Concerns for halalness of halal-labelled food products among Muslim consumers in Malaysia: Evaluation of selected demographic factors

(Keprihatinan pengguna Muslim terhadap kesahihan halalnya produk makanan yang berlambang halal: Penilaian terhadap faktor demografi)

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Keywords: consumer concern, halalness, halal food products, religiosity, halal logo

Abstract

To Muslims, food must not only be of good quality, but must be halal. This has raised concerns among Muslim consumers regarding the halalness of manufactured halal-labelled food products. This paper focuses on the concerns of Muslim consumers in Malaysia about the halalness of manufactured foods which carry the halal logo. Cross-sectional consumer data were collected in a survey of 1,560 Muslim respondents in 2008. Descriptive and Chi-square analyses were used to analyse the data collected. Consumers with higher levels of religiosity and education are more likely to be concerned about the halal status of halal-labelled food products. There were significant difference among consumers with high level of religiosity and those attending religious school. Similarly, older generation, more educated and those that come from east coast of Malaysia are also more concern. Thus, an understanding of the extent of consumers' concerns towards the halalness of halal-labelled food products from the religious viewpoint and relevant policy formulation in ensuring halalness of food product are vital in order to make Malaysia a successful World Halal Food Hub by 2020.

Introduction

Religious motives and food consumption
Food choice and consumption behaviour
are imbued with social rules and meaning.
Religion is one of the main factors
determining food avoidance, taboos, and
special regulation particularly with respect
to meat consumption (Simoons 1994). Most
religions impose some food restrictions
such as prohibition of pork and not ritually
slaughtered meat in Islam and Judaism, and
pork and beef in Hinduism and Buddhism,
except for Christianity which has no food
taboos. Religious food prescriptions are far
easier to adopt than to discard, because once

a ban is adopted, it tends to be reinforced by strong feelings of disgust, for example the strong aversion of Muslims and Jews to pork in general (Simoons 1994).

With respect to food prescriptions in Islam, Muslims have to follow a set of dietary laws intended to advance their well-being, in addition to the Five Pillars of Islam. These dietary laws or prescriptions determine which foods are halal (i.e. permitted) and which foods are haram (prohibited) for Muslims.

Although the dietary laws imposed by religion may be rather strict, nonetheless the number of people following them is

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usually quite substantial. It was estimated that 75% of Muslims in the USA follow their religious dietary laws (Hussaini 1993), meaning that even after having emigrated, most Muslims still eat halal foods. Factors explaining differences in adherence to religious dietary prescriptions pertain, among others, to social structures, such as origin, immigration, generation differences and education level (Ababou 2005: Bonne et al. 2007). However, not only religious motives determine halal consumption, but also health, respect for animal welfare and social issues, such as religious identity and degree of acculturation (Bonne et al. 2007).

Malaysia and halal issues

Malaysia is a multiracial country with various ethnic groups and religions. In view of this, the issue of halal/haram is of great importance, as many non-Muslims do not understand the Islamic dietary codes and rules. Determining the halal status of a product goes beyond ensuring that food is pork-free or that it does not contain an alcoholic ingredient.

Malaysia also imports food and consumer products from non-Muslim countries whose halal status is unknown. Muslims around the world face a similar problem when they consume or import food from non-Muslim countries. These food and consumer products could well contain haram substances, as the manufacturers in the foreign countries and importers/exporters may not understand the concept of halal/ haram as required in the Muslim countries.

This situation exposes consumers to various types of food that could contain haram substances. The situation is worsened when these substances cannot be detected even by scientific methods. For example, in the case of gelatin in food, even if it could be detected from which animal it is sourced, it is almost impossible to determine if the animal was slaughtered according to Muslim rites.

Lately, Muslim consumers have become more concerned about food products

that are halal. As such, the word 'halal', whether in Arabic or Romanized alphabets, displayed on products and premises has a special attraction to Muslim consumers. This preference for the halal sign has, however, been exploited by some retailers who put up the sign at their premises even when the items sold are not halal. Because of their commercial value, the 'halal' signs have been proliferating in many business outlets, whether it be exclusive restaurant or street food stall.

Due to the lack of proper legislation on the halal/haram issues and poor enforcement of the Trade Descriptions Act 1972, unscrupulous businesses are abusing the halal logo to promote their business. The introduction of halal logo by JAKIM (Department of Islamic Development Malaysia) has generated much awareness among the Muslims on the importance of consuming products or engaging in services that follow Islamic guidelines and principles. However the lack of enforcement and monitoring in the usage of certified halal logo has caused the public to question the validity of halal logo on some of the products or services.

Several food-related lawsuits have made the media headlines recently. High 5 (a local bread manufacturer) stated that its bakery products were cooked in 100% halal oil when in fact it was from Israel or Germany, which was in doubt about it being halal (Malay Mail 2006). Dindings Poultry (a local chicken meat producer) also was sued for not ensuring that its products were Halal, and this suit was settled for RM100 million (NST 2006). Many other events can be cited in the Malaysian scenario with regards to halal and halalness of food products which are quite unethical on the part of the parties involved.

Thus, the objective of the study was to address the importance of understanding consumers' concerns for halalness of the food products in relation to their selected demographic factors such as age, education level and state of origin. Similarly, the

concern about halal and halalness of food products in relation to consumer attitudinal characteristics such as the level of religiosity and being at religious school might give some insight on the importance of religion education in shaping up the mind of consumer in purchasing behaviour of halallabelled food products.

Methodology

Conceptual framework

The Theory of Planned Behaviour (TPB) (Ajzen 1989, 2002) postulates three conceptually independent determinants of behavioural intention: attitude, subjective norm and perceived behavioural control. It assesses the degree to which people perceive that they actually have control over enacting the behaviour of interest. The link between perceived behavioural control and behaviour suggests that consumers are more likely to engage in behaviours they feel to have control over and are prevented from carrying out behaviours over which they feel to have no control.

Control factors such as perceived availability may facilitate or inhibit the performance of behaviour (Tarkiainen and Sundqvist 2005; Verbeke and Lopez 2005, Vermeir and Verbeke 2006). For example, high perceived availability of halal food in Malaysia may hinder someone from consuming other food.

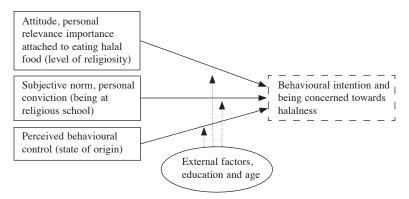
In addition, Conner and Armitage (1998) suggest incorporating habit measures as predictors of behaviour in the TPB. Habit is defined as behaviour that has become automatic and is beyond an individual's awareness. Several studies using TPB to food related behaviour have successfully included habit as an independent predictor of intentions (Honkanen et al. 2005). Therefore, habit will be included as a separate component of the TPB.

In the present study, the influence of the classical components of the TPB on Muslim consumers' concern towards the halalness of halal-labelled food products was measured within an ethnic majority population of Muslims in Malaysia. For them, eating foods that meet the religious prescriptions can be considered as an expression of religion. Therefore, we argue that the degree to which an individual considers the halal-labelled food could influence their purchasing process that relate to their confidence level in the halalness of the halal-labelled food products. By extending the model with level of religiosity, being in religious school and other demographic factor, consumers' concerns with regards to halalness of food products was investigated.

Level of religiosity can be interpreted as a label that people used to describe themselves. It is assumed to be the result of social interaction and the cause of subsequent behaviour. Since the focus of this study was on food behaviour from the religious aspect, we chose to measure respondents' religious level by referring to the impact that occurred when groups of people adopted the eating pattern or food choices based on their religious principle. Being at religious school, in general, is used to denote the educational process, which is based on the very creation of the human being and the world. Similarly, the state of origin and other selective demographic factors are added to the theoretical framework to investigate public concerns for halal-labelled food in Malaysia (Figure 1).

Research hypotheses

Halal-labelled food consumption is shaped by the Islamic dietary prescriptions and could be considered a religious expression which is strongly linked to the value 'faith' and level of religiosity, next to other values like 'health' and 'tradition', meaning that Muslim should consume halal food in order to follow and express their religious teachings (Bonne and Verbeke 2006). Moreover, Biddle et al. (1987) described how self-identity (level of religiosity), the extent to which an individual considers him/herself a Muslim - could influence the



Source: Adapted and modified from Ajzen (2002) 'Theory of Planned Behaviour (TPB)'

Figure 1. Conceptual framework of Theory of Planned Behaviour with application to concern towards halal-labelled food in Malaysia

process concerning consumers' confidence level towards halal food products.

Previous research showed that someone can strictly follow the dietary rules and eat halal meat without following other religious prescriptions (Bonne and Verbeke 2006). Possibly, these individuals consider themselves less as Muslim and are less motivated to comply to religious rules and/ or peer group pressure (subjective norms), while they are more inclined to follow their personal attitudes. On the contrary, individuals with a religious background (being at religious school) could be more inclined to follow Islamic rules and customs and therefore be more concerned for religious obligations. Therefore, the following hypothesis set forth was that:

"There is no relationship between 'concerned about halalness of halal-labelled food product' and personal attitude (level of religiosity), personal conviction (being at religious school), state of origin (east or west coast of Malaysia), education level (below tertiary education and attending tertiary) and age (younger generation below 40 years old and above 40 years old).

Sample and questionnaire

Randomized samples of 1,560 Muslim respondents were interviewed via structured questionnaires in order to gauge how far they were concerned towards halalness

of food products with halal logo. The questionnaire was pre-tested and refined prior to field work and the respondents were selected randomly in the supermarkets. Supermarkets were chosen because most manufactured food products are widely available there and consumers from different walks of life do their shopping at the supermarkets. The questionnaire was divided into three parts and contained straightforward questions.

The first part of the questionnaire included items measuring the components of the proposed model of the TPB. Behavioural intention was measured on a five-point scale (ranging from 1 to 5) where 1 = strongly disagree to 5 = strongly agree.

Attitude was measured in the second part of the questionnaire through the statements such as "Religious obligation is a major concern of mine when purchasing food products" and "I am very concerned about the halalness of food products purchased". The measurement of subjective norm consisted of multiple items to assess the motivation to comply with the Islamic dietary code. Personal conviction was measured by the statement "being at religious school". Perceived behavioural control was measured using the statement "Halal principal is a concern for hygiene and food safety".

Finally relevant socio-demographics such as age, gender, state of origin, place of residence, level of education, occupation, marital status, level of religiosity and religious background were asked in section three of the questionnaire.

Method of analysis

To accomplish the objectives of this study, internal reliability consistency of the multi-item TPB concepts was assessed using Cronbach's alpha and descriptive analysis were performed. The analysis includes chi-square test of independence to examine the extent to which selected socio-economic/demographic characteristics influenced respondents' concern towards halalness of manufactured food products.

Results and discussion

The Cronbach's alpha value for "subjective norms" and "perceived controls" were 0.91 and this showed that there is consistency among the TPB items and therefore the model can fit for this study.

Socio-economic/demographic information Descriptive analysis was used to discuss the results of the socio-economics profile of the

results of the socio-economics profile of the respondents such as residential area, state of origin, gender, race, religion, age, education level and income level to name a few.

About two-thirds of the respondents were from urban, and one-third from suburban. More than 50% of the respondents were male. In this survey, 17.3% of respondents identified themselves as very religious and 52.9% claimed to be religious. Most of the respondents were married (58.5%). The majority of respondents interviewed are between 26–40 years of age (54.0%) and most of them (75.5%) were educated at tertiary level (*Table 1*).

The occupations of the respondents were categorized into five levels. The majority of the respondents have working experiences in various positions such as working for government sector at (32.10%), private sector (40.86%), and self-employed

(8.01%). The remainder are students (8.87%) and others (7.1%) which include retirees, unemployed and housewife groups. In terms of income distribution, the study found that at least 39.04% of the respondents have incomes between RM1,501–RM3,000 per month and a smaller percentage of respondents (8.06%) have monthly incomes above RM6.000.

Attending religious schools can influence one's dietary behaviour. As can be seen in *Table 1*, majority of respondents (58.8%) have attended religious schools. Understanding own religion can often benefits a person. It can provide a forum for support in professional, personal, spiritual growth and make rational decision that comply to the principles adhered by the religion (Rippentrop et. al. 2005).

Consumers' concern towards halal food

Table 2 presents the mean scores and the percentage of the components included in the TPB using the five-point scale (1 to 5) stated earlier. In general, religious obligation seems to be the major concern among the Muslims in purchasing food to ensure the halalness of the food. They also concerned about halalness of manufactured food product rather than the conventional food. This could be due to the way the food is processed and the ingredients used which are not visible. Similarly, consumers seemed to agree that halal method of food preparation (such as slaughtering of animals) is more hygienic and ensured its safety. It seems also that information on how the food is being grown or prepared is very important for the consumers in deciding whether the product is halal or not.

In addition, the country of origin of the halal-labelled food products is also of concern to Muslim consumers. This could be due to the fact that some of the non-Muslim countries such as Thailand, China and the USA are using halal label on their manufactured food products. Information on how the halal principles are being applied in their systems is doubtful and unknown.

Table 1. Demographic profile of respondents (n = 1,560)

Characteristics	Percentage	Characteristics	Percentage			
Residential area		Education Level				
Urban	61.45	Never been to school	0.97			
Suburban	38.55	Primary school	6.99			
Region		Secondary school	23.01			
East Coast	41.67	Tertiary	69.03			
West Coast	58.33	Marital status				
Gender		Single	43.98			
Female	48.66	Married	54.84			
Male	51.34	Widowed	1.18			
Loyal of raligiosity		Occupation				
Level of religiosity Very religious	17.31	Government sector	32.10			
Religious	52.95 27.69 2.05	Private sector	40.86			
Somewhat religious		Self-employed	8.01			
Not religious		Unemployed	3.06			
_		Student	8.87			
Age	15.02	Others	7.10			
Below 25 26–40	15.02 54.83	Monthly income				
41–60	26.98	Below 1500	15.00			
Above 61	3.17	1501-3000	39.04			
	3.17	3001-6000	37.90			
		Above 6001	8.06			
		Attending religious school				
		Yes	58.78			
		No	41.22			

Table 2. Respondents' concern about halal food

Statement	Likert Scale Score* (Percentage)					Mean
	1	2	3	4	5	
I am very concerned about the halalness of food products purchased	1.40	6.89	23.06	44.46	24.19	3.87
Religious obligation is a major concern of mine when purchasing food products	2.90	3.82	9.30	31.08	52.90	4.27
Halal principle is concerned for hygiene and food safety	1.23	4.30	19.35	36.83	38.28	4.08
I am more concerned about the halalness of manufactured food compared to conventional food	4.62	3.71	12.32	36.02	43.33	4.09
Knowing how halal food is grown or processed is very important	2.80	3.39	8.49	36.77	48.55	4.00
The halal products being manufactured internationally is one of my concerns	1.99	5.81	26.34	44.30	21.56	3.87

^{*1 =} strongly disagree; 5 = strongly agree

Overall, the above analysis indicates that the Muslims are concerned about the halalness of the food product they purchase. Thus halal label on food products does not guarantee the acceptance of the product in total, but there are some concern about its halalness.

Chi-square analysis

The results of chi-square test of independence showed that there is significant relationship between all selected socio-economic variables and consumers' concern over halal-labelled food products. The level of religiosity was classified in two self religious-identity categories using median split (i.e. low and high level of religiosity). Similarly, the variables attending religious school, education level and age are also categorized into either attending religious school or not, higher education and lower education level and younger and older generation respectively. The region where consumers come from might also influence their concerns about halalness. It is assumed that those consumers from east cost of Malaysia are more religious compared to their counter part in west cost of Malaysia.

The results showed that consumers with higher levels of religiosity are more concerned ($\chi^2 = 12.603$, p < 0.05) about the halalness of the halal-labelled food products. In addition, studying at religious school also influenced the consumers' concern towards halalness of food products ($\chi^2 = 16.934$, p < 0.05). In terms of region of origin, there were significant differences between the east and west coast consumers in their concern about halalness of manufactured food product. Consumers from the east coast states seemed to be more careful about the authenticity of the halal label on the food products.

Information presented in *Table 3* also shows that, in general, age and education level are important variables that can be used to explain the consumers' concern towards the halalness of halal-labelled food products. The results also indicated

Table 3. Chi-square values and respondents' concern about halal food

Demographic/Socio-economic variable	χ^2
Level of religiosity	12.603*
Attending to religious school	16.934*
State of origin	16.557*
Education level	12.576*
Age	15.716*

^{*}Significant at 5% level

that there were significant differences between the old and younger generation in their concern about halalness of the food they consumed. Similarly, the education level also influenced consumers in their purchasing behaviour of halal-labelled food products.

Discussion and conclusion

In this study, the Theory of Planned Behaviour was used to investigate consumers' concern towards halal food products. It is important for Muslim consumers to know 'how halal is halal'. The influence of society, personal conviction (level of religiosity and religious education) and the perceived control (food safety and hygiene process) over consuming halal food contribute to making them more careful and conscious about the halalness of the food products. External variables such as some demographic factors like education level, age and the state of origin have strong relationships with consumers' concern about halalness of manufactured food products. The results suggest that consumers from east coast states of Peninsular Malaysia, with higher levels religiosity and religious education level are more likely to be concerned about this issue.

Thus understanding Muslim consumer behaviour from religious perspective is very important. The concern about how halal is halal has become an issue among Muslim consumers especially with those that has religious background. Cases such as Dinding Proultry Processing Berhad and High 5 bread manufacturer that has been stated earlier caused consumers to be doubtful of

the halalness of halal-labelled food products. Understanding consumers' concern about the authenticity of halal-labelled food products is necessary when designing halal food regulations.

Consumers with higher religious levels have expressed their concerns about halalness. The argument is that it is not accurate to focus on the halal aspect of any single food product outside of the context of total processing. Halal is a total quality control measure involved in the monitoring of food processing, handling, and storage as well as all the ingredients used in processing the halal-labelled food products. Muslim consumers increasingly expect assurance that food and beverages manufactured fully comply with Islamic preparation requirements from the very start of the manufacturing process. Food manufacturing industries must be sensitive in using or sourcing ingredients that are genuinely halal. The manufacturers themselves should take the initiative to trace the origin of the ingredients used and how they are being processed.

Marketers and importers of manufactured food product that carry halal logo must ensure that the products they bring into the country are halal. With the technology in detecting non-halal elements, the halal certification or halal approval agency must use this technology to ensure the halalness of the imported products. On the other hand, manufacturers of food products must be made aware of the halal principles and concept, and the importance of such principles in food preparation and processing. Halal processing can only be improved not only through better total monitoring by the certified authorities but also the integrity of those involved in the food manufacturing industries and not just through the printing of any single logo on food product.

References

- Ababou, M. (2005). The impact of age, generation and sex variables on religious beliefs and practices in Morocco. *Social Compass* 52(1): 31–44
- Ajzen, I. (1989). Attitude and structure and behavior. In: Attitude structure function, (Pratkanis, A.R., Breckler, S.J. and Greenward, A.G., eds), p. 241–275. Hilladale, New-Jersey: Erbaum
- —— (2002). Perceived behavioral control, self-efficacy, locus of control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology* 32: 665–683
- Biddle, B.J., Bank, B.J. and Slavings, R.L. (1987), Norms, preferences, identities and retention decisions. Social Psychology Quarterly 50(4): 322–327
- Bonne, K. and Verbeke, W. (2006), Muslim consumer's attitude towards meat consumption in Belgium: Insights from a means-end chain approach. *Anthropology of Food* 5: 511–523
- Bonne, K., Vermeir, I., Bergeaud-Blackler, F. and Verbeke, W. (2007). Determinants of halal meat consumption in France. *British Food Journal* 109(5): 367–386
- Conner, M.T. and Armitage, C.J. (1998). Extending the Theory of Planned Behavior: A review and avenues for further research. *Journal of Applied Social Psychology* 28(15): 1429–1464
- Honkanen, P., Olsen, S.O. and Verplanken, B. (2005). Intention to consume seafood the importance of habit. *Appetite* 45: 161–168
- Hussaini, M.M. (1993). Halal Haram lists. Why they do not work? Retrieved on 23 August 2007 from http://www.soundvision.com/info/halalhealthy/halal.list.asp.
- Malay Mail (2006). Oil is halal, says High 5. *The Malay Mail* 14 September 2006
- NST (2006). Dindings Poultry sued for RM101 million. *New Straits Times* 20 January 2006
- Rippentrop, A.E., Altmaier, E.M., Chen, J., Found E.M. and Keffala V.J. (2005). The relationship between religion/spirituality and physical health, mental health, and pain in a chronic pain population. *Pain* 116(3): 311–321
- Simoons, F.J. (1994). Eat not this flesh. Food avoidances from prehistory to the present. Madison/London: The University Wisconsin Press
- Tarkiainen, A. and Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal* 107(11): 808–822

Verbeke, W. and Lopez, G.P. (2005). Ethnic food attitudes and behaviour among Belgians and Hispanics living in Belgium. *British Food Journal* 107(11): 823–840

Vermeir, I. and Verbeke, W. (2006). Impact of values, involvement and perceptions on consumer attitudes and intentions towards sustainable consumption. *Journal of Agricultural and Environmental Ethics* 19(2): 169–194

Abstrak

Bagi seorang Muslim, makanan yang dimakan bukan sahaja berkualiti baik tetapi juga mesti halal. Halalnya produk makanan yang berlambangkan halal telah mendapat perhatian di kalangan pengguna Muslim. Artikel ini memfokus terhadap keprihatinan pengguna beragama Islam di Malaysia terhadap kesahihan halalnya produk makanan yang membawa logo halal. Data primer dikumpul melalui survei di kalangan 1,560 responden Muslim pada tahun 2008. Pengguna yang mempunyai tahap keagamaan yang tinggi dan berpelajaran kemungkinan akan lebih prihatin terhadap status halal produk makanan yang membawa logo halal. Terdapat perbezaan yang bermakna di kalangan pengguna yang mempunyai tahap keagamaan tinggi dan yang mengikuti sekolah agama dari segi keprihatinan terhadap halalnya produk yang membawa logo halal berbanding dengan pengguna yang mempunyai tahap keagamaan yang rendah dan tidak mengikuti sekolah agama. Di samping itu, generasi tua, pengguna yang berpelajaran dan berasal dari pantai timur Semenanjung Malaysia adalah lebih prihatin. Oleh itu, memahami keprihatinan pengguna terhadap produk yang membawa lambang halal daripada kaca mata keagamaan dan dasar yang relevan untuk memastikan halalnya produk makanan adalah penting untuk menjadikan Malaysia sebagai Hub Halal Dunia dalam tahun 2020 dengan jayanya.