

The Influence of Attitude, Knowledge and Quality on Purchase Intention towards Halal Food: A Case Study of Young Non-Muslim Consumers in Thailand

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Type of Review: Peer Reviewed.

DOI: <http://dx.doi.org/10.21013/jmss.v6.n3.p3>

How to cite this paper:

Maichum, K., Parichatnon, S., & Peng, K. (2017). The Influence of Attitude, Knowledge and Quality on Purchase Intention towards Halal Food: A Case Study of Young Non-Muslim Consumers in Thailand. *IRA-International Journal of Management & Social Sciences* (ISSN 2455-2267), 6(3), 354-364. doi:<http://dx.doi.org/10.21013/jmss.v6.n3.p3>

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ABSTRACT

This paper investigates the influence of attitude, halal knowledge, halal quality on purchase intention towards halal food of young non-Muslim consumers in Thailand. Consequently, total of 600 questionnaires were distributed and 482 usable responses were obtained yielding a response rate of 80.33%. Our results indicated that attitude has a strongest direct influence on intention to purchase and also the results indicated that halal knowledge has a significant effect on attitude towards halal food and had no significant effect on halal purchase intention. Furthermore, halal quality has significant positive influences on the purchase intention among the studied group in Thailand. Therefore, this paper could provide insights important for manufacturers, marketers and policymakers to understand the perspectives of young non-Muslim consumers in Thailand.

Keywords: Attitude, Halal food, Halal knowledge, Halal quality, Purchase intention, Thailand, Young non-Muslim consumers

Introduction

In 2016, the global Muslim population was more than 2 billion, which spreading over 112 countries and is expected to increase by about 35% in the next 20 years (Muslim, 2017). The majority of Muslims live in Asia, followed by Middle East and North Africa, sub-Saharan Africa, Europe, North America, Latin America and the Caribbean, respectively. In addition, Thailand had an estimated population at 70 million people and had an estimated Muslim population of about 7 million people, which accounts for 10% of the total population (NSO, 2016). Currently, the Muslim population is increasing rapidly; resulting in a demand for halal food has increased dramatically in recent years. Halal food refers to food that is permissible according to Islamic law. Therefore, halal food is a key to consumption for the Muslims.

Global halal market is estimated to be worth more than 2.3 trillion USD and the value of halal food is reaching 700 billion USD per year (Elasrag, 2016). Moreover, Muslims around the world who consume halal food and beverages is worth about 1,128 billion USD or about 17% of global expenditure (Elasrag, 2016). Thailand is a leading exporter of halal products in Southeast Asia, as well as the world's fifth largest halal food exporter with 5.6% share of the global halal food market valued at 5 billion USD a year annually (Abdul, 2014; Elasrag, 2016). Moreover, the Thai government has developed and improved several key strategies to strengthen the halal industry in the country and to reassure consumers of halal food in recognition of the quality and standards in the production of halal food in Thailand. Therefore, halal food has a very significant role both among Muslims and non-Muslims and has also very important to Thailand's economy.

Currently, the consumer awareness about the importance of healthy food, thereby influencing their food consumption behavior (Mathew, 2014), especially young consumers. Due to healthy foods can lead to protect the health and also help protect the environment as well (Chen, 2009). According to Lampila and Lähteenmäki (2007), the consumer acceptance is the important keys for their purchase intention and contributes to sustainable consumption. Khalek (2014) suggested that attitude towards halal food is essential in determining consumer behavior towards halal food. Shah Alam and Mohamed Sayuti (2011) reported that the attitude has a positive influence on purchase intention towards halal food among young consumers in Malaysia and moreover the consumers need to have enough understanding and knowledge to be able to choose halal food. In addition, Mohamed, Shamsudin, and Rezai (2013) observed that if consumers lack knowledge about halal food may affect their attitude and purchase intention. In Aziz and Chok (2013), the quality of halal food can be a source of product differentiation and is an important parameter for the food industry; therefore, understanding the relationship between the quality of halal food and consumer behavior is very important for producer and marketers. Many previous studies have

been focused on the purchase intention towards halal food among young Muslim consumers (Khalek, 2014; Musa, 2014) but there are very few studies that focus on young non-Muslim consumers. Furthermore, Muhammad, Norhaziah, Nuradli, and Hartini (2007) concluded that the halal food is not only good for the Muslims but also good for everyone else. In Thailand, the majority of the population is Buddhist (94.6%), thus there is a great need to study on non-Muslim consumers, which could indicate the important opportunity for this group to be a sustainable consumer of the halal market and could contribute more to the growth and development of halal food industry. Therefore, this study aimed to investigate the purchase intention towards halal food among young non-Muslim consumers and also to determine the relationship of attitude, halal knowledge and halal quality towards the purchase intention of young non-Muslim consumers in Thailand.

Literature Review and Hypothesis Development

The research framework used in this study is shown in Figure 1. In total, five hypotheses are drawn from four constructs, namely, attitude towards halal food, halal knowledge, halal quality and halal food purchase intention.

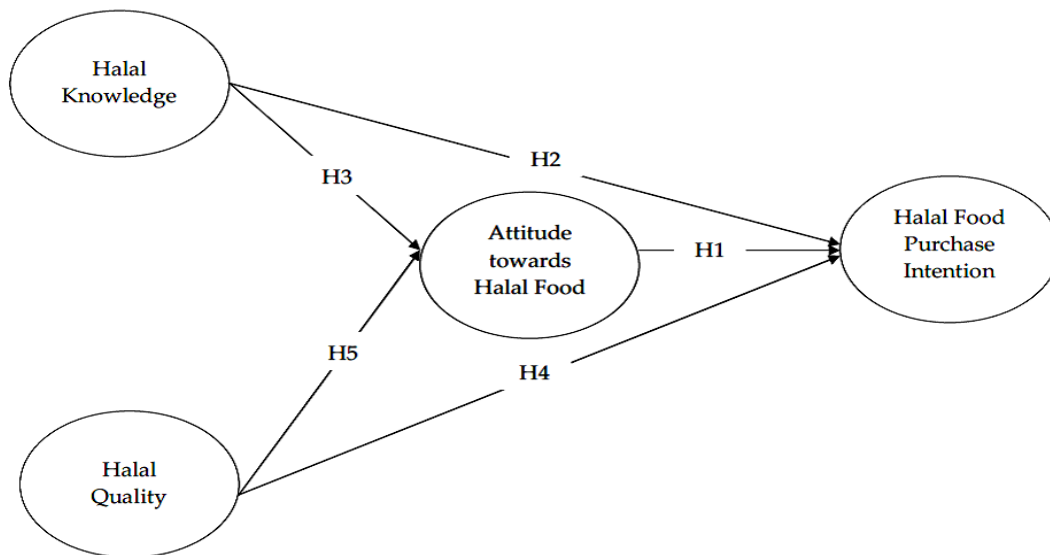


Figure 1. Conceptual model

Halal Food Purchase Intention

Purchase intention is the strongest indicators of the probability that a consumer will purchase a product or service. In addition, many researchers have proposed that the intention to purchase indicates an individual human belief to buy halal food (Nazahah & Sutina, 2012; Yunus, Rashid, Ariffin, & Rashid, 2014). Therefore, previous studies have shown that the purchase intention is strongly correlated with attitude, halal knowledge and halal quality (Jamal & Sharifuddin, 2015; Khalek, 2014; Khalek & Ismail, 2015; Mohamed Elias, 2016).

Attitude towards Halal Food

Attitude towards halal food refers to evaluate the favorable or unfavorable respondents to perform or not to perform behavior. Especially, the earlier studies have focused on the relationship between attitude towards halal food and purchase intention. For example, Shah Alam and Mohamed Sayuti (2011) reported that attitude towards halal food have a positive influence on purchase intention in Malaysia. Moreover, Khalek (2014) suggested that young consumer’s

purchasing intention is based on their attitude towards halal food. Thus, attitude towards halal food is regarded an important part of predicting and explaining the behavior of young consumers. Based on literature review, we propose the following hypotheses.

H1: Attitude towards halal food is positively associated with purchase intention for halal food of young non-Muslim consumers.

Halal Knowledge

Knowledge is one major factor that influences consumer's decision to purchase the products (Baharuddin, Kassim, Nordin, & Buyong, 2015). Moreover, knowledge is important in creating the behavior of actual consumer purchase intention, especially towards halal food (Ahmad, Rahman, & Ab Rahman, 2015; Sadeeqa, Sarrif, Masood, Saleem, & Atif, 2013; Said, Hassan, Musa, & Rahman, 2014). Hong and Sternthal (2010) pointed that the consumers who have less knowledge would much affect the evaluation of the product attributes. Mohamed Elias (2016) found that the positive relationship between halal knowledge and purchase intention towards halal food among university students in Malaysia. Mathew (2014) reported that the knowledge towards halal food influencing the acceptance of non-Muslim consumers. Therefore, halal knowledge is an important factor in encouraging purchase intention towards halal food and we propose that:

H2: Halal knowledge is positively associated with purchase intention for halal food of young non-Muslim consumers.

Simanjuntak and Dewantara (2014) suggested that the consumers' knowledge influences their attitude towards the product. Mostafa (2007) proposed that the knowledge has direct effects on their attitude and purchase intention. Furthermore, previous studies reported that the knowledge towards halal food has significant positive influence on consumers' attitude (Mohtar, Amirnordin, & Haron, 2014; Simanjuntak & Dewantara, 2014). Based on this discussion, we hypothesize that:

H3: Halal knowledge is positively associated with attitude towards halal food of young non-Muslim consumers.

Halal Quality

The quality of halal food is the most important factor for consumers in their decision to purchase the product and also important for manufacturers and marketers to improve product quality and increase customer value. Newberry, Klemz, and Boshoff (2003) reported that food quality was regarded as a parameter to predict the purchase intention. Namkung and Jang (2007) also showed that food quality has a positive influence on behavioral intention. According to Aziz and Chok (2013), halal food should be recognized that the high quality by the non-Muslim consumers, which has an impact on purchase intention. Therefore, we hypothesize that:

H4: Halal quality is positively associated with purchase intention for halal food of young non-Muslim consumers.

Halal quality has a direct impact on the attitude toward the product. Mohtar et al. (2014) concluded that halal quality positively influence the non-Muslim consumers' attitude towards halal food in Malaysia. As a result, we hypothesize that:

H5: Halal quality is positively associated with attitude towards halal food of young non-Muslim consumers.

Methodology

The data used in this study were collected through a questionnaire by face to face interviews from young consumers in Thailand. Earlier studies have mentioned that young consumers are interested in a more sustainable behavior, as well as the purchase of halal food (Khalek, 2014; Musa, 2014). Therefore, the sample of this study was used to select respondents of or aged 18-30 that resided in Thailand. In addition, individual respondents who purchase halal foods in Thailand were considered to be the target population. A survey was conducted at halal shops, halal market, convenience store and department stores from September to November 2016. This study was conducted of two pilot tests. Firstly, we sampled 60 consumers who buy green products for testing the validity and reliability of the questionnaires. The items of questionnaire have been improved from the suggestions and comments of respondents to ease of understanding and more simplicity. After the first revision, the second pilot test of 60 consumers was performed to re-evaluate the reliability. Finally, the questionnaire for data collection has been completed. A total of 600 questionnaires were distributed and 482 usable responses were obtained yielding a response rate of 80.33%. From the Table 1 shown below, the majority of respondents were females (55.60%), aged 18–23 years (50.83%), single (63.69%), Buddha (60.17%), graduates with a bachelor's degree (32.78%), with a family size of 2–3 persons (29.46%) and a monthly income ranged 5,001 –10,000 THB per person (1 USD = 34.6047 THB as of 1st September, 2016). The variables for each construct were modified from previous studies. This study has four constructs namely attitude towards halal food, halal knowledge, halal quality and halal food purchase intention. Therefore, the questionnaire items and sources of this study are provided in Table 2. Rankings of questionnaire items used the five-point Likert scale (1 = strongly disagree through 5 = strongly agree). Moreover, data were analyzed using the statistical package for social sciences (SPSS 23.0) and analysis of moment structures (AMOS 19.0) software, to achieve the objectives and to test hypotheses of this study.

Table 1. Demographic characteristics of sample (N = 482)

Items	Classification	Frequency	Percentage
Gender	Female	268	55.60
	Male	214	44.40
Age	18 –23 years	245	50.83
	24 –30 years	237	49.17
Marital Status	Single	307	63.69
	Married	175	36.31
Religion	Buddha	290	60.17
	Christian	159	32.99
	Hindu	19	3.94
	Others	14	2.90
Level of education	Junior high school or less	36	7.47
	Senior high school	73	15.14
	Community college	112	23.24
	Bachelor	158	32.78
	Above bachelor	103	21.37

Table 1. Cont.

Items	Classification	Frequency	Percentage
Family size	1 person	102	21.16
	2–3 persons	142	29.46
	4–5 persons	132	27.39
	More than 5 persons	106	21.99
Monthly income	Less than 5,000 THB	91	18.88
	5,001 –10,000 THB	175	36.31
	10,001 –20,000 THB	139	28.84
	20,001 –30,000 THB	63	13.07
	More than 30,001 THB	14	2.90

Table 2. The questionnaire items and sources

Constructs / Questionnaire items	Sources
Attitude towards halal food (AT)	Khalek and Ismail (2015) and Khalek (2014)
AT1: Halal food is safer compared to non halal food	
AT2: Halal food is cleaner compared to non halal food	
AT3: Halal food is healthier compared to than non halal food	
AT4: I have a favorable attitude towards halal food	
Halal knowledge (HK)	Ahmad et al. (2015) and Said et al. (2014)
HK1: I understand about the halal-labels and certifications on halal food before purchase	
HK2: I understand deeply about the inputs, processes and impacts of halal food before purchase	
HK3: I would prefer to gain substantial information on halal food before purchase	
Halal quality (HQ)	Jamal and Sharifuddin (2015), Mohtar et al. (2014) and Aziz and Chok (2013)
HQ1: Halal food has an acceptable standard of quality	
HQ2: Halal food has consistent quality	
HQ3: Halal food is very good in taste and texture	
Halal food purchase intention (PI)	Khalek and Ismail (2015), Khalek (2014) and Aziz and Chok (2013)
PI1: I have a high intention to buy halal food	
PI2: I buy halal food even if they are more expensive than non halal food	
PI3: I am likely to purchase any halal food	

Results

Reliability and Validity of the Measurement Model

The confirmatory factor analysis (CFA) was used to test and confirm the reliability and convergent validity of all constructs (e.g., attitude towards halal food, halal knowledge, halal quality and halal food purchase intention). According to Table 3, the reliability analysis showed that the Cronbach's α value ranged from 0.793 to 0.891 (e.g., halal knowledge is 0.793, halal quality is 0.840, attitude towards halal food is 0.860 and halal food purchase intention is 0.891, respectively). Cronbach's α value of at least 0.700 is commonly seen as accepted (Nunnally & Bernstein, 1994). Therefore, Cronbach's α value is recognized for reliability and these

Cronbach's α values exceeded the standard value. The standardized factor loadings were between 0.683 and 0.910. Bagozzi and Yi (1988) proposed that the standardized factor loadings should be greater than 0.600, thus, the standardized factor loadings of this study over the recommended value. Furthermore, the composite reliability (CR) estimates ranging from 0.811 to 0.906, which are more than the recommended value of 0.700 and average variance extracted (AVE) range between 0.595 and 0.732, which exceed the suggested value of 0.500, as proposed by Alamsyah and Angliawati (2015) and Hair, Anderson, Tatham, and Black (1998). Table 4 shows that the results of the measurement model fit indices exceeded the acceptable levels (Steiger, 2007; Tabachnick, Fidell, & Osterlind, 2001) as follows: $\chi^2 = 117.423$ ($p < 0.001$), $df = 45$, $\chi^2/df = 2.609$, GFI = 0.963, AGFI = 0.921, RFI = 0.918, NFI = 0.936, CFI = 0.965, RMSEA = 0.064, and RMR = 0.036. Thus, the results indicated that this measurement model had validity and reliability. Moreover, Table 5 shows that the descriptive statistics and correlations between constructs of this study.

Table 3. Validity of the measurement model

Construct	Question item	Cronbach's alpha	Standardized factor loading	Composite reliability	Average variance extracted
Attitude towards halal food (AT)					
	AT1	0.860	0.794 ^a	0.875	0.683
	AT2		0.812 ^{***}		
	AT3		0.860 ^{***}		
	AT4		0.841 ^{***}		
Halal knowledge (HK)					
	HK1	0.793	0.683 ^a	0.811	0.595
	HK2		0.732 ^{***}		
	HK3		0.812 ^{***}		
Halal quality (HQ)					
	HQ1	0.840	0.758 ^a	0.831	0.623
	HQ2		0.885 ^{***}		
	HQ3		0.824 ^{***}		
Halal food purchase intention (PI)					
	PI1	0.891	0.861 ^a	0.906	0.732
	PI2		0.894 ^{***}		
	PI3		0.910 ^{***}		

Note: ^{***} $p < 0.001$, ^aValue was not calculated because loading was set to 1.000 to fix construct variance.

Table 4. Measurement model fit indices

	Criteria	Indicators
Chi-square (χ^2)	$p > 0.050$	117.423 ($p < 0.001$)
Chi-square/degree of freedom (χ^2/df)	< 5.000	2.609 (117.423/45)
Goodness of Fit Index (GFI)	> 0.900	0.963
Adjusted Goodness of Fit Index (AGFI)	> 0.900	0.921
Relative Fit Index (RFI)	> 0.900	0.918
Normed Fit Index (NFI)	> 0.900	0.936
Comparative Fit Index (CFI)	> 0.950	0.965

Root Mean Square Error of Approximation (RMSEA)	< 0.080	0.064
Root Mean Square Residual (RMR)	< 0.050	0.036

Table 5. Descriptive statistics and correlations between constructs

	AT	HK	HQ	PI
AT	1.000			
HK	0.461***	1.000		
HQ	0.439***	0.395***	1.000	
PI	0.427***	0.337***	0.476***	1.000
Mean	4.214	3.559	4.016	4.339
Standard Deviation	0.743	0.965	0.841	0.732

Note: *** $p < 0.001$.

Hypotheses Testing

Figure 2 provides details of the results of research model. According to the results in Table 6, the results of the model fit were higher than the recommended values and showed that the model fit the data very well ($\chi^2 = 212.396$ ($p < 0.001$), $df = 58$, $\chi^2/df = 3.662$, $GFI = 0.969$, $AGFI = 0.924$, $RFI = 0.921$, $NFI = 0.945$, $CFI = 0.972$, $RMSEA = 0.055$ and $RMR = 0.027$). Furthermore, Table 7 reports the hypotheses and the estimates of the research model. Totally, four out of five hypotheses are supported. First, attitude towards halal food had significant positive influences on halal food purchase intention (H1: $\beta_1 = 0.632$, $t = 20.451$, $p < 0.001$), thus supporting H1. Second, halal knowledge showed no significant influences on halal food purchase intention (H2: $\beta_2 = 0.102$, $t = 0.984$) and has direct positive effects on attitude towards halal food (H3: $\beta_3 = 0.315$, $t = 8.693$, $p < 0.01$). Thus, H2 was rejected, while H3 was supported. Finally, halal quality had significant positive effects on halal food purchase intention (H4: $\beta_4 = 0.461$, $t = 15.438$, $p < 0.001$) as well as attitude towards halal food (H5: $\beta_5 = 0.357$, $t = 10.480$, $p < 0.01$). In this case H4 and H5 were supported.

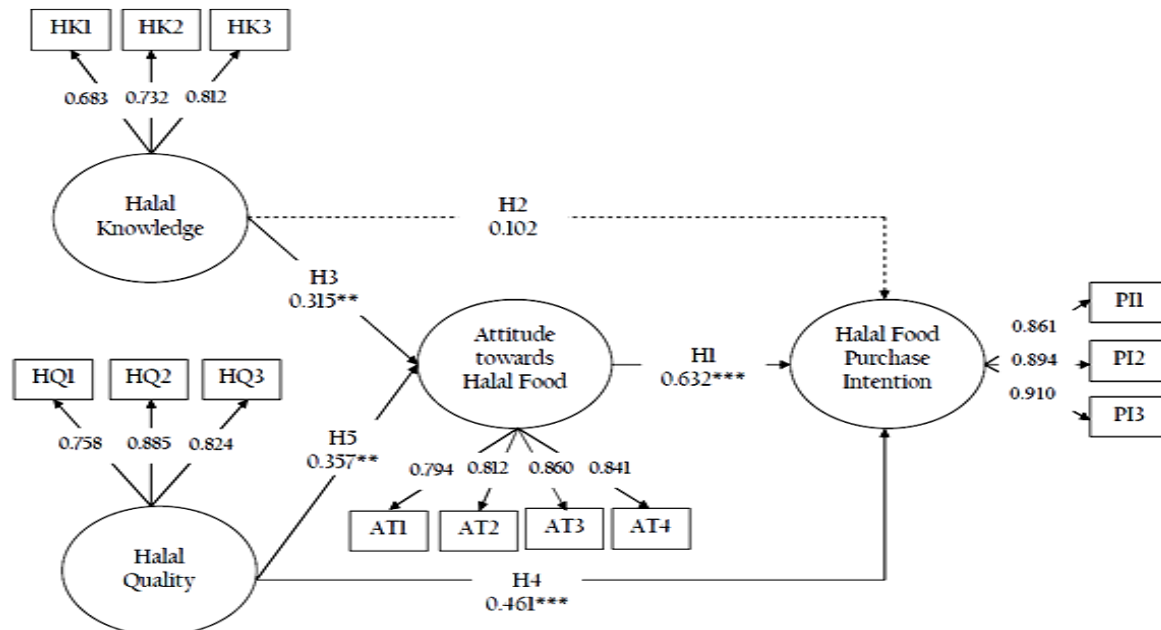


Table 6. Goodness of fit indices

	Criteria	Indicators
Chi-square (χ^2)	$p > 0.050$	212.396 ($p < 0.001$)
Chi-square/degree of freedom (χ^2/df)	< 5.000	3.662 (212.396/58)
Goodness of Fit Index (GFI)	> 0.900	0.969
Adjusted Goodness of Fit Index (AGFI)	> 0.900	0.924
Relative Fit Index (RFI)	> 0.900	0.921
Normed Fit Index (NFI)	> 0.900	0.945
Comparative Fit Index (CFI)	> 0.950	0.972
Root Mean Square Error of Approximation (RMSEA)	< 0.080	0.055
Root Mean Square Residual (RMR)	< 0.050	0.027

Table 7. Hypotheses results for the structural model

Hypothesis	Path correlation	Standardized estimates	t-Value	Test result
H1	Attitude towards halal food → Halal food purchase intention	0.632***	20.451	Support
H2	Halal knowledge → Halal food purchase intention	0.102	0.984	Reject
H3	Halal knowledge → Attitude towards halal food	0.315**	8.693	Support
H4	Halal quality → Halal food purchase intention	0.461***	15.438	Support
H5	Halal quality → Attitude towards halal food	0.357**	10.480	Support

Discussion and conclusions

This study investigated the determinants that influence young non-Muslim consumers’ intention to purchase toward halal food in Thailand. The overall results confirmed that the attitude towards halal food has a strongest direct influence on halal food purchase intention among the young non-Muslim consumers in Thailand. The study therefore shows that if they have a positive attitude and will influence their purchase intention towards halal food, which make them buy more and more often. Khalek (2014) reported a positive impact of attitude on halal food purchase intention among students in Malaysia. Halal knowledge reported a significant positive effect on attitude towards halal food and on the other hand, halal knowledge failed to provide any positive thrust concerning a reason of purchase intention, which supported the findings of Mohamed Elias (2016). Furthermore, the empirical finding reported that halal quality had significant positive influence on attitude and purchase intention towards halal food among consumers. This study could help guide manufacturers, marketers and policy makers to understand the influence on intention to purchase towards halal food of young non-Muslim consumers in Thailand. Therefore, future research would recommend to explore the other factors, may focus on different demographics and in addition to increasing the number of samples, which may result in a much stronger research.

References

1. Abdul, M. (2014). Perceptions on Halal food certification in Hat Yai, Thailand. *International Journal of Economics and Management*, 8(1), 178-194.
2. Ahmad, A. N., Rahman, A. A., & Ab Rahman, S. (2015). Assessing knowledge and religiosity on consumer behavior towards halal food and cosmetic products. *International Journal of Social Science and Humanity*, 5(1), 10.
3. Alamsyah, D. P., & Angliawati, R. Y. (2015). Buying behavior of organic vegetables product: The effects of perceptions of quality and risk. *International Journal of Scientific and Technology Research*, 4(12), 28-35.
4. Aziz, Y. A., & Chok, N. V. (2013). 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 & Agribusiness Marketing*, 25(1), 1-23.
5. Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
6. Baharuddin, K., Kassim, N. A., Nordin, S. K., & Buyong, S. Z. (2015). Understanding the halal concept and the importance of information on halal food business needed by potential Malaysian entrepreneurs. *International Journal of Academic Research in Business and Social Sciences*, 5(2), 170.
7. Chen, M. F. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165-178.
8. Elasrag, H. (2016). Halal Industry: Key Challenges and Opportunities: Hussein Elasrag.
9. Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). Conjoint analysis. *Multivariate data analysis*, 387-441.
10. Hong, J., & Sternthal, B. (2010). The effects of consumer prior knowledge and processing strategies on judgments. *Journal of marketing research*, 47(2), 301-311.
11. Jamal, A., & Sharifuddin, J. (2015). Perceived value and perceived usefulness of halal labeling: The role of religion and culture. *Journal of Business Research*, 68(5), 933-941.
12. Khalek, A. A. (2014). Young consumers' attitude towards halal food outlets and JAKIM's halal certification in Malaysia. *Procedia-Social and Behavioral Sciences*, 121, 26-34.
13. Khalek, A. A., & Ismail, S. H. S. (2015). Why are we eating halal-using the theory of planned behavior in predicting halal food consumption among generation Y in Malaysia. *International Journal of Social Science and Humanity*, 5(7), 608.
14. Lampila, P., & Lähteenmäki, L. (2007). Consumers' attitudes towards high pressure freezing of food. *British Food Journal*, 109(10), 838-851.
15. Mathew, V. N. (2014). Acceptance on Halal food among non-Muslim consumers. *Procedia-Social and Behavioral Sciences*, 121, 262-271.
16. Mohamed Elias, E., Othman, S. N., & Mohd Saifudin, A. (2016). Halal awareness and knowledge among Muslim's student entrepreneurship program: A preliminary study. Paper presented at the In: 2nd International Conference on Global Social Entrepreneurship (2nd ICoGBSE2016), 13-14 March 2016, Koh Samui, Thailand.
17. Mohamed, Z., Shamsudin, M. N., & Rezai, G. (2013). The effect of possessing information about halal logo on consumer confidence in Malaysia. *Journal of International Food & Agribusiness Marketing*, 25, 73-86.
18. Mohtar, N. M., Amirnordin, N. A., & Haron, H. (2014). Ayamas Food Corporation Sdn. Bhd: A Study on the Factors of Consumer Behaviour towards Halal Product Selection. *Procedia-Social and Behavioral Sciences*, 121, 166-185.

19. Mostafa, M. M. (2007). A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychology & Marketing*, 24(5), 445-473.
20. Muhammad, N., Norhaziah, N., Nuradli, R., & Hartini, M. (2007). Halal Branding: An Exploratory Research among consumers in Malaysia.
21. Musa, R. (2014). Factors influencing attitude towards halal cosmetic among young adult Urban Muslim women: A focus group analysis. *Procedia-Social and Behavioral Sciences*, 130, 129-134.
22. Muslim. (2017). Muslim Population. Available at <http://muslimpopulation.com/world/>. Retrieved on January 22, 2017. .
23. Namkung, Y., & Jang, S. (2007). Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. *Journal of Hospitality & Tourism Research*, 31(3), 387-409.
24. Nazahah, A., & Sutina, J. (2012). The halal product acceptance model for the religious society. *Business & Management Quarterly Review*, 3 (1), 17-25.
25. Newberry, C. R., Klemz, B. R., & Boshoff, C. (2003). Managerial implications of predicting purchase behavior from purchase intentions: a retail patronage case study. *Journal of Services Marketing*, 17(6), 609-620.
26. NSO. (2016). The 2015 household socio-economic survey whole Kingdom. National Statistics Office, *Bangkok, Thailand*.
27. Nunnally, J. C., & Bernstein, I. (1994). Elements of statistical description and estimation. Psychometric Theory 3 Edition (Edited by: Nunnally JC, Bernstein IH).
28. Sadeeqa, S., Sarrif, A., Masood, I., Saleem, F., & Atif, M. (2013). Knowledge, attitude and perception (KAP) regarding halal pharmaceuticals among general public in Penang state of Malaysia. *International Journal of Public Health Science*, 2(4), 143-150.
29. Said, M., Hassan, F., Musa, R., & Rahman, N. (2014). Assessing consumers' perception, knowledge and religiosity on Malaysia's halal food products. *Procedia-Social and Behavioral Sciences*, 130, 120-128.
30. Shah Alam, S., & Mohamed Sayuti, N. (2011). Applying the theory of planned behavior (TPB) in halal food purchasing. *International Journal of Commerce and Management*, 21(1), 8-20.
31. Simanjuntak, M., & Dewantara, M. M. (2014). The effects of knowledge, religiosity value, and attitude on halal label reading behavior of undergraduate students. *ASEAN Marketing Journal*, 6(2), 65-76.
32. Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual differences*, 42(5), 893-898.
33. Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). Using multivariate statistics.
34. Yunus, N. S. N. M., Rashid, W. E. W., Ariffin, N. M., & Rashid, N. M. (2014). Muslim's Purchase Intention towards Non-Muslim's Halal Packaged Food Manufacturer. *Procedia-Social and Behavioral Sciences*, 130, 145-154.