Paper 6

by Poppy Arsil

![emerald **insight**]

British Food Journal

Personal values underlying halal food consumption: evidence from Indonesia and Malaysia

Poppy Arsil, Yeong Sheng Tey, Mark Brindal, Cun Uei Phua, Denisa Liana,

Article information:

For Authors

About Emerald www.emeraldinsight.com

Personal values underlying halal food consumption: evidence from Indonesia and Malaysia

Poppy Arsil
Department of Agricultural Technology, Universitas Jenderal Soedirman, Purwokerto, Indonesia

Yeong Sheng Tey
Institute of Agricultural and Food Policy Studies, University Putra Malaysia, Serdang, Malaysia

Mark Brindal
Department of Global Food, School of Agriculture Food and Wine, University of Adelaide, Adelaide, Australia

Cun Uei Phua
Putra Business School, Serdang, Malaysia, and

Denisa Liana
Department of Agricultural Technology, Universitas Jenderal Soedirman, Purwokerto, Indonesia

Abstract

Purpose – The purpose of this paper is to uncover the personal values driving Indonesian and Malaysian Muslims' consumption decisions with respect to halal food.

Design/methodology/approach – The personal values of 130 Indonesian and 80 Malaysian Muslims have been analyzed, using a means-end chain (MEC) approach, in relation to halal food.

Findings – Primary personal values are identified as a better sense of personal security. This is ascribed as seeking "better future" and "go to heaven." Other personal values are related to tradition, benevolence and achievement.

Research limitations/implications – Since this study was conducted in both the capital cities of Indonesia and Malaysia, this study might not take account of cultural diversity within the two countries' Muslim communities.

Practical implications – An understanding of the personal values governing Muslim consumption is a useful tool toward improving the promotion of halal certification and food products.

Originality/value – This study reveals the personal values of Indonesian and Malaysian Muslims with underpinning their consumption of halal food.

Keywords Motivation, Means-end chain, Halal food, Laddering, Personal value

Paper type Research paper

1. Introduction

There is increasing interest in halal food products. Thompson Reuters (2015) valued the global halal food market at $1,128bn in 2014. They estimated that this figure could reach $1,585bn by 2020. Both growing population of Muslim consumers and increasing awareness of their religious obligations in respect of permissible consumption are believed to be responsible for the increase. In the West, according to Hussaini (1993) and Bergeaud-Blackler and Bonne (2007), 75 percent of American Muslims and 84 percent of French Muslims follow religious dietary laws. The conformance of Muslims in Asia is relatively high. Additional demand comes

from non-Muslim consumers among whom an increasing belief that "halal" is a standard that regulates permissible processing and supply chain practices, thus, ensuring wholesomeness, food safety and quality (Bonne and Verbeke, 2008) is valued. Nevertheless, Muslims remain core consumers of halal food products. This study is, therefore, primarily motivated by the globally increasing interest of Muslim consumers in halal food products.

Halal, which means "permitted," "allowed," "lawful" and "approved," is an integral value governing the Muslim way of life (Hitti, 1970). It goes beyond a series of practices and traditions and permeates activities ranging from food to clothing, investments to insurance. Consuming halal food is obligatory for every Muslim. It is, therefore, integral to the utility of consumers. How strictly a Muslim adheres to this guidance, however, is, in reality, a personal choice (Bergeaud-Blackler and Bonne, 2007; Hussaini, 1993). It depends on personal interpretation of the Quran. There is, as a result, diversification on how and what to eat (Pradipta, 2016). The motivation of individual Muslims is, therefore, integral to the compliance and application of halal in all aspects of life.

Implicit in that construct is the notion that the concept of halal is closely related to personal values. This is confirmed by the literature. When faced with choice, personal values serve as standards guiding thoughts, evaluation (Bardi and Schwartz, 2003). Personal values are viewed as providing a rationale for choice behavior (Hansson and Lagerkvist, 2015). Understanding Muslim values with respect to halal food consumption would, therefore, explain the resultant choices.

Belgian Muslims, for example, indicated a clear preference for certified halal meat, with an inclination to pay up to a 13 percent premium for the halal certification. Additionally they exhibited greater trust toward Islamic butcher shops in preference to supermarkets (Verbeke et al., 2013). Muslim migrants in France revealed the importance of personal attitudes, peer influence, and perceived control as well as the reinforcements of trust, involvement and personal values as driving their behavior (Bonne et al., 2007). Values can be explained as the important beliefs of individuals toward some desirable end state (Rokeach, 1973). Specifically, halal meat consumption is considered a religious expression of personal values. Individuals with higher Muslim identification are motivated to more strictly follow dietary rules (Bonne and Verbeke, 2006).

However, few attempts have been made to understand the content and structure of the personal values driving Muslim halal consumption choices. One means-end exploratory study by Bonne and Verbeke (2006) finds that halal meat was preferred for the attribute "ritual slaughter," which was viewed as a precondition to meeting the personal values "health" and "faith," by Muslims in Belgium. Uncovering similar constructivist motivations underpinning choice behavior help to provide a better understanding of the motivations behind the personal choice of Muslims, particularly those in Islamic countries, such as Indonesia and Malaysia, in respect to halal choices.

Indonesia is the home to the world's largest Muslim population. Their neighbor, Malaysia, is a Muslim-led multi-ethnic frontier in global halal hub. Malaysia, in particular, is an exemplar in the implementation and commercialization of halal standards. The country has systematically "certified, standardized, and bureaucratized halal production, trade and consumption" in the last three decades (Fischer, 2011, p. 36).

Given their global significance, understanding the contents and structure of the personal values driving halal consumptive choice in Malaysia and Indonesia is of particular interest. The insights can be used by government when promoting halal certification within the agrifood industry; by the agrifood industry to improve marketing strategies and to promote halal food products. The agrifood industry would benefit especially from understanding the importance of identified personal values since such knowledge can be used to enhance marketing communication in congruence with the cognitive content and meaning ascribed by Muslim consumers.

The objective of this exploratory study, then, is to uncover the personal values driving Indonesian and Malaysian Muslim consumption decisions with respect to halal food. The study uses a means-end chain (MEC) approach. Gutman's (1982) MEC model has been used extensively to elicit the personal values underlying consumer preference for various food products. These include: novel foods (e.g. Barrena-Figueroa and Garcia-Lopez-de-Meneses, 2013; Barrena *et al.*, 2017); local foods (e.g. Aertsens *et al.*, 2009; Arsil *et al.*, 2014), organic food (e.g. Barrena and Sánchez, 2009; Zagata, 2014), meat products (e.g. Barrena and Sánchez, 2009; Barrena *et al.*, 2015); dairy products (e.g. Grunert and Valli, 2001); genetically modified food (e.g. Boecker *et al.*, 2008). As previously discussed, Bonne and Verbeke (2006) applied the MEC analysis to explain why Muslims prefer halal meats in Belgium.

Past studies have proved the laddering interview techniques useful in facilitating the structured identification of consumers' preferred product attributes, through their associated consequences, to elicit the personal values that drive their behavioral choices.

In the laddering questioning process, respondents are pushed toward increasingly higher cognitive structures and to revealing personal values that were previously intangible to them (Reynolds and Gutman, 1988). While Bonne and Verbeke (2006) differentiated an MEC through generation, age and gender, we attempt to achieve wider generalization. We seek to uncover those personal values driving the consumption decisions of Indonesian and Malaysian Muslims with respect to halal food. Our work will add to previous literature by examining how Muslim consumers in the world's largest halal economies make their decisions (based on their actual cognitive content and structure).

In the next section, we elaborate halal certification and review the literature on the interaction between halal certification and Muslim food choice. This literature review is essential to establish a fundamental understanding of halal and its influence as a holistic standard.

2. Literature review

2.1 Consumer behavior toward halal food

Halal certification and its logo are used to signify to consumers that a food product is halal compliant as validated by a relevant and official religious authority. Malaysia's Department of Islamic Development and Majelis Ulama Indonesia are examples. These bodies certify that a halal food product is neither made of, nor contains any part of any animal whose consumption is forbidden by Islam (e.g. pork). They further certify that the product is free from contamination by any religiously proscribed element.

The validation process encompasses slaughter methods, processing, tools and machines, handling, distribution and transportation. Site hygiene and food safety are monitored. Food products that are unsafe or produced in a poor environment or which contain or have been in contact with any pork derivative, food additive, preservative or by packaging material and processing aid are haram (proscribed).

Considerable evidence indicates that religion can influence consumptive food behavior (e.g. Dindyal and Dindyal, 2003; Mullen *et al.*, 2000). Halal was found to be the most important attribute for Malaysian Muslims (Mohayidin and Kamarulzaman, 2014). To a Malaysian Muslim, the meaning of halal is not confined to ritual slaughter and pork or alcohol avoidance, halal food is perceived as "pure, sacred, appropriate or healthy" (Fischer, 2011, p. 20).

The impact of religion on food consumption is dependent on the extent to which individuals follow religious law. Consumers who self-identified/affiliated themselves as holy Muslims indicate a clear preference for halal food products, even in Muslim-minority countries, such as France (Bonne *et al.*, 2007) and Belgium (Bonne and Verbeke, 2006). White and Kokotsaki (2004) also found that religion is a significant factor considered by British Indians who consider whether foods are processed and prepared according to religion-based traditions. Similar observations were made among those who exhibited high motivation to follow the teachings of their own religion (Muhamad and Mizerski, 2010).

Among Muslims, positive personal attitudes toward halal food products were generally also predictive of an intention to consume halal meat (Lada *et al.*, 2009; Alam and Sayuti, 2011).

Muslim communities are described as sharing collective cultures in which people are perceived as interdependent and are motivated to reach group goals (Bonne *et al.*, 2007). In both Lada *et al.* (2009) and Alam and Sayuti (2011), pressure to comply with the subjective norms of a Muslim community was associated with halal food choice is evidenced.

Muslim consumers are vigilant when shopping for halal food products. In addition to the halal certification logo, they rely on marketing promotions and brands as cues in helping their choice (Awan *et al.*, 2015; Aziz and Chok, 2013). The false information or abuse of the credence attribute of halal is very likely to cause mistrust in and avoidance of counterfeits (Mohamed *et al.*, 2013). For example, a Japanese company, which was exposed for using a pork-derived flavor enhancer by Majelis Ulama Indonesia, issued public apology. Since that, enzyme production was considered in the halal process of certification (Fischer, 2011).

A greater need for truthful information, which adheres to the strict mandate for consuming only halal food products, necessitates high-level involvement among Muslim consumers (Wilson and Liu, 2011). Such involvement was demonstrated to be particularly important in non-Muslim and mixed societies in which non-halal food products are also (widely) available (Razzaque and Chaudhry, 2013).

To preserve their dietary practices, Muslim consumers were willing to make considerable effort in making informational searches on the halal attributes of any particular food product (Awan *et al.*, 2015). Lacking prior information (including cues), they are likely to avoid that food product. Muslim consumer purchasing behavior was described as think-feel-do (cognitive-affective-conative) or feel-think-do (affective-cognitive-conative) (Wilson and Liu, 2011). Both cognitive and affective aspects are satisfied through a perceived adequacy of information, leading to confident consumption. The information Muslim consumers' sought are product specific and often refer to product attributes.

While past studies have made significant contributions, there appears to have been scant interest in the content and structure of the personal values underlying and directing purchasing decisions. Thus far, the Belgian Muslims studied by Bonne and Verbeke (2006) revealed that tenderness and labeling as well as slaughtering and production methods were considered as important attributes (means) to achieve key personal values (ends) like health, faith and respect. The study suggests that the halal meat consumption is beyond religious values. While that is also likely the case of other kinds of halal consumption, uncovering and explicitly understanding the important values that govern Muslim decision making beyond the narrow context of meat consumption and the European setting would provide further understanding of what motivates Muslim consumers to consume halal food. Indonesia and Malaysia represent two interesting cases since their halal food markets are diverse and Muslims are the primary population in what remain multi-ethnic and multi-cultural societies.

2.2 MEC approach

The MEC theory, as advanced by Gutman's (1982) study, posits that consumption is made when consumers believe that specific attributes (the means) of the product will lead them to achieve desired personal values (the ends) through associated with benefits (the consequences). It is assumed that consumers perceive utility in the product to the extent that they expect its attributes (consumption) to lead to self-relevant consequences, helping consumers realize personal values. Consumption is intended to satisfy values that its attributes enable.

Personal values reflect the meaning, worth and importance which people attach to things, and are defined as desirable, trans-situational goals that guide their life (Schwartz and Bardi, 2001). They govern and provide a rationale for choosing any action to meet self-actualization in the future they wish to experience. Some recent works, such as the study by Lusk and Briggeman (2009), found that food values significantly influence

consumers' stated and revealed preferences for food products. Food values are a stable set of beliefs in the relative importance of meta-attributes, consequences and desired end states associated with food purchase and consumption (Martínez-Ruizand Gómez-Cantó, 2016). Consequently, personal values are a central motivator directing behavior through the consumption of products with desired attributes and the perceived importance of the associated consequences of those attributes. Their hierarchical relationship can be presented as:

- Attribute → consequence → personal value.

The MEC theory can facilitate an understanding of contents (i.e. what aspects define halal food products). Consequences are related to these attributes, and personal values are fulfilled through those consequences. It can map the hierarchical structures ascribed by Muslim consumers to halal food consumption. It is, therefore, a relevant framework for uncovering the personal values underlying consumption behavior with respect to halal food products.

As previously mentioned, Bonne and Verbeke (2006) found that halal meats were consumed to meet such primary personal values as "health," "faith" and "respect." Other personal values uncovered in that study were "free time," "enjoy life," "care for family" and "tradition." That discovery motivated this study since Belgian Muslims' decision making with respect to halal meat purchase was proved to be driven by utility concerns. They were not motivated solely by the religious conformance demanded through halal consumption. If religious values were the sole determinant associated with halal food products, consumption would be determined by the utility derived from compliance with Islamic teaching. Muslim consumers would have no reason to seek information beyond the halal logo unless this further increased their utility. It, therefore, follows that halal food products meet other needs and enhance other aspects of their well-being.

Halal food products are similar to other certified food products, whose production processes have been validated by a credible third party. Halal, in itself, is a credence (product) attribute (Bonne and Verbeke, 2008; Mohayidin and Kamarulzaman, 2014; Verbeke *et al.*, 2013), and has its own associated consequences. In that sense, since the first step of an MEC ladder is a precondition, the resulting cognitive content of halal food consumption has to be considered starting at a higher level of abstraction. Those which Muslim consumers view as an attribute others view as a consequence.

In this study, we answer the question as to what, in reality, constitutes the attributes of halal food products. Bonne and Verbeke (2006) suggested that the attributes of halal meat may include availability, tenderness, smell, appearance, production methods, no hormones, lean, production region, labeling and slaughtering methods. Their associated consequences are assessed positively or negatively in reference to the personal values held by individuals.

3. Data and methods

3.1 Data collection procedure

Between October 2016 and January 2017, data for this study were collected through face-to-face interviews with 130 Indonesian Muslims and 80 Malaysian Muslims in Jakarta and Kuala Lumpur, respectively. The sample was recruited on the basis that they are Muslim, and were observed to have purchased halal processed food from a supermarket or a grocery shop. Their socio-demographic information is presented in Table I. Most respondents from Jakarta were married individuals and women. This observation is congruent with previous studies (e.g. Arsil *et al.*, 2014, 2016), which reported that Indonesian women played a key role in food choice decisions. Interestingly, single individuals and men seem to be more involved in shopping for processed halal food products in Kuala Lumpur. Respondents from both cities purchased processed halal food products largely from modern markets.

	Jakarta %	Kuala Lumpur %
Gender		
Female	80	51
Male	20	49
Age		
< 20	5	6
20–29	28	50
30–39	31	31
40–49	19	10
> 50	18	3
Marital status		
Single	20	56
Married	78	44
Widowed	2	0
Highest education level		
Primary school	4	2
Secondary school	43	34
University	53	64
Sources of halal processed food		
Traditional markets	38	33
Modern markets	62	67

Table I.
Socio-demographic
information on
Muslim respondents
in Jakarta and
Kuala Lumpur

Enumerators (trained university students) used a soft laddering technique to help respondents reveal their hierarchical MEC in respect to their consumption of halal food products. Soft laddering was chosen over hard laddering since previous knowledge about the contents and structures underlying behavioral choice toward halal food products are limited.

The enumerators took care to ensure that respondents were comfortable sharing their thoughts. First, we clarified that the study did not seek to question their religious compliance. We were, in fact, interested in how they, as Muslim consumers, think about halal and why it is important for them to consume only halal food products. Second, we assured them that the collated information collected from all respondents will be analyzed in general and that no individual respondent could be identified. This preamble proved useful in reducing their possible fear of being judged by how they think about their consumption of halal food products. Acceptance was unanimous. All respondents voluntarily remained and participated in the soft laddering interview process.

3.2 MEC procedure
As previously explained, the concept of an MEC is that product attributes are assumed to lead to various associated consequences resulting from its use or consumption. These, in turn, satisfy personal values. Their links can be represented in a cognitive structure known as a hierarchical value map (HVM). The MEC procedures begin with laddering interviews lead to content analysis, and end with HVM production and interpretation (Gutman, 1982).

As respondents were not familiar with the soft laddering questioning process, prior to the laddering interviews, they were encouraged to think through what halal food products mean to them and why halal food products are important for them. Such direct elicitation, which is the closest technique to natural speech, is suitable in exploratory settings (Grunert and Grunert, 1995) and as the starting point (entry concept) for the laddering interviews (Olson, 1988).

Respondents were then asked to identify the most significant aspects that, for them, constitute halal food products and influence their purchase decisions. These were taken as the attributes of halal food products, and used as the starting point, from which a set of "why is that (element you mentioned) important?" questions was asked. In such follow-up questions, respondents were pushed to reveal increasingly higher cognitive concepts until reaching the point at which the importance of an element can no longer be explained. This was taken as the end point in the soft laddering interview.

Following the recommendations of Reynolds and Gutman (1988), two researchers analyzed the transcripts of the interviews for their contents (meanings) and position, namely, attributes, consequences and values. Similar contents were then summated into master codes (common headings). These were developed from the literature both related to halal food (e.g. Bonne and Verbeke, 2006; Hassan and Hamdan, 2012; White and Kokotsaki, 2004) and to food in general (e.g. Arsil et al., 2014, 2016; Barrena and Sánchez, 2009). Any new code identified outside of the list (or any discrepancy) necessitated a discussion among the researchers.

In order to assess the consistency of the coding, as recommended by Kassarjian (1977), interjudgemental reliability was calculated. We achieved 90 and 89 percent coding agreements in the total number of coding results for Jakarta and Kuala Lumpur, respectively. As both ratios of interjudgemental reliability were above 85 percent, our codes were acceptable for further analysis (Kassarjian, 1977).

The final master codes–35 codes for Jakarta and 51 codes for Kuala Lumpur–were used to construct a summary implication matrix (SIM) demonstrating all attribute-consequence-value linkages, and to summarize them into an HVM displaying the dominant paths of an MEC through which the Indonesian and Malaysian Muslim consumers interviewed thought about their consumption of halal food products.

Using this SIM, out-degree and in-degree were calculated. Out-degree is the total of each row that represents how many times a code serves as a means or a source of origin whereas in-degree is the number of time each code serves as an end or end of linkages.

Abstractness ratios and centrality indices were then estimated using the value of in and out degrees. Abstractness ratios were obtained through the formula: (in degrees)/(in-degrees +out-degrees). They ranged from 0 to 1: low abstractness ratio suggests that a code is likely to be an attribute; high abstractness ratio suggests that a code is likely to be a personal value. Centrality indices were measured using the formula: (in-degrees + out-degrees)/the sum of active cells. The centrality index exhibits the central role of each element within the HVM. Ranging from 0 to 1, a high centrality index indicates that the element has been mentioned more often than other elements and is a dominant base for associated elements (Bagozzi and Dabholkar, 1994).

In the construction of the HVM, it is necessary to choose a cut-off value, which qualifies the linkages in the HVM through the number of times they were mentioned by respondents. Reynolds and Gutman (1988) suggest a cut-off value of between 3 and 5 for a sample of 50–60 respondents. Gengler et al. (1995) recommended a cut-off value of 5 percent of the sample size. Bagozzi and Dabholkar (1994) suggested that a cut-off value can be chosen as long as the resultant total active linkages represent around the two-third of total active linkages. Leppard et al. (2004) argued that a cut-off value is valid so long it produces a manageable HVM and contains informative solutions.

While there is no definitive guidance here, the basis of our choice of cut-off was to obtain an HVM that is clear, easy to interpret and which, additionally, contained as many of the active linkages as possible. In addition, since halal was viewed at a different level of abstraction, we followed Hansson and Lagerkvist's (2015) procedure of using the same cut-off value throughout an HVM. We experimented with different cut-off values (2–6). In the case of Jakarta, a cut-off level of 4 was considered the most plausible, capturing 70.4 percent of active linkages.

In the case of Kuala Lumpur, a cut-off level of 3 was considered most appropriate, retaining 43.3 percent active linkages. While representing most of the active linkages, these selected cut-off values yielded HVMs that enabled clear interpretation.

4. Results

The abstractness ratio and centrality index of elements that qualified at a cut-off value of 4 for Jakarta and 3 for Kuala Lumpur are presented in Table II. Complementing our narrative understanding of the contents of the elements, abstractness ratios helped identify the position of the elements in an MEC. Elements with a low abstraction ratio below 0.49 were categorized as attributes. According to the centrality index, "Allah ordinance" was perceived as a key base leading to another element. "Healthy food" and "clean" were other central attributes that were identified by both Indonesian and Malaysian respondents. Elements ranging from 0.5 to 0.7 abstractness ratio were grouped under consequences. Based on the centrality index, "healthy" and "active" were identified as key consequences. Other elements above 0.73 abstractness ratio referred to personal values. As suggested by the centrality index, Indonesian respondents sought to achieve mainly "better future" and "go to heaven" values while Malaysian respondents pursued two highly congruent values, "good Muslim" and "go to heaven."

The HVM with respect to the consumption of halal food products among Muslims in Jakarta and Kuala Lumpur is illustrated in Figures 1 and 2, respectively. Elements were positioned according to their respective abstractness ratio (y-axis). Their central role, based on the centrality index, was marked using dark shading. Links that are mentioned more than 20 times were emboldened, indicating their significance. Interactively, these indicators helped us identify contents and pathways linking to personal values that are considered the most important by respondents.

In the case of Jakarta, the strongest links begin with the attribute "Allah ordinance," which was described as following Islamic principles, laws and rules. The attribute was perceived by the respondents to lead indirectly to the consequence "healthy" through the attributes "convenience" and "trust." Respondents held high trust in food products that have been validated by the authority. The latter, in turn, was perceived to link to a predominant attribute "healthy food" before meeting the consequence "healthy." This consequence was viewed by the respondents as leading to the major consequence "active" (can do daily activities) which was linked to the personal value "go to heaven" on one hand, the consequence "meet family needs" and the personal value "better future" on another hand.

The contents and structure above suggests that halal food consumption in Jakarta was intended, in accordance with Islamic teaching, for its functional (health) benefits so that respondents could have an active life, a better future and a better life after death.

> "Halal processed food is my priority in order to follow Allah's guidance. The food can give us good health. so I can do daily activities […] for better future," an anonymous respondent.
>
> "(1) I am a Muslim so I eat halal processed food […] It is good to our health […] so I can earn some money […] for better future […] (2) I follow Allah guidance […] I am likely to succeed both in the world and in the after life," an anonymous respondent.
>
> "I eat halal processed food because I am a Muslim […] the food is clean […] that affects my health […] so I can do activities to achieve my goal and be successful," an anonymous respondent.

In the case of Kuala Lumpur, it appears that the strongest links stem from the major attribute "clean." This attribute relates to clean, pure and contains no pork and its

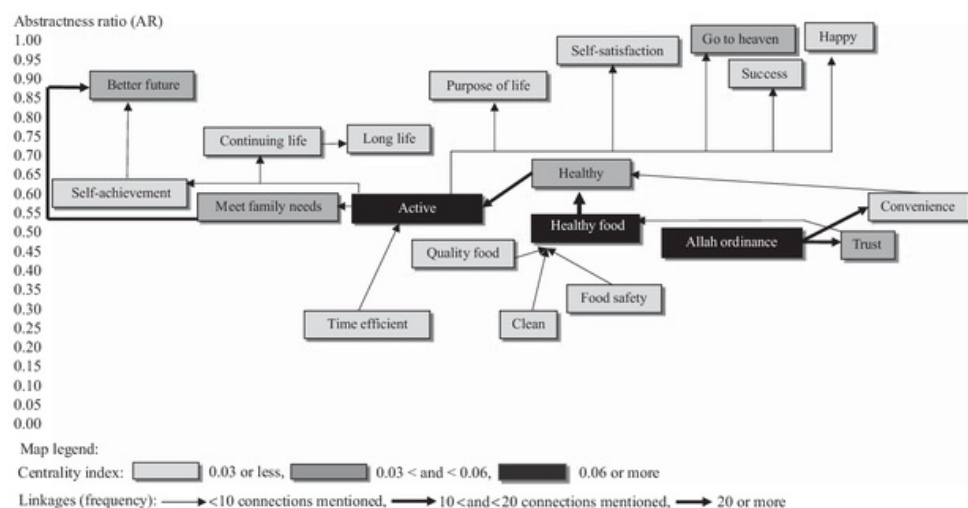|	Jakarta				Kuala Lumpur		
Codes	Description	AR	CI	Codes	Description	AR	CI
Attributes							
Food safety	Food is safe	0.27	0.01	Nutritious	Nutritious food; nutritious and good quality; contain vitamins	0.00	0.02
Time efficient	Save time to seek other information; practical implication	0.22	0.01	Clean	Clean and safe; contain no pork and its derivative products; pure; clean assurance	0.14	0.10
Clean	Cleanness, good and clean, hygienic food	0.23	0.01	Allah ordinance	Religious; Islamic ordinance; halal is Islamic syariah; Al-Quran rules; I am a Muslim; haram food is strictly forbidden; follow Islamic and Qur'anic teaching; halal is a must	0.25	0.10
Quality food	Halal food is of high quality	0.40	0.01				
Trust	Trust that no pork and its derivatives in the food; validated by the authority	0.41	0.04				
Allah ordinance	I am a Muslim; born as a Muslim; follow Islamic principles, law and rules; obey Qur'anic rules; avoid sins; a duty of Muslims; mentioned in the Quran	0.42	0.1				
Healthy food	Healthy food	0.44	0.17				
Consequences							
Convenience	Convenience	0.5	0.01	Get rewarded	Get rewarded	0.50	0.02
Active	Can do daily activities; can work hard; can take care of family; can study at university; can think properly	0.5	0.14	Earn a living	Earn a living	0.50	0.02
Meet family needs	To earn money; to obtain halal income; meet the spiritual and physical needs	0.5	0.04	Healthy	Healthy; good for health; good for our body; maintain health; energetic; clear thinking	0.54	0.22
Healthy	Healthy; good for our health; health is the top priority	0.5	0.05	Life direction	Guidance of life	0.57	0.02
Self-achievement	Responsibility as a wife/husband; self-achievement; to please parents; get good remark at school	0.56	0.03	Blessed	Blessed	0.57	0.04
Continuing life	Continuing life	0.70	0.02	Cleanse soul	Cleanse soul	0.60	0.01
Long life	Live longer	0.72	0.03	Food safety	Food is safe	0.62	0.02
				Active	Active life	0.64	0.11
				Good offspring	Good offspring	0.67	0.02
Better future	Take care next generation; better future; prosperous life; better future of children	0.85	0.05	Good Muslim	Good Muslim	0.73	0.04

Table II.
Attributes, consequences and values of halal food in Jakarta and Kuala Lumpur

(continued)

Codes	Jakarta Description	AR	CI	Codes	Kuala Lumpur Description	AR	CI
Personal values							
Successful	Successful	0.87	0.01	Assurance	Assurance	0.75	0.01
Purpose of life	Purpose of life	0.85	0.01	To support family	To support family	0.75	0.01
Self-satisfaction	Self-satisfaction	0.92	0.01	Go to heaven	Go to heaven	0.83	0.02
Go to heaven	Go to heaven	0.95	0.04	Better future	Better future	1.00	0.01
Happy	Happy; happy in worship; happy physically and spiritually	0.96	0.03				

Table II. **Notes:** AR, abstractness ratio; CI, centrality index

Figure 1.
HVM of halal food in Jakarta at cut-off level of 4
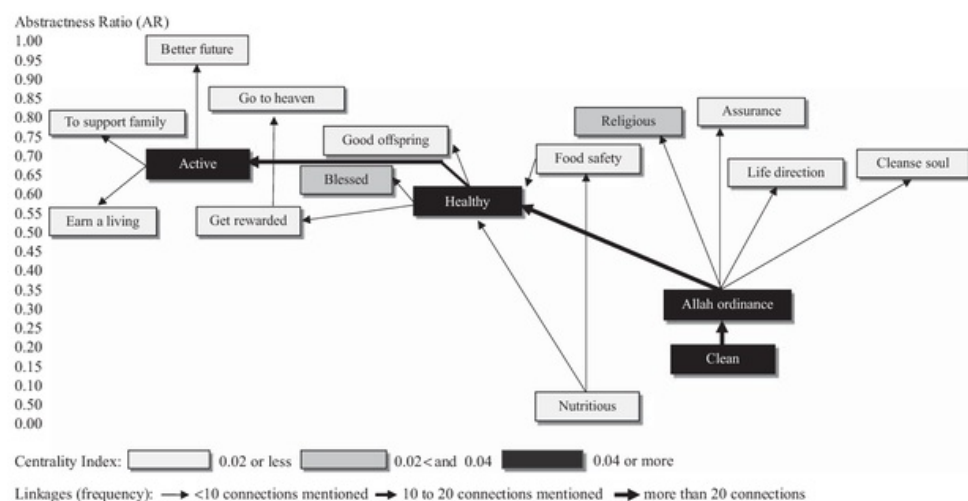
Figure 2.
HVM of halal food in Kuala Lumpur at cut-off level of 3

derivative products. The attribute was perceived by the respondents to directly link to another main attribute "Allah ordinance," which, in turn, linked to "healthy" as a consequence and "good Muslim" as a personal value. The consequence "healthy" was said by the respondents as pivotal in leading to three consequences: "active," "get rewarded," and "blessed." While the consequence "get rewarded" was seen as leading to the personal value "go to heaven," the consequence "active" was taken as linking to the consequence "earn a living" and the personal values "to support family" and "better future."

These findings suggest that Malaysian Muslim consumers considered processed food that is certified halal is "clean." Such consumption was necessary in following Islamic teaching, which, in turn, was believed to promote good health and self-actualization as a good Muslim. Good health was perceived by the respondents as being associated with an active life, spiritual rewards, and being blessed. Cumulative spiritual rewards were said to result in a good afterlife whilst active life could pave way to a better future for the individual and his/her family.

> "Halal food is clean […] it makes me healthier […] can actively work […] to support my kids' education," anonymous respondent.
>
> "It is a must to follow as a Muslim […] I will be (religiously) rewarded […] go to heaven after I die," an anonymous respondent.

5. Discussion

In Quranic teaching, Islam followers are required to eat only halal food. Our findings suggest that "Allah ordinance" was the central aspect of halal food products. While it was an immediate attribute in the view of Indonesian Muslims, it was a higher level attribute derived from the attribute "clean" when perceived by Malaysian Muslims. An MEC further suggested that Indonesian and Malaysian Muslims perceived "Allah ordinance" to, indirectly and directly, lead to good health. In the terminology of Al-Quran, the motivation to comply with Islamic teaching is related to the appreciation of good health as one of God's countless bounties, i.e. it is a holistic way to nourish human body with respect, not only faith, but also with lawful and healthy food.

These findings concur with Bonne *et al.* (2008) who predicted inclination to purchase halal meat through the attitude to health of both high and low acculturated Muslims in France. Meat, for example, that is slaughtered and handled using halal methods has been proved to oxidize more slowly and to contain fewer microbes (Nakyinsige *et al.*, 2014). Halal meat also has an association with hygiene (White and Kokotsaki, 2004) and is perceived as pure, clean and hygienic food (Fischer, 2011).

Good health was perceived as leading to the consequence "active" by Indonesian Muslims and, additionally, the consequences "get rewarded" and "blessed" by Malaysian Muslims. These consequences concur with much of the Islamic teaching on the interconnectedness of physical and spiritual benefits. Active life was predominantly suggested to directly achieve the value "better future." Physical inactivity is related to morbidity, which, in turn, compromises health. By staying physically active, it was perceived by Indonesian Muslims that one can have a better future, i.e. in taking care of family, prosperous life and supporting children. Similarly, an active life was deemed by Malaysian Muslims as leading to the consequence "earn a living" and adds value "to support family." The value "care for family" was also underscored by Belgian Muslims (Bonne and Verbeke, 2006).

Beyond these social considerations, an active life was perceived by Indonesian Muslims to lead to the value "go to heaven." This finding supports physical educators' advocacy of active lifestyles since they have long advocated that the benefits of a physically active lifestyle go beyond health claims (Siedentop, 1996). This value, from Malaysian Muslims' point of view, could be achieved through the consequence "get rewarded." The other values discovered in this study were "successful," "self-satisfaction," "purpose of life" and "happy" in the case of Indonesia *vis-à-vis* "good Muslim" and "assurance" in the case of Malaysia.

In addition to the MEC approach as adopted, the personal values uncovered in this study can also be interpreted in the light of Schwartz's theory of basic human values. The personal values "good Muslim" and "purpose of life" are related to tradition; "better future," "assurance," and "go to heaven" are related to security; "support family" is related to benevolence; "successful" and "self-satisfaction" are related to achievement. "Happy" is represented as a sense of contentment.

Taken together, the intersection of values preserves existing social-cultural practices thought to give certainty to (after) life. Such cognitive contents and structure might be related to the lesson in which Prophet Adam's deviance of Allah's instruction caused his banishment from heaven to earth (Quran, *al-Baqarah*: 35–38). It is a sin for Muslims who consume non-halal food, and every sin is counted and accumulated (Pradipta, 2016). The demerits would result in punishment in the afterlife. Halal consumption is, therefore, an objective approach to demonstrate faith in and submission to Islam for earning a place in the kingdom of God (Wang-Kanda, 2016). It was perceived by Muslims that they would go to heaven by conforming to religious law since halal, as permissible consumption, was perceived as a means to earn an indulgence.

As revealed in this study, the Indonesian and Malaysian samples shared similar values in their decision making with respect to halal food consumption. Although Indonesian and Malaysian have somewhat different socio-cultural and economic backgrounds, their food choice was mainly driven by religious values. While this finding does not necessarily imply that religious beliefs have a stronger influence than socio-cultural and economic factors such a conclusion was drawn among British Indians by White and Kokotsaki (2004). Importantly, in this study, our evidence does reinforce the special role of religion in influencing consumer behavior. Our conclusions support other food studies (e.g. Bonne *et al*, 2008; Fam *et al*, 2004).

6. Conclusions

Our study has demonstrated that Muslim consumption decisions with respect to halal food are guided primarily by religion, principally through a set of conservation and security values. This suggests that, for Muslims, halal food is chosen over and beyond more functional aspects of consumerism.

Based on these findings, policy measures directed toward promoting halal certification should take these values into consideration. For example, marketing communication programs can be improved so as to ensure greater congruence with values revealed that are considered the most salient by Muslim consumers. This could be achieved by way of differentiation, thereby scaling up the perceived value of halal food products and promoting investment in halal certification.

In particular, the marketing of halal food can leverage halal certification by taking the two central themes revealed in this study into consideration. The first theme centers on "clean," "Allah ordinance," "healthy," "active life," "good Muslim," "good offspring" and "good Muslim" in Malaysia. The public and private sectors could consider the intersection of these important aspects in structuring their communication. They should promote messages which encourage such desirable self-image as "be a good Muslim by purchasing halal products," self-practice "follow Allah ordinance, get the best rewards, buy halal products," and lifestyle "be active by consuming clean and hygienic halal food." The second theme is

related to "trust," "healthy food," "active," "healthy," "better future" and "go to heaven" as perceived by Indonesian Muslims. They can be used to build a base for communication ideas like "trusted and healthy, halal food" and "stay healthy, be active by purchasing halal food," While these are general examples, they should be modified with care to combine both the halal and specific appeal of a particular food product.

[5] In this exploratory study, its limitations relate to our focus on Muslim consumers in the capital cities of Indonesia and Malaysia since they might not represent the attitudes of the entire Muslim communities of these countries. Non-Muslim samples remain an unexplored subject. The MEC approach may just as useful for understanding why non-Muslims also seek halal food products. Such an investigation would be of considerable interest since the Islamic law does not bind them, and their voluntary preference is therefore likely to be self-motivated. Knowledge on their decision making with respect to halal food consumption is, therefore, an important step in improving marketing communications to non-Muslim consumers.

References

Aertsens, J., Verbeke, W., Mondelaers, K. and Huylenbroeck, G.V. (2009), "Personal determinants of organic food consumption: a review", *British Food Journal*, Vol. 111 No. 10, pp. 1140-1167.

Alam, S.S. and Sayuti, N.M. (2011), "Applying the theory of planned behavior (TPB) in halal food purchasing", *International Journal of Commerce and Management*, Vol. 21 No. 1, pp. 8-20.

Arsil, P., Li, E. and Bruwer, J. (2016), "Using means-end chain analysis to reveal consumers' motivation for buying local foods: an exploratory study", *Gadjah Mada International Journal of Business*, Vol. 18 No. 3, pp. 285-300.

Arsil, P., Li, E., Bruwer, J. and Lyons, G. (2014), "Exploring consumer motivations towards buying local fresh food products: a means-end chain approach", *British Food Journal*, Vol. 116 No. 10, pp. 1533-1549.

Awan, H.M., Siddiquei, A.N. and Haider, Z. (2015), "Factors affecting Halal purchase intention – evidence from Pakistan's Halal food sector", *Management Research Review*, Vol. 38 No. 6, pp. 640-660.

Aziz, Y.A. and 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*, Vol. 25 No. 1, pp. 1-23.

Bagozzi, R.P. and Dabholkar, P.A. (1994), "Consumer recycling goals and their effect on decisions to recycle: a means-end chain analysis", *Psychology and Marketing*, Vol. 11 No. 4, pp. 313-341.

Bardi, A. and Schwartz, S.H. (2003), "Values and behavior: strength and structure of relations", *Personality and Social Psychology Bulletin*, Vol. 29 No. 10, pp. 1207-1220.

Barrena, R. and Sánchez, M. (2009), "Consumption frequency and degree of abstraction: a study using the laddering technique on beef consumers", *Food Quality and Preference*, Vol. 20 No. 2, pp. 144-155.

Barrena, R., García, T. and Camarena, D.M. (2015), "An analysis of the decision structure for food innovation on the basis of consumer age", *International Food and Agribusiness Management Review*, Vol. 18 No. 3, pp. 149-170.

Barrena, R., García., T. and Sánchez, M. (2017), "The effect of emotions on purchase behaviour towards novel foods: an application of means–end chain methodology", *Agrekon*, Vol. 56 No. 2, pp. 173-190.

Barrena-Figueroa, R. and Garcia-Lopez-de-Meneses, T. (2013), "The effect of consumer innovativeness in the acceptance of a new food product: an application for the coffee market in Spain", *Spanish Journal of Agricultural Research*, Vol. 11 No. 3, pp. 578-592.

Bergeaud-Blackler, F. and Bonne, K. (2007), "D'une consommation occasionnelle à un reégime halal: Quelles conseéquences sur la santeé (From occasional consumption to a halal diet)", *Migrations Santé (Health Migrations)*, Vol. 129, pp. 59-86.

Boecker, A., Hartl, J. and Nocella, G. (2008), "How different are GM food accepters and rejecters really? A means-end chains application to yogurt in Germany", *Food Quality and Preference*, Vol. 19 No. 4, pp. 383-394.

Bonne, K. and Verbeke, W. (2006), "Muslim consumer's motivations towards meat consumption in Belgium: qualitative exploratory insights from means-end chain analysis", *Anthropology of Food*, Vol. 5, pp. 2-24.

Bonne, K. and Verbeke, W. (2008), "Religious values informing halal meat production and the control and delivery of halal credence quality", *Agriculture and Human Values*, Vol. 25 No. 1, pp. 35-47.

Bonne, K., Vermeir, I. and Verbeke, W. (2008), "Impact of religion on halal meat consumption decision making in Belgium", *Journal of International Food & Agribusiness Marketing*, Vol. 21 No. 1, pp. 5-26.

Bonne, K., Vermeir, I., Bergeaud-Blackler, F. and Verbeke, W. (2007), "Determinants of halal meat consumption in France", *British Food Journal*, Vol. 109 No. 5, pp. 367-386.

Dindyal, S. and Dindyal, S. (2003), "How personal factors, including culture and ethnicity, affect the choices and selection of food we make", *Internet Journal of Third World Medicine*, Vol. 1 No. 2, pp. 27-33.

Fam, K.S., Waller, D.S. and Erdogan, B.Z. (2004), "The influence of religion on attitudes towards the advertising of controversial products", *European Journal of Marketing*, Vol. 38 Nos 5/6, pp. 537-555.

Fischer, J. (2011), *The Halal Frontier: Muslim Consumers in a Globalized Market*, Palgrave Macmillan, New York, NY.

Gengler, C.E., Klenosky, D.B. and Mulvey, M.S. (1995), "Improving the graphic representation of means-end results", *International Journal of Research in Marketing*, Vol. 12 No. 3, pp. 245-256.

Grunert, K.G. and Grunert, S.C. (1995), "Measuring subjective meaning structures by the laddering method: theoretical considerations and methodological problems", *International Journal of Research in Marketing*, Vol. 12 No. 3, pp. 209-225.

Grunert, K.G. and Valli, C. (2001), "Designer-made meat and dairy products: consumer-led product development", *Livestock Production Science*, Vol. 72 Nos 1-2, pp. 83-98.

Gutman, J. (1982), "A means-end chain model based on consumer categorization processes", *Journal of Marketing*, Vol. 46 No. 2, pp. 60-72.

Hansson, H. and Lagerkvist, C.J. (2015), "Identifying use and non-use values of animal welfare: evidence from Swedish dairy agriculture", *Food Policy*, Vol. 50, pp. 35-42.

Hassan, S.H. and Hamdan, H. (2012), "Means-end approach to study Muslim consumers' values and preference towards genetically modified (GM) food in Malaysia", *International Journal of Arts and Commerce*, Vol. 1 No. 4, pp. 319-327.

Hitti, P.K. (1970), *Islam: A Way of Life*, University of Minnesota Press, Minnesota, MN.

Hussaini, M.M. (1993), *Islamic Dietary Concepts and Practices*, Al-Meezan International, Islamic Food and Nutrition Council of America, Illinois, IL.

Kassarjian, H.H. (1977), "Content analysis in consumer research", *Journal of Consumer Research*, Vol. 4 No. 1, pp. 8-18.

Lada, S., Tanakinjal, G.H. and Amin, H. (2009), "Predicting intention to choose halal products using theory of reasoned action", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 2 No. 1, pp. 66-76.

Leppard, P., Russell, C.G. and Cox, D.N. (2004), "Improving means-end-chain studies by using a ranking method to construct hierarchical value maps", *Food Quality and Preference*, Vol. 15 No. 5, pp. 489-497.

Lusk, J.L. and Briggeman, B. (2009), "Food values", *American Journal of Agricultural Economics*, Vol. 91 No. 1, pp. 184-196.

Martínez-Ruiz, M.P. and Gómez-Cantó, C.M. (2016), "Key external influences affecting consumers' decisions regarding food", *Frontiers in Psychology*, Vol. 7 No. 1618, pp. 1-4.

Mohamed, Z., Shamsudin, M.N. and Rezai, G. (2013), "The effect of possessing information about halal logo on consumer confidence in Malaysia", *Journal of International Food & Agribusiness Marketing*, Vol. 25 No. S1, pp. 73-86.

Mohayidin, M.G. and Kamarulzaman, N.H. (2014), "Consumers' preferences toward attributes of manufactured halal food products", *Journal of International Food & Agribusiness Marketing*, Vol. 26 No. 2, pp. 125-139.

Muhamad, N. and Mizerski, D. (2010), "The constructs mediating religions' influence on buyers and consumers", *Journal of Islamic Marketing*, Vol. 1 No. 2, pp. 124-135.

Mullen, K., Williams, R. and Hunt, K. (2000), "Irish descent, religion and food consumption in the west of Scotland", *Appetite*, Vol. 34 No. 1, pp. 47-54.

Nakyinsige, K., Fatimah, A.B., Aghwan, Z.A., Zulkifli, I, Goh, Y.M. and Sazili, A.Q. (2014), "Bleeding efficiency and meat oxidative stability and microbiological quality of New Zealand white rabbits subjected to halal slaughter without stunning and gas stun-killing", *Asian-Australasian Journal of Animal Sciences*, Vol. 27 No. 3, pp. 406-413.

Olson, J.C. (1988), "Theoretical foundations of means-end chains", working Series in Marketing Research, Pennsylvania State University, PA.

Pradipta, A. (2016), "Halal food and human-God relationship: the study of Muslim Indonesian students in Stockholm", available at: www.etd.ceu.hu/2016/pradipta_andamar.pdf (accessed August 20, 2017).

Razzaque, M.A. and Chaudhry, S.N. (2013), "Religiosity and Muslim consumers' decision-making process in a non-Muslim society", *Journal of Islamic Marketing*, Vol. 4 No. 2, pp. 198-217.

Reynolds, T.J. and Gutman, J. (1988), "Laddering theory, method, analysis, and interpretation", *Journal of Advertising Research*, Vol. 28 No. 1, pp. 11-31.

Rokeach, M. (1973), *The Nature of Human Values*, Free press, New York, NY.

Schwartz, S.H. and Bardi, A. (2001), "Value hierarchies across cultures: taking a similarities perspective", *Journal of Cross Cultural Psychology*, Vol. 32 No. 3, pp. 268-290.

Siedentop, D. (1996), "Valuing the physically active life: contemporary and future directions", *Quest*, Vol. 48 No. 3, pp. 266-274.

Thompson Reuters (2015), "State of the GLOBAL Islamic Economy report 2015/16", available at: www.tief2015.org/pdf/report/1910_3_1_shaima_hasan.pdf (accessed May 12, 2017).

Verbeke, W., Rutsaert, P., Bonne, K. and Vermeir, I. (2013), "Credence quality coordination and consumers' willingness-to-pay for certified Halal labelled meat", *Meat science*, Vol. 95 No. 4, pp. 790-797.

Wang-Kanda, L. (2016), "Bottom-up coexistence: the negotiation of Chinese ethnicity, Islam, and the making of ethno-religious landscapes among Yunnanese Muslims in the Thai-Myanmar borderland", *Senri Ethnological Studies*, Vol. 93, pp. 49-64.

White, H. and Kokotsaki, K. (2004), "Indian food in the UK: personal values and changing patterns of consumption", *International Journal of Consumer Studies*, Vol. 28 No. 3, pp. 284-294.

Wilson, J.A.J. and Liu, J. (2011), "The challenges of Islamic branding: navigating emotions and halal", *Journal of Islamic Marketing*, Vol. 2 No. 1, pp. 28-42.

Zagata, L. (2014), "Towards conscientious food consumption: exploring the values of Czech organic food consumers", *International Journal of Consumer Studies*, Vol. 38 No. 3, pp. 243-250.

Corresponding author

Poppy Arsil can be contacted at: poppy74arsil@gmail.com

Paper 6

8 Hansson, Helena, and Carl Johan Lagerkvist. "Identifying use and non-use values of animal welfare: Evidence from Swedish dairy agriculture", Food Policy, 2015. Publication   <1%

9 www.ajas.info Internet Source   <1%

10 Gabriele Morandin, Massimo Bergami, Richard P. Bagozzi. "chapter 13 The Second Generation of the Laddering Methodology and Its Use in Studying Decision Making", IGI Global, 2015 Publication   <1%

11 Journal of Consumer Marketing, Volume 32, Issue 4 (2015) Publication   <1%

12 Yeong S. Tey, Poppy Arsil, Mark Brindal, Su Y. Liew, Chi T. Teoh, Rika Terano. "Personal values underlying ethnic food choice: Means-end evidence for Japanese food", Journal of Ethnic Foods, 2018 Publication   <1%

13 www.researchgate.net Internet Source   <1%

14 stud.epsilon.slu.se Internet Source   <1%

15 Tey, Yeong Sheng, Poppy Arsil, Mark Brindal, Mad Nasir Shamsudin, Alias Radam, Ahmad   <1%

Hanis Izani Abdul Hadi, Natasha Rajendran, and Chin Ding Lim. "A Means-End Chain Approach to Explaining the Adoption of Good Agricultural Practices Certification Schemes: The Case of Malaysian Vegetable Farmers", Journal of Agricultural and Environmental Ethics, 2015.
Publication

16 umexpert.um.edu.my
    Internet Source   <1%

17 www.etd.ceu.hu
    Internet Source   <1%

18 ciheam.org
    Internet Source   <1%

19 Asyraf Hj. Ab. Rahman. "Knowledge on Halal
    Food amongst Food Industry Entrepreneurs
    in Malaysia", Asian Social Science,
    11/29/2011   <1%
    Publication

20 Rajasekhara Mouly Potluri, Rizwana Ansari,
    Saqib Rasool Khan, Srinivasa Rao Dasaraju.
    "A crystallized exposition on Indian Muslims'
    attitude and consciousness towards halal",
    Journal of Islamic Marketing, 2017   <1%
    Publication

21 Afzaal Ali, Guo Xiaoling, Mehkar Sherwani,
    Adnan Ali. "Factors affecting Halal meat
    purchase intention", British Food Journal,   <1%

2017
Publication

22 Poppy Arsil, Elton Li, Johan Bruwer, Graham Lyons. "Motivation-based segmentation of local food in urban cities", British Food Journal, 2018
Publication

<1%

23 trace.tennessee.edu
Internet Source

<1%

24 Klaus G. Grunert. "Food quality: A means-end perspective", Food Quality and Preference, 1995
Publication

<1%

25 link.springer.com
Internet Source

<1%

26 Joan M. Phillips, Thomas J. Reynolds. "A hard look at hard laddering", Qualitative Market Research: An International Journal, 2009
Publication

<1%

27 journals.ums.ac.id
Internet Source

<1%

28 www.iefpedia.com
Internet Source

<1%

29 eprints.kingston.ac.uk
Internet Source

<1%

30 Tommaso Savino, Stefania Testa, Antonio

Messeni Petruzzelli. "Researcher understanding of food innovations in Nordic and Southern European countries: A systematic literature review.", Trends in Food Science & Technology, 2018
Publication

<1%

31 world-food.net
Internet Source

<1%

32 pure.uva.nl
Internet Source

<1%

33 dspace.lboro.ac.uk
Internet Source

<1%

34 arpgweb.com
Internet Source

<1%

35 espace.curtin.edu.au
Internet Source

<1%

36 Mohamed Syazwan Ab Talib, Abu Bakar Abdul Hamid. "Halal logistics in Malaysia: a SWOT analysis", Journal of Islamic Marketing, 2014
Publication

<1%

37 etheses.uin-malang.ac.id
Internet Source

<1%

38 lra.le.ac.uk
Internet Source

<1%

39 www.inderscienceonline.com
Internet Source

<1%

40 era.library.ualberta.ca
Internet Source

<1%

41 Aiedah Abdul Khalek. "chapter 11
Entrepreneurship and the Halal Wave in
Malaysia", IGI Global, 2018
Publication

<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		