0.281	Supported
H2	GE --> PBC	0.252	0.047	5.384	0.322	0.075	0.218	Supported
H3	HR --> PBC	0.409	0.043	9.603		0.197		Supported

**Table 5:** Results of the Structural Model Analysis.

First, one needs to look at the antecedents of perceived behavioural control. Self-efficacy ( $\beta = 0.252, t = 5.384, p < 0.10$ ) and resource facilitating condition ( $\beta = 0.409, t = 9.603, p < 0.10$ ) both positively affected perceived behavioural control, thus, giving support for H2 and H3. This two constructs explained 32.2 per cent of the variance in perceived behavioural control and based on the suggestion of Chin [32], this R<sup>2</sup> value can be considered weak. Surprisingly, resource facilitating condition was the strongest predictor of perceived behavioural control with a beta value of 0.409.

Next, one needs to look at the predictor of intention to purchase. Perceived behavioural control ( $\beta = 0.377, t = 6.790, p < 0.10$ ) positively influenced the intention to purchase, thus, providing support for H1. This particular construct explained only 20.9 per cent of the variance in purchase intention and based on the suggestion of Chin [32], this R<sup>2</sup> value can be considered weak.

Subsequently, one needs to assess the effect sizes (f<sup>2</sup>). As asserted by Sullivan and Feinn [39], "While a P value can inform the reader whether an effect exists, the P value will not reveal the size of the effect. In reporting and interpreting studies, both the substantive significance (effect size) and statistical significance (P value) are essential results to be reported" (p.279). In assessing effect sizes, Hair, *et al.* [37] suggested that the change in the R<sup>2</sup> value should also be examined. The method suggested is to examine the R<sup>2</sup> change when a specified exogenous construct is omitted from the model. This is to evaluate whether the omitted construct has a substantive impact on the endogenous construct. To measure the magnitude of the effect size, the researcher used Cohen's [40] guideline which is 0.02, 0.15, and 0.35, representing small, medi-

um, and large effects respectively. Looking at the f<sup>2</sup> values in Table 5, it can be observed that all the relationships showed substantive impact whereby there were 2 relationships with small effect sizes and 1 with medium effect sizes.

Finally, it is also important to measure the predictive relevance of the model by using the blindfolding procedure [37]. Blindfolding is a sample reuse technique that omits every dth data point in the endogenous construct's indicators and estimates the parameters with the remaining data points [32,41,42]. Hair, *et al.* [37] suggested that the blindfolding procedure should only be applied to endogenous constructs that have a reflective measurement (multiple items or single item). If the Q<sup>2</sup> value is larger than 0, the model has predictive relevance for a certain endogenous construct and otherwise if the value is less than 0 [34,43]. Based on Table 5, it can be seen that all the Q<sup>2</sup> values are more than 0 ranging from 0.218 to 0.281, thus, suggesting a sufficient predictive relevance.

**Moderation Analysis**

Moderation clarifies a situation in which the relationship between two constructs is not consistent but depends on the values of a third variable, referred to as a moderating variable [30,34]. The moderating variable alters the strength or even the direction of a relationship between two constructs in the model [30,32]. This study focuses on the moderating role of spiritual intelligence (SQ) on the effect of perceived behavioural control on purchase intention.

**Interaction Effect**

The moderation analysis in this study followed the following steps. Firstly, the original model needed to be extended by includ-

ing the moderating variable into the framework. Next, to facilitate the inclusion of a moderating variable in the PLS path model, the concept of interaction effect was introduced. In this study, the two-stage approach was chosen over the product indicator and orthogonalizing approach.

Once the interaction effect was created, one can now proceed with the analysis by running the PLS-SEM algorithm using the path weighting scheme and mean value replacement for missing values. The results of the PLS-SEM algorithm showed that the value of  $R^2$  increased from 0.484 to 0.493, giving an  $R^2$  change of 1.9%.

### Moderation measurement model analysis

Consistent with the standard evaluation procedures for reflective measures, the additional constructs (i.e. Spiritual Intelligence) must be evaluated for reliability and validity. However, this does not apply for the interaction term, which relies on an auxiliary measurement model generated by reusing indicators of the exogenous construct and the moderator variable. Based on the final round of analysis, the moderation measurement model in this study demonstrated both the convergent validity and discriminant validity, thus, allowing the researcher to proceed with the evaluation of the size of the interaction effect.

### Size of the interaction effect

The interaction term of PBC\*SQ had a positive effect on intention to purchase (0.100), whereas the simple effect of perceived behavioural control on intention to purchase was 0.371. Jointly, these results suggested that the effect of perceived behavioural control on intention to purchase was 0.371 for an average level of spiritual intelligence. For higher levels of spiritual intelligence, the effect of perceived behavioural control on intention to purchase increased by the size of the interaction term (i.e.  $0.371 + 0.100 = 0.471$ ). This result implies that when spiritual intelligence got higher, perceived behavioural control became more important for the explanation of intention to purchase.

On the other hand, for lower levels of spiritual intelligence, the effect of perceived behavioural control on intention to purchase decrease by the size of the interaction term (i.e.  $0.371 - 0.100 = 0.271$ ). Thus, when spiritual intelligence got lower, attitude became less important for the explanation of intention to purchase.

### Hypotheses testing

Finally, one needs to analyse whether the relationship between the interaction term and intention to purchase is significant. For this purpose, the bootstrapping procedure with 1000 bootstrap samples were used to conduct this analysis [32]. One-tailed t-tests was used to identify the significance of the path coefficient in this study since all the relationships of the path coefficient were one-directional in nature. The results of the bootstrapping procedure yielded a t value of 1.562 for the path linking the interaction term of PBC\*SQ and intention to purchase. Therefore, this results provided a clear support that spiritual intelligence exerted a significant positive effect on the relationship between perceived behavioural control and intention to purchase, thus, providing support for H4. In other words, the higher the spiritual intelligence, the stronger the effect of perceived behavioural control on intention to purchase.

### Discussions

Based on Table 5, perceived behavioural control ( $\beta = 0.377$ ,  $p < 0.10$ ,  $t = 6.790$ ) was found to have a positive effect on intention to purchase, thus, giving support to H1. This result was in line with the findings of other halal-related studies [44-46]. Selectively, in a study investigating factors that influenced Muslim behavioural intention to buy halal meat in France, Bonne, *et al.* [45] found that intention was significantly and positively affected by perceived behavioural control. Similarly, Alam and Sayuti [44] also found a similar result in their investigation on the customers' intention to purchase halal food in Malaysia.

The results implies that individuals would be more inclined to purchase halal personal care products when they believed that they have the ability to purchase them. The beliefs associated with the ability to purchase the products were reflected in individual's perception of the internal factor (e.g. self-efficacy) and external factors (e.g. availability of resources). Therefore, higher customers' perception of these internal and external factors will lead to stronger intention to purchase them [47].

Meanwhile, self-efficacy ( $\beta = 0.252$ ,  $p < 0.10$ ,  $t = 5.384$ ) and resource facilitating condition ( $\beta = 0.409$ ,  $p < 0.10$ ,  $t = 9.603$ ) were found to have a positive effect on perceived behavioural control, thus, H2 and H3 were also supported. This result was consistent with the findings of other information technology and halal

financial services studies [48,49]. For instance, in a conceptual paper investigating the factors influencing the customers' intention to participate in family takaful scheme, Husin and Rahman [48] proposed that self-efficacy (i.e. self-confidence) was significant determinants of perceived behavioural control. On a different note, Lau's [49] study on the factors affecting the adoption of online trading among brokers showed that perceived behavioural control was significantly and positively affected by resource facilitating conditions.

This finding implies that self-efficacy or self-confidence to use halal personal care products may affect an individual's perception of behavioural control, thus, affecting their behaviour to purchase them. Lack of individual's confidence and efficacy towards this product implies that marketers and product managers need to put extra efforts to provide additional advertising and promotional activities to the potential customers on the benefits and advantages of using the products.

In addition, this finding suggests that the influence of the availability of resources such as time, money, and information could affect an individual's perception of the ease or difficulty of getting the products. In other words, the individuals who believed that they have the resources such time, money, and information (i.e. high resource facilitating conditions) would perceive that they have the ability (i.e. high perceived behavioural controls) to purchase the products.

Finally, the results of the hypotheses testing on the moderating variable showed that spiritual intelligence exerted a significant positive effect on the relationship between perceived behavioural control and intention to purchase (i.e. the higher the spiritual intelligence, the stronger the effect of subjective norm on intention to purchase). This result was consistent with the findings of Cisheng, Jamala, Aqeel, Shah, Ahmed and Gul [50], Mughaddampour and Karimian [51] and Othman, Mohamad Mokhtar, Abbas, Hamzah, Mohd Badrillah, Munap, Wahab, Abdul Rahman and Abu Bakar [52] who found a significant positive effect of spiritual intelligence on the relationship between the independent and dependent construct [53-68].

## Conclusions

Theoretically speaking, this study further extends the purchase intention research on halal personal care products by applying DTPB as the theoretical model of the study. By decomposing the attitudinal, normative, and perceived control beliefs into relevant multidimensional constructs, the researcher anticipate to have a higher predictive power and a more detailed understandings of the determinants of behaviour. According to Ali, *et al.* [18], applying merely the TRA and the TPB in a study makes it difficult for researchers to deeply understand and explore the context-specific antecedents of behaviour. In other words, pure TRA and TPB model will weaken the explanatory power of the proposed model if a research is mainly dealing with a behaviour whose perspectives is very specific. Therefore, this study goes the extra miles by integrating the relevant determinants of attitude, subjective norm, and perceived behavioural control in DTPB model as a new approach in predicting customers' behavioural intention in the context of halal personal care products.

Although the DTPB was specifically tailored to understand the adoption of information technology (IT), antecedents such as interpersonal referents (i.e. friends' and family members' influences), self-efficacy (i.e. self-confidence), and resource-facilitating conditions (i.e. time, money, and information) can still be applied into the research of other natures including that of halal personal care products. Therefore, this study will provide an interesting platform to explore the robustness and thoroughness of the theory in predicting the customers' intention within a different research area, thus, improving our understanding of the factors that may influence one's intention to purchase halal personal care products.

## Bibliography

1. Global Institute of Forensic Research. The Global Halal Industry: An overview. GIFR (2015).
2. State of Global Islamic Economy Report. Halal Products (2014).
3. Rahim NF, *et al.* "Awareness and Perception of Muslim Consumers on Halal Cosmetics and Personal Care Products". *International Journal of Business, Economics and Management* 2.1 (2015): 1-14.



4. Ministry of International Trade and Industry. Exports of Halal Cosmetic and Personal Care Products Hit RM1.7 Billion, Emerging as the Fastest Growing Consumer Segment. MITI, Malaysia (2015a).
5. Rahman AA, *et al.* "Consumers and Halal cosmetic products: knowledge, religiosity, attitude and intention". *Journal of Islamic Marketing* 6.1 (2015): 148-163.
6. Hunter M. "The emerging Halal cosmetic and personal care market: integrating the organization towards the philosophy of Tawhid". Working Paper, University Malaysia Perlis (2012).
7. KasehDia Consulting. The 7th World Halal Forum, 4-5 April 2012, Kuala Lumpur, Malaysia". Post Event Report (2015).
8. World Halal Forum. The 6th World Halal Forum, 4-5 April 2011. Kuala Lumpur, Malaysia, Post Event Report (2011).
9. Hajipour B, *et al.* "Raising Halal Cosmetic Awareness among the respective Consumers". *International Journal of Academic Research in Business and Social Sciences* 5.7 (2015): 338-349.
10. Halal Development Corporations. Opportunities in Halal Economy. HDC, Malaysia (2014).
11. Rahim NF, *et al.* "Awareness and Perception of Muslim Consumers on Non-Food Halal Product". *Journal of Social and Development Sciences* 4.10 (2013): 478-487.
12. Teng PK, *et al.* "Investigating students awareness and usage intention towards halal-labelled cosmetics and personal care products in Malaysia". In Proceeding of the 4th International Conference on Business and Economic Research (4th ICBER 2013), 4th - 5th March 2013, Bandung, Indonesia (2013): 367-376.
13. Mokhtar A, *et al.* "Guidelines for Implementing Value-Based Total Performance Excellence Model in Business Organizations". Presentations at the Islamic Perspective Forum. Manila, Philippines (2012).
14. Ramlee J. "Safi rebrands products to reach younger men". *Business Times, New Straits Times* (2013): 9-10.
15. Hashim, *et al.* "Factors Influencing Attitude towards Halal Cosmetic among Young Adult Urban Muslim Women: A Focus Group Analysis". *Procedia-Social and Behavioral Sciences* 130 (2014): 129-134.
16. Hashim, *et al.* "Modelling the effects of the attitude of young adult urban Muslim women towards halal cosmetic products: New insights for championing the halal economy". *International Journal of Education and Research* 1.7 (2013): 1-8.
17. Ministry of International Trade and Industry. Status of the Halal Industry Report. MITI, Malaysia (2015b).
18. Ali S, *et al.* "The state of halal personal care products research on consumer behaviour: A systematic review of the literature and future research directions". *Journal of Marketing Management and Consumer Behavior* 14 (2016): 40-51.
19. Israel GD. Determining sample size. University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, EDIS (1992).
20. Bentler PM and Chou C. "Practical issues in structural modelling". *Sociological Methods and Research* 16.7 (1987): 78-117.
21. Ding, L., *et al.* "Effects of estimation methods, number of indicators per factor, and improper solutions on structural equation modelling fit indices". In *Structural Equation Modelling* 2 (1995): 119-143.
22. Hair J, *et al.* "Multivariate data analysis. Prentice Hall, Inc, Upper Saddle River, New Jersey (1998).
23. Kelloway EK. "Using Lisrel for structural equation modelling". International Educational and Professional Publisher, SAGE Publications, CA (1998).
24. Shah R and Goldstein S. "Use of structural equation modelling in operations management research". *Journal of Operations Management* 24.2 (2006): 148-169.
25. Brace I. "Questionnaire Design: how to plan, structure and write survey material for effective market research, 2nd Edition". Kogan Page Limited, London, UK (2008).

26. Khan A and Azam MK. "Factors Influencing Halal Products Purchase Intention in India: Preliminary Investigation". *The IUP Journal of Marketing Management* 15.1 (2016): 20-35.
27. Khalid MN and John MP. "An exploratory study into the adoption of internet banking in a developing country: Malaysia". *Journal of Internet Commerce* 7.4 (2008): 29-73.
28. Haque A., et al. "Non-Muslim consumers' perception toward purchasing halal food products in Malaysia". *Journal of Islamic Marketing* 6.1 (2015): 133-147.
29. Pyeman J., et al. "Factorial Structure of Spiritual Intelligence On Purchasing Decision Towards Halal Cosmetics Product". In Proceedings of the 1st AAGBS International Conference on Business Management 2014, Kuala Lumpur, Malaysia (2016).
30. Chin WW. "How to write up and report PLS analyses". In Esposito Vinzi, V., Chin, W.W., Henseler, J., and Wang, H. (Eds. : Handbook of partial least squares: Concept, methods and applications. Springer-Verlag, Berlin, Germany (2010).
31. Lee Y and Kozar K. "An empirical investigation of anti-spyware software adoption: a multi theoretical perspective". *Information and Management* 45.2 (2008): 109-119.
32. Chin WW. "The partial least squares approach to structural equation modeling, in Modern Business Research Methods, Marcoulides, G.A. (Ed)". In Lawrence Erlbaum Associates, Mahwah (1998): 295-336.
33. Gholami R., et al. "Senior managers' perception on green information systems (IS) adoption and environmental performance: Results from a field survey". *Information and Management* 50.7 (2013): 431-438.
34. Hair JF., et al. "A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM: 2nd Edition)". SAGE Publications, California (2017).
35. Fornell C and Larcker DF. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error". *Journal of Marketing Research* 18.1 (1981): 41-54.
36. Henseler., et al. "A new criterion for assessing discriminant validity in variance-based structural equation modeling". *Journal of the Academy of Marketing Science* 43.13 (2015): 115-135.
37. Hair JF., et al. "A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)". SAGE Publications, Los Angeles, CA (2014).
38. Ramayah T and Rahbar E. "Greening the environment through recycling: An empirical study". *Management of Environmental Quality: An International Journal* 24.6 (2013): 782-801.
39. Sullivan GM and Feinn R. "Using Effect Size - why the p Value is not Enough". *Journal of Graduate Medical Education* 4.3 (2012): 279-282.
40. Cohen J. "Statistical power analysis for the behavioral sciences". Lawrence Erlbaum, Mahwah, New Jersey (1988).
41. Henseler J., et al. "The use of Partial Least Squares Path Modeling in International Marketing". *Advances in International Marketing* 20.8 (2009): 277-320.
42. Tenenhaus M., et al. "PLS Path Modeling". *Computational Statistics and Data Analysis* 48.23 (2005): 159-205.
43. Fornell, C and Cha J. "Partial Least squares". In R.P. Bagozzi (Ed : Advanced methods in marketing research. Cambridge: Blackwell (1994).
44. Alam SS and Sayuti NM. "Applying the Theory of Planned Behavior (TPB) in halal food purchasing". *International Journal of Commerce and Management* 21.1 (2011): 8-20.
45. Bonne K., et al. "Determinants of halal meat consumption in France". *British Food Journal* 109.5 (2007): 367-386.
46. Omar KM., et al. "The Direct Effects of Halal Product Actual Purchase Antecedents among the International Muslim Consumers". *American Journal of Economics* 2.4 (2012): 87-92.
47. Ajzen I and Madden TJ. "Prediction of goal-directed behaviour: attitudes, intentions, and perceived behavioural control". *Journal of Experimental Social Psychology* 22.5 (1986): 453-474.

48. Husin MM and Rahman AA. "What drives consumers to participate into family takaful schemes? A literature review". *Journal of Islamic Marketing* 4.3 (2013): 264-280.
49. Lau SM. "Strategies to motivate brokers adopting on-line trading in Hong Kong financial market". *Review of Pacific Basin Financial Markets and Policies* 5.4 (2002): 471-489.
50. Cisheng W, et al. "The moderating role of spiritual intelligence on the relationship between emotional intelligence and identity development in adolescents". *Foundation University Journal of Psychology* 1(1 : 78-103.
51. Moghaddampour J and Karimian MV. "A study on impact of workplace spirituality on customer-oriented organizational citizenship behavior by considering the role of spiritual intelligence: A case of an insurance company". *Management Science Letters* 3.2 (2013): 1633-1648.
52. Othman, et al. "The moderating effects of practical, emotional and spiritual intelligences on the link between personality traits and Malay entrepreneurship success". In *Asean Entrepreneurship Conference 2012, Kuala Lumpur, Malaysia* (2012).
53. Abdul Aziz Y and Chok NV. "The role of Halal awareness, Halal certification, and marketing components in determining Halal purchase intention among non-Muslims in Malaysia: a structural equation modeling approach". *Journal of International Food and Agribusiness Marketing* 25.1 (2013): 1-23.
54. Ajzen I. "The theory of planned behaviour". *Organizational Behaviour and Human Decision Processes* 50.12 (1991): 179-211.
55. Bandura A. "Social Foundations of Thought and Action". Prentice-Hall, Eaglewood Cliffs, NJ (1986).
56. Bhattacharjee A. "Acceptance of e-commerce services: The case of electronic brokerages". *IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans* 30.4 (2000): 411-420.
57. Husin MM and Rahman AA. "Predicting Intention to Participate in Family Takaful Scheme Using Decomposed Theory of Planned Behaviour". *International Journal of Social Economics* 43.12 (2016): 1351-1366.
58. Madden TJ, et al. "A comparison of the theory of planned behaviour and the theory of reasoned action". *Personality and Social Psychology Bulletin* 18.3 (1992): 3-9.
59. Othman AK, et al. "The moderating role of spiritual intelligence on the relationship between job stress and job performance of employees in a banking sector". *Journal of Islamic Management Studies* 1.1 (2017): 89-103.
60. Parthasarathy M and Bhattacharjee A. "Understanding post-adoption behaviour in the context of online services". *Information Systems Research* 9.4 (1998): 362-379.
61. Ramayah T, et al. "Green Manufacturing Practices and Performance among SMEs: Evidence from a Developing Nation. In IGI Global (2013).
62. Sekaran U and Bougie R. *Research methods for business: A skill-building approach*, Sixth edition. John Wiley and Sons, New York (2013).
63. Taylor S and Todd P. "Understanding information technology usage, a test of competing models". *Information Systems Research* 6.2 (1995): 144-176.
64. Triandis HC. "Values, attitude, and interpersonal behaviour. in Husin, M.M. and Rahman, A.A. (Ed. : What drives consumers to participate into family takaful schemes? A literature review. *Journal of Islamic Marketing* 4.3 (1980): 264-280.
65. Wan Omar, et al. "An analysis of Muslim's consumers' attitudes towards Halal food products in Kelantan". In *ECER Regional Conference 2008, UiTM Kelantan* (2008).
66. Wigglesworth C. "The twenty one skills of spiritual intelligence". Select books Inc, New York (2012).
67. Yener D. "Factors That Affect the Attitudes of Consumers Toward Halal-Certified Products in Turkey". *Journal of Food Products Marketing* 10.1 (2014): 1-19.
68. Zohar D and Marshall I. "SQ: Spiritual Intelligence-the ultimate intelligence". Bloomsbury, London (2001).

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