CHAPTER 6
RECOMMENDATIONS AND CONCLUSION

6.1   Introduction

This study aims to reach awareness regarding the wholesomeness of Halal food products among Malaysian Muslim consumers after the use of reliable and established sources to improve their attitude, habit, and perception towards Halal food. The study findings are developed extensively from Chapter 5 to establish an overview of the implementation model to measure the perception regarding the wholesomeness of the Halal food products based on the reports on hypotheses testing. Subsequently, an overview of the thesis focuses on the development of the model of wholesomeness, the validity of dimensions in model implementation, relationships among the constructs, and the results of underlying hypotheses involved in this thesis. Hypothesis and review of the findings are discussed in this section. All the hypotheses are interpreted into the applicable structural model. This chapter outlines the contributions of this study to knowledge, the limitations of the research, and recommendations and suggestions for future research.

6.2   Key Findings

Halal food management has gained the attention of researchers and practitioners in the context of academic research in the last decade. Although various studies were performed on different aspects of Halal food management, an established model on the detailed model of Halal food of implementation in Malaysia has yet to be developed. The recent literature on Halal food management suggested that Halal food required an

approach for a standard model to remain competitive on the market (Lada, Tanakinjal, and Amin 2009; Ibrahim et al., 2010; Wilson and Liu 2010; Tieman 2011). Based on the aforementioned justifications and challenges, this study mainly aims to develop a model and evaluate the interactions between seven independent constructs, such as attitude, habit, individual awareness, resource information, information awareness, traceability, and verification process in the dependent wholesomeness variable. The construct measurement items were then verified. Ten hypotheses were used with a conceptual model as a framework to answer the following research questions:

RQ1: What are the factors of the information-seeking behaviour regarding Halal food product among Malaysian Muslim consumers?

RQ2: What are the correlations between human attributes and process verification in searching for information about Halal food product?

Sub RQ2:

1) What is the correlation between attitude and process verification in searching for information about Halal food product?

2) What is the association of practice and process verification in searching for Halal food product information?

3) What is the correlation between the awareness of individual and process verification in searching for information about Halal food product?

4) RQ3: How are the human features of the existing Halal food model linked with the features of the existing information-seeking behaviour model to ensure that Halal food product information could be sought effectively?

All research questions were discussed thoroughly, while the proposed hypotheses were tested using structural equation modelling (CB-SEM) based on covariance, as

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described in Chapter 5. Table 6.1 presents the hypotheses and results. These hypotheses will also be presented in the next sections, with further discussions. The first research question of this study is related to the factors of information-seeking behaviour regarding Halal food product among Malaysian Muslim consumers. The findings in Table 5.11 present the contribution of each factor to the dependent variable (wholesomeness) of the Halal food. In this case, higher beta value and lower significance level ($p < 0.05$) of each independent variable indicated the strongest contribution to the dependent variable. Therefore, Table 5.11 presents the factors of information-seeking behaviour among Malaysian Muslim consumers, namely the awareness of information, traceability, process verification, attitude, sources of information, habit, and awareness of the individual. As a result, awareness of information showed the strongest contribution to the dependent variable (wholesomeness) and a direct significant effect on wholesomeness. Therefore, it was found that customers with information resources had a positive intention leading to the purchase of Halal food, and this finding was supported by numerous past studies (Ajzen, 1991; Mualla 2011; Lee, 2013). Halal is perceived as an essential part of meeting the quality and wholesomeness of the produced food, which fulfils the permissible requirements of Islamic instructions. The acceptability and healthiness of food items may also benefit bodies and souls. Yousoff and Adzharuddin (2017) found that Muslim families exhibited a high level of awareness regarding Halal food as they did not rely solely on the information provided by The Islamic Development Department (JAKIM). However, the families also performed information searching for Halal food on their own. In conclusion, the awareness factor is vital in providing information to the Malaysian Muslim consumers regarding Halal food products as this status is highly important in their preferences for food.

The second research question was related to the correlation between human attributes, while process verification was tested through AMOS hypotheses as shown in Table 5.35:

1) What is the correlation between attitude and process verification, which leads to the wholesomeness of an efficacious searching of information about Halal food product?

   It was found from the test of the correlation between attitude factor and process verification that critical ratio (C.R) amounted to $0.428 < 1.96$. Provided that C.R was not statistically significant at ($\rho \geq 0.05$, $\rho = 0.669$), a negative relationship between attitude factor and process verification was suggested. It could be concluded that the increase in negative attitude led to a decrease in the process of verification. Therefore, a weak belief led to a negative attitude towards verification, resulting in wholesomeness in the efficacious searching for information about Halal food products.

2) What is the association between habit and process verification, which leads to wholesomeness in effective searching for Halal food product information?

   To identify the overall influence of habit factor and process verification, the critical ratio (C.R) value of the relationship between these two variables was evaluated. The result recorded that the C.R = $1.217 < 1.96$. Besides, provided that C.R was not statistically significant at ($\rho \geq 0.05$, $\rho = 0.224$), a negative relationship between habit factor and process verification was indicated. It was also recorded that strong self-control might influence the formation of habits, which subsequently did not strongly impact the process verification and the wholesomeness in the effective searching of information regarding Halal food product.

3) What is the correlation between awareness of individual and process verification, which leads to the wholesomeness in an effective searching for information about Halal food product?

To derive the overall influence of an individual's awareness and process verification, the critical ratio (C.R) value of the relationship between these two variables was calculated. The result recorded that $C.R = 4.40 \geq 1.96$. Provided that the positive value of C.R was statistically significant at ($\rho \leq 0.05$, $\rho = 0.000$), this result suggested a positive relationship between an individual's awareness and process verification. Notably, it was concluded from this result that effective searching for Halal food information would be improved through the increase in an individual's awareness using trusted and credible information sources. This observation was in line with the findings by Yousoff and Adzharuddin, (2017), who found that Muslim families have a high awareness of Halal food products.

The third research question determined the correlation between human attributes, namely attitude, habit, individual's awareness, and wholesomeness to ensure that Halal food product information could be sought effectively.

To identify the overall influence of attitude and wholesomeness, the critical ratio (C.R) value of the relationship between the two variables was calculated. As a result, it was indicated that $C.R = 2.66 \geq 1.96$. Furthermore, provided that the positive value of C.R was statistically significant at ($\rho \leq 0.05$, $\rho = 0.008$), the result suggested the positive relationship between attitude and wholesomeness. Notably, this finding was in line with the finding by Khalek et al. (2015), who revealed that attitude positively influenced the behavioural intention in consuming Halal food. Therefore, attitude and wholeness factor affected the decision in ensuring the consumption of Halal food among the Muslim community.

To determine the overall influence of habit and wholesomeness, the critical ratio (C.R) value of the relationship between the two variables was evaluated. The result indicated that C.R = 2.78 ≥ 1.96. Furthermore, provided that the positive value of C.R was statistically significant at ($\rho \leq 0.05$, $\rho = 0.004$), this result suggested the positive and causal association between habit and wholesomeness. Notably, this result was in line with the result by Bonne et al. (2007), who described the ability of some Muslims to consider eating Halal meat as a norm or habit as this consumption is their identity.

To identify the overall influence of an individual's awareness and wholesomeness, the critical ratio (C.R) value of the relationship between these variables was evaluated. It was recorded that C.R = 0.683 < 1.96. Provided that C.R was not statistically significant at ($\rho \geq 0.05$, $\rho = 0.494$), this result suggested a negative relationship between an individual's awareness and wholesomeness.

The results from the SEM analysis were discussed, which are as follows:

Based on Figure 3.1, Chapter 3 presents the model used for measurements. Using the literature review, the main components and interactions of the model were selected. The relationship tested the attributes of the perception of Halal food wholesomeness, which improved the searching for information related to Halal food. Provided that the perception and effective searching were determined based on the wholesomeness of Halal food, the human attributes, including individual attitude, habit, and awareness, were related to wholesomeness through hypothetical relationships. However, the literature did not provide sufficient background on the relation between the attributes of humanity and wholesomeness. Therefore, the model was tested using SEM analysis, as explained in Section 5.9.2, subsections 5.9.2.1, 5.9.2.2, and 5.9.2.3, and Section 5.10.

In conclusion, the analyses of SEM revealed that six hypotheses were supported, which are presented as follows:

Table 6.1: The hypotheses and summary of the results

No	Latent construct			Estimates	S. E	C.R.	P
H1	Attitude	➐	Process verification	0.03	0.063	0.428	0.669
H2	Attitude	➐	Wholesomeness	0.24	0.058	2.66	0.008
H3	Habit	➐	Process verification	0.09	0.047	1.217	0.224
H4	Habit	➐	Wholesomeness	0.24	0.043	2.78	0.004
H5	Awareness of individual	➐	Process verification	0.61	0.134	4.40	***
H6	Awareness of individual	➐	Wholesomeness	0.11	0.112	0.683	0.494
H7	Information sources	➐	Wholesomeness	0.57	0.044	6.032	***
H8	Awareness of information	➐	Wholesomeness	0.50	0.030	6.048	***
H9	Traceability	➐	Wholesomeness	0.42	0.40	4.515	***
H10	Process verification	➐	Wholesomeness	-0.01	0.116	0.090	0.928

6.2.1 Implementation Model of Wholesomeness

The proposed concept of wholesomeness consisted of eight dimensions or first-order structures from a comprehensive analysis of literature. This study mainly focuses on identifying the relevant measurement, which could be used in Malaysian adoption of Halal foods. Therefore, this thesis also seeks to determine whether the measurements described could be established as the wholesomeness models for adoption of Halal food

in Malaysia. As proposed in the literature review, this model was hypothesised with eight dimensions. Using ten hypotheses proposed in this study and IBM SPSS and AMOS version 22 based on statistical measurements of standardised coefficient pathways, parameter estimates were evaluated. Elimination and purification processes were elaborated extensively using EFA, while the measurement model was evaluated using the CFA in Section 5.11. The final review provided in Table 6.1 demonstrated that support was available for hypotheses H2, H4, H5, H7, H8, H9. It was also suggested that the implementation of this model as a process was made to fulfil the perspective of healthy Halal food products among Malaysian Muslim consumers after using credible sources of information to improve their attitude, habit and wholesomeness, individual's awareness, the process of verification, awareness of information, and traceability. These elements were among the constructs related to the wholesomeness model established in the Halal food industry.

6.2.2 Valid Dimension of the Wholesomeness of the Model

Based on the extensive literature review, the study findings were in line with the implementation model dimensions. The first element, which should be taken into account, was the individual's awareness. Specifically, consumer's awareness was possibly a major role in the decision making for purchase and process of verification (Mohamed et al., 2008). Accordingly, Muslims should possess the knowledge and information related to Halal status in the assessment of perception regarding Halal (Yunus et al., 2014).

The awareness of Halal food is relevant to customers. The food products in Malaysia range from various local and imported foods, which are grown and governed by all ethnic groups. In this study, it was found that awareness of information about

Malaysian Halal processed food and beverage manufacturing was a prerequisite to the development of the verification for the wholesomeness model in the Halal food industry. This finding demonstrated that the information about Halal food products was easier to identify using the non-official sources of social media or family and friends due to the shorter duration taken to search for Halal food products. The respondents also agreed that packing, quality, price, country of origin, listed ingredients, and Halal logo operated by Muslims were the factors of the selection of Halal food product. Notably, the respondents sought for information based on convenience, ease of use, speed of retrieval of information, user-friendliness, full-text content provision, availability, data quality, and cost. Furthermore, price plays a vital role as the purchasing power in deciding the choice of food among the Halal packages. Through the focus on this dimension, the improvement could be made on the issues regarding information awareness, verification process, and wholesomeness in Halal food production. This research presented several practical consequences, such as the positive relationship between religious faith and awareness of Halal-related information, the importance of the Halal Malaysia logo for food products, and the relevance of online and traditional digital media to educate and raise awareness among Muslim consumers. Moreover, the choice of food among Muslim customers in Malaysia was not solely based on Halal subject, but it was also based on other factors, including environment, price, taste, and income level with purchasing power. Each consumer had different levels of wealth, which could affect their decision on the product. This finding was reinforced by Gutkowska and Ozimek (as cited in Zakowska-Biemans, 2011), where an individual's judgement or taste of food could be related to food intake and reflected in the selection of products. However, the increase in individual income gradually reduced the concerns regarding price (Ozimek et al., 2011).

In the implementation of wholesomeness model using combined constructs and nine items, information sources were found to be an important dimension in measuring wholesomeness in the Halal food industry. It was suggested from the SEM analysis that information sources in the implementation model were an important dimension of wholesomeness, which might affect perception and effective search. Halal food consumers are currently more conscious and educated regarding their purchase of daily food consumption, particularly from the Muslim population. They are not only concerned about the Halal status of the food ingredients, but they are curious about the Halal status of the items purchased from the supply chain.

Halal value chain could be used as a guideline in understanding and educating people about the agencies and government departments, which directly manage the food industry to achieve the government goal of developing into a Halal hub. The Halal value chain consists of various stakeholders, including the Department of Islamic Development Malaysia (JAKIM), the State Islamic Religious Department (JAIN), the State Islamic Religious Council (MAIN), the Halal Industry Development Corporation (HDC), the Ministry of Agriculture and Agro-Industry (MOA), the Ministry of Health (MOH), and the Ministry of Home Trade and Consumer.

The findings demonstrated sufficient information on the market for Halal food products. To seek information on Halal food, a major part of the Muslim community employed various platforms before their food consumption. As a law-abiding Muslim, the respondent agreed that most information on Halal food is obtained from official sources, such as TV, radio, newspaper, or the Malaysian Islamic Development Department publications. The respondent also preferred to search through social media regarding Halal food products or ask a family member or friend rather instead of

checking official sources. Additionally, websites on the internet, mass media and social media, including Facebook, Twitter, and WhatsApp were their chosen sources.

The analysis revealed that individual awareness was the most critical dimension of the verification process in the implementation of wholesomeness model. Based on the measurement of the construct of awareness using 17 validated items, it could be concluded that awareness of information was positively related to wholesomeness in Halal food. This result was supported by Kertajaya and Ridwansyah (2014), who stated that without previous knowledge of the product, consumers would not intend to purchase the product regardless of the product association with Halal or non-Halal status. It could be concluded that consumers' knowledge of Halal was vital before they decided to purchase Halal food products (Zakaria et al., 2017). According to Aziz and Chok (2013), Halal awareness influences individual's clarification and motive to buy Halal products. Additionally, Hamdan et al. (2013) demonstrated in their study that the most significant factor of Muslim consumers' purchase of Halal food represented their level of awareness regarding the product. The study findings were supported by previous study results (Aziz and Chok, 2013; Hamdan et al., 2013; Yunus et al., 2014). Besides, Muslim consumers are currently more aware of their food purchase and choices of Halal items before they decided to purchase (Sundram et al., 2011). According to Abdul (2013), Muslims' responsibility to consume Halal products led to an increased need for Halal products among Muslim populations worldwide due to the increasing awareness among Muslim populations.

Traceability in the implementation model, which was measured using four items, was also found to be an important dimension of wholeness. The respondent agreed that the traceability of Halal food products, Halal logo-certified, and the validity of the Halal logo with the concept of Halal zero were their selected factors in measuring

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Halal food. This result was in line with the Rashid findings (2018), which found that the acceptance of traceability had a significant relationship with the integrity of Halal food. Zulfakar et al. (2014) argued that traceability could be used as the main platform in tracing the Halal status of a particular food product during all stages of the supply chain. Traceability should be established to increase transparency in food production. Overall, the results promoted traceability and accessibility of information along the supply chain.

The SEM result specified that attitude was a significant aspect in determining the pattern of implementation of wholesomeness on Halal food. To measure this dimension, 11 items were used in this study. A strong correlation was indicated between the right practices in Halal food production upon application, which could reduce food contamination. Notably, these elements had a significant relationship with the consumption of Halal food, preferences for Halal food consumption over non-Halal food. It was also found that Halal food was cleaner compared to non-Halal food.

The habit was found to have a positive relationship with wholesomeness, which was measured using three items. To be specific, the respondent ate Halal food when they were accustomed to it, consumed Halal food only at Halal-food places, and observed the ingredients when purchasing food. It could be inferred that these findings established a detailed executing model and validated the scales for eight dimensions or structures of the first order.

In conclusion, the analyses of SEM revealed that six hypotheses were supported, which are as follows:

H2: There is a positive relationship between the attitude of consumers towards Halal food and the perception of wholesomeness, which leads to effective searching for Halal food information.

H4: There is a positive relationship between the habit of consuming Halal food and perception of wholesomeness, which leads to effective searching for Halal food information.

H5: There is a positive relationship between an individual's awareness and process verification of Halal food information.

H7: There is a positive relationship between the information sources used for seeking Halal food and perception of wholesomeness, which leads to effective searching for Halal food information.

H8: There is a positive relationship between awareness of information towards Halal food and perception of wholesomeness, which leads to effective searching for Halal food information.

H9: There is a positive relationship between traceability of Halal food information and perception of wholesomeness, which leads to effective searching for Halal food information.

Table 6.2: Summary of finalized measurement items based on findings

Construct	Measurement Items
Attitude	- Eating Halal food is important for me - I eat non-Halal food - I prefer to eat Halal food over non-Halal food - Halal food and non-Halal food are the same - Halal food is cleaner than non-Halal food - Halal food tastes good - Halal food tastes better than non-Halal food - Halal food is healthy - Halal food is healthier than non-Halal food
Habit	- I eat Halal food because I am used to it - I will eat only at Halal food places - I do not observe the ingredients when I purchase food products
Awareness of individual	- I eat Halal food because it is a part of my identity as a Muslim - I will not eat if the food is doubted as not Halal - I will make sure that the food is Halal before I purchase it - I will make sure that the food is Halal before I consume it
Sources of information	There is enough information about Halal food products in the market
	- I hear about Halal food products from official sources, such as TV, radio, newspaper, or the Malaysian Islamic development department publications - JAKIM - I search for Halal food products using social media, or by asking family members and friends - I prefer to search about Halal food products using social media or by asking a family member or a friend instead of referring to official sources - Internet websites - Mass media (T.V., radio, newspapers) - Social media (Facebook, Twitter, WhatsApp) - Family members and friends - JAKIM
Process verification	- The information available from official sources about Halal food product is accurate. - I trust the information provided by the official sources about Halal food products. - The information from official sources about Halal food products is more accurate compared to the sources from non-official sources, such as social media or family and friends.

Awareness of information	• It is easier to find information about Halal food products using non-official sources, such as social media or family and friends
	• Using non-official sources, such as social media or family and friends for searching Halal food products requires a shorter time
	• Packaging
	• Quality
	• Price
	• Country of origin
	• Ingredients listed
	• Halal Logo
	• Operation by Muslims
	• Convenience
	• Ease of use
	• Speed of information retrieval
	• User-friendliness
	• Provision of full-text content
	• Availability
	• Quality of data
	• Cost
Traceability	• Halal food product traceability
	• Certified Halal logo
The validity of the Halal logo	• Collaboration between the world's Halal certification authorities

6.3   Research Contributions

The key results of this research were the differences between the agreements on attitude, habit, consumer's awareness, and information channels used (formal and informal) when seeking for Halal food among Malaysian Muslim consumers when purchasing one food item. These variations among Muslim consumers in Malaysia established the relationships between human attributes and attribute-seeking knowledge to achieve the understanding regarding the wholesomeness of Halal food items and efficiently determine the Halal food knowledge among Muslim consumers. The research contributions are explained in the following subsections.
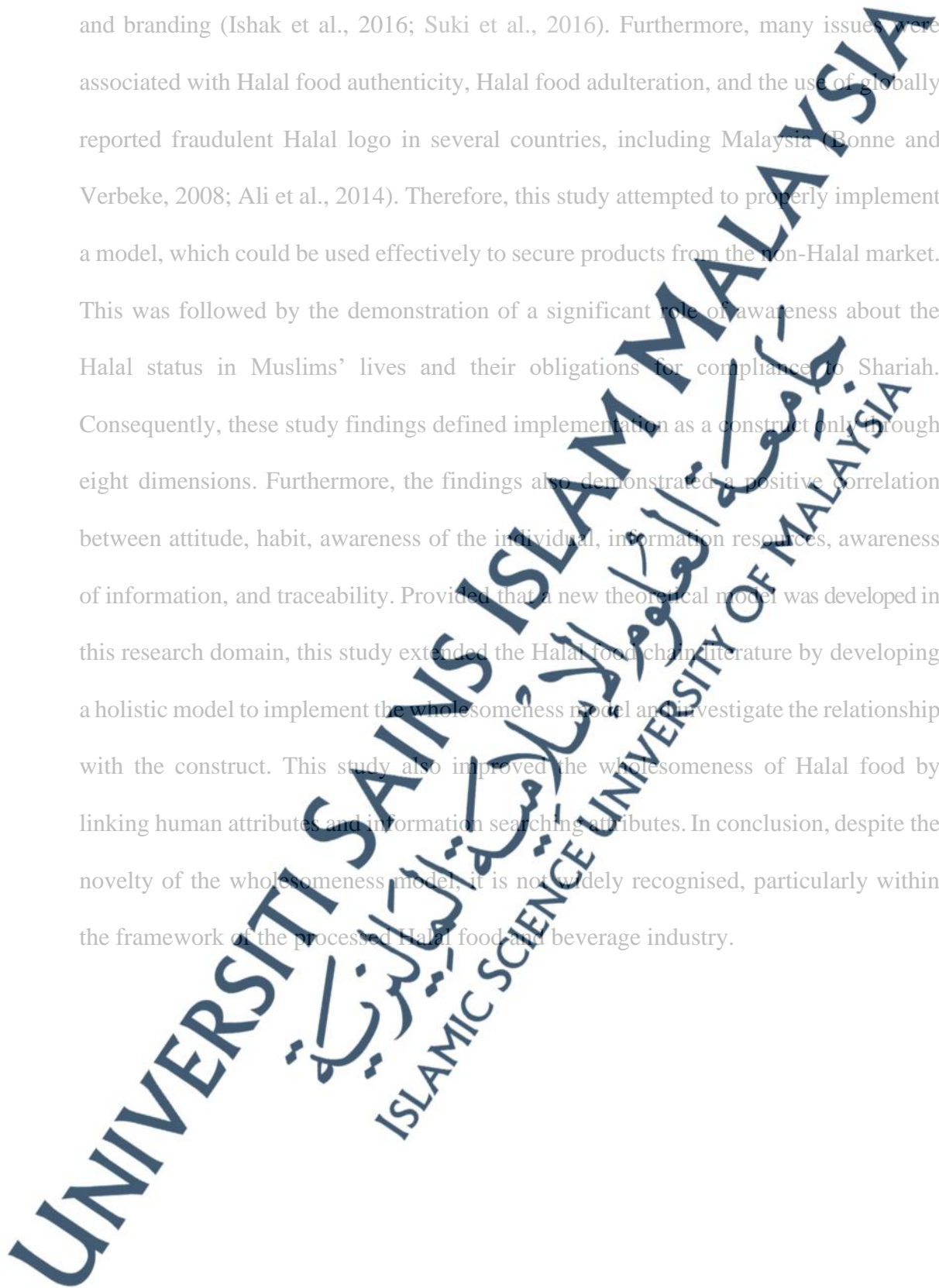
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6.3.1 Primary Contributions

Provided that Halal concepts are inseparable from Islamism, Muslim consumers are more conscious of their health and religion aspects. Therefore, the demand for Halal food is prioritized in areas where Muslim customers' preferences are regulated by Halal laws and the requirements of Halal food. Although Halal food may generally be similar to other types of food, Islamic laws should always approve and endorse its composition. In this case, manufacturing techniques are implemented, which include ingredients, handling, and the use of specific methods from the concept of implementation. The developed Halal commodities should be licensed to prevent the violation of intellectual property. Notably, Muslim consumers need to gain a deep understanding of the Halal definition. This notion is in line with the sermons of Prophet Muhammad, which emphasized the important aspects and values of Halal and Haram. Zakieah et al. (2014) and Ahasanul et al. (2015) highlighted that the Halal concept presents a sense of a product or service, which is permitted by Islamic law. The Halal concept consists of several entities, such as safety, hygiene, and product wholesomeness. Although the term Halal was generally recognized, the term may not be comprehensive for the incorporation of the "Toyyiban" aspect (wholesomeness). The term Toyyiban is derived from the word "tayyib", which could be described as things obtained through clean and lawful means. Therefore, it is indicated that compliance with fundamental Syariah parameters extends beyond the fundamentals to produce enhanced features, which contribute to positive, pure, and wholesome elements. A novel conceptual framework is related to human qualities, namely the individual's attitude, habit, and awareness regarding process verification. This process ensures that reliable and trustworthy sources of information are used, while a method of searching for Halal food information

is achieved. Subsequently, the solution to Halal food information in Malaysia could be achieved.

In this study, the most important approach to the theoretical contribution to Halal food knowledge was the analysis, which attempted to examine a holistic model of wholesomeness adoption focused on Reasoned Action Theory (TRA), Theory Planned Behaviour as an expansion of TRA, and Triandis Model (1980). Although numerous studies on the Halal food industry are emerging in the literature, no research has examined the combination of the theories in the context of Halal studies. Notably, this research is the first attempt at a theoretical foundation in Halal food knowledge for the development of wholesomeness model of Halal food among Malaysian Muslim consumers. In this case, reliable and trustworthy sources of information on Halal food industry were employed through behaviour, habit, and awareness. Additionally, this study proposed additional insight into the theory by demonstrating that this theory could be adequately described using several dimensions, which were selected to describe implementation as a framework. As a result, a new wholesomeness model for the perception of wholesomeness of Halal food products was developed and tested. Through the integration of the theory of the Halal food supply chain, this analysis expanded the knowledge developed in previous research and made an important contribution to other research works.

A recent study by Wan Omar and Jie (2015) was performed on Halal food management and the products among Malaysian Muslim consumers after the use of credible and trusted information sources to achieve positive attitude, good habit, and increase awareness towards Halal. However, the development of a systematic model was not addressed. This was followed by multiple research works on different facets of Halal food management. Previous studies focused primarily on marketing factors, such

as consumer awareness, consumer intent, purchasing behaviour, and product adoption and branding (Ishak et al., 2016; Suki et al., 2016). Furthermore, many issues were associated with Halal food authenticity, Halal food adulteration, and the use of globally reported fraudulent Halal logo in several countries, including Malaysia (Bonne and Verbeke, 2008; Ali et al., 2014). Therefore, this study attempted to properly implement a model, which could be used effectively to secure products from the non-Halal market. This was followed by the demonstration of a significant role of awareness about the Halal status in Muslims' lives and their obligations for compliance to Shariah. Consequently, these study findings defined implementation as a construct only through eight dimensions. Furthermore, the findings also demonstrated a positive correlation between attitude, habit, awareness of the individual, information resources, awareness of information, and traceability. Provided that a new theoretical model was developed in this research domain, this study extended the Halal food chain literature by developing a holistic model to implement the wholesomeness model and investigate the relationship with the construct. This study also improved the wholesomeness of Halal food by linking human attributes and information searching attributes. In conclusion, despite the novelty of the wholesomeness model, it is not widely recognised, particularly within the framework of the processed Halal food and beverage industry.
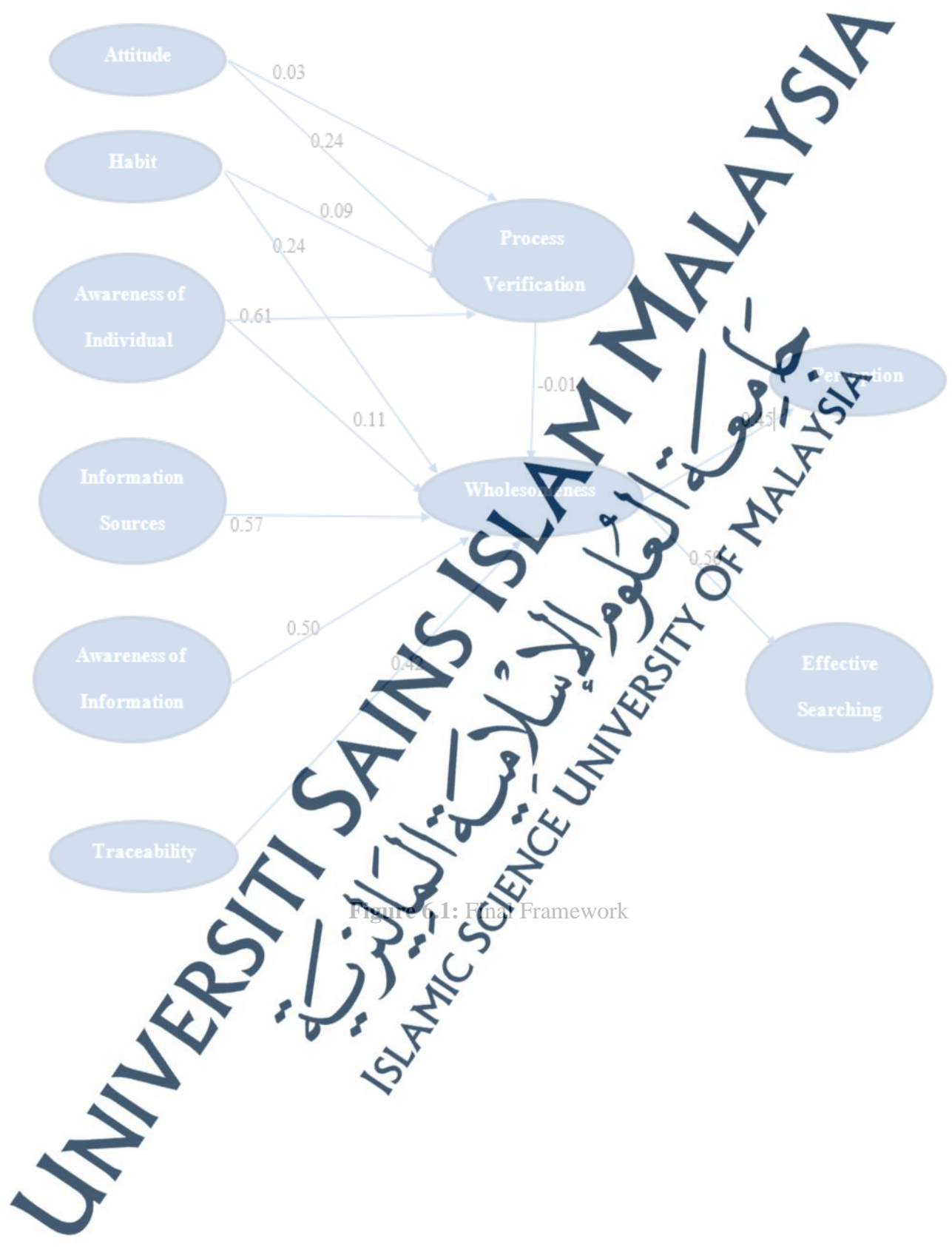
Figure 6.1: Final Framework

Attitude

Habit

0.03

0.24

0.09

0.24

Awareness of Individual

0.61

Process Verification

0.11

-0.01

Perception

0.45

Information Sources

0.57

Wholesomeness

0.50

Awareness of Information

0.42

0.56

Effective Searching

Traceability

6.3.2 Secondary Contribution

This analysis implemented a technique focused on quantitative studies. In this report, the data analysis ranged from simple to advanced statistical techniques for solving the research problems. However, minimum research employed robust statistical methods in Halal food management. Majority of the previous studies on Halal food consisted of case studies (Tieman and Che Ghazali, 2012; Zulfakar, Jie, and Chan, 2013 Ali et al., 2014). Even within the context of quantitative methods, the vast majority of Halal food industry work mainly applied either descriptive statistics or regression analysis (Omar et al., 2015). Notably, this study was one of the few Halal studies, which used structural equation modelling (CB-SEM) based on covariance (Aziz and Chok, 2013). The use of CB-SEM in this study enabled the demonstration of an observable variable for the impact of wholesomeness of Halal food industry on efficiency implementation. Additionally, CB-SEM performed a holistic test for simultaneous evaluation of the model fitness and the estimation of individual parameters (Hair et al., 2010). This technique contributed to a simpler and more accurate for the testing of hypothesis compared to the traditional statistical techniques. Therefore, this thesis may have a significant contribution to a framework for future work in terms of robustness despite the contribution from various studies through the analytical capacity of CB-SEM.

6.4 Implications of Findings

The conceptual framework generated from these major findings offered several useful implications in determining credible and trusted information sources, which motivated consumers for effective searching for Halal food products.

A positive and causal association was observed between the attitude of consumers towards Halal food and perception of wholesomeness. Therefore, it was indicated that a positive consumers' attitude towards the consumption of Halal food leads to effective searching for Halal food and the perception of wholesomeness of Halal food. The Muslim population was predicted to increase to 2.8 billion by 2050. Halal products and services market has also become viable, with the Halal industry growth within the Islamic country. Malaysia has a multicultural environment predominated by Muslims. Subsequently, acculturation occurs, which will encourage the non-Muslims in Malaysia to accept Halal food. Therefore, the impact of government actions is crucial on the relationship between Halal food choice and food assurance, acculturation influence, and personality traits. Moreover, the government should enhance consumers' attitude towards Halal food, which will reflect the effective searching process for Halal food information. Secondly, a positive and causal association was observed between the habit of consuming Halal food and perception of wholesomeness. Therefore, it was demonstrated that consumers have a habit in consuming Halal food, which would enable an effective searching for Halal food and perception of wholesomeness of Halal food.

Thirdly, a positive and causal association was present between the awareness of individual and process verification for the searching of Halal food information. Provided that if consumers had a high level of awareness, the Halal status of the food would be verified before consumption. It was indicated that the government should organize programs to increase the citizens' awareness regarding Halal food consumption. The verification process for searching for Halal food information should be enhanced.

A positive relationship was recorded between information sources used for seeking Halal food and perception of wholesomeness. It was indicated that the qualifications of information sources can be considered one of the most important factors of the success of wholesomeness of Halal food. Information or source of knowledge is a crucial construct among the Muslim community. It affects information searching and information processing, which occurs simultaneously with the concept of wholesomeness of Halal food.

It was found that awareness of information regarding Halal food was positively related to the perception of the wholesomeness of Halal food. Therefore, a significant influence of this perception on the awareness of information towards Halal food was indicated. Understanding the reason and the Muslim community's perception of Halal food products would enable manufacturers to increase their level of awareness and knowledge on Halal principles and Halal food process in to employ the most efficient method of communicating marketing information to their consumers.

A positive and casual association was found between the traceability of Halal food information and perception of wholesomeness of Halal food. It was indicated that the government should increase the traceability of Halal food such to encourage effective searching process for Halal food information among the consumers.

6.5 Research Limitations

Few limitations were identified in this study. Specifically, the research was conducted for practical purposes with a highly limited number of respondents. Therefore, the sample did not represent the entire population of the country. Future studies should consider a larger population involving more states in Malaysia. In this study, the selected age category was from 25 to 32 years old, which did not represent

all age categories consuming Halal food. Nevertheless, this age group was involved in this study due to easy accessibility and the overall ageing effect. Other factors included the upward drift in religious intensity and strength of beliefs over the adult lifespan, though religious attendance remained generally stable throughout adulthood until it was reduced in the later life phase (Bengtson, 2015).

6.6   Recommendations for Future Research

Potential work may concentrate on verifying the relationships in other contexts, such as the relationship between the previously mentioned human attributes in this work and other knowledge-gathering attributes, such as the sources of intelligence. Subsequently, another solution and recommendation for Halal food were achieved. Provided that this study was limited to Muslim consumers in Malaysia, potential studies would possibly focus on non-Muslim consumers in Malaysia and other countries. Halal food should also be cooked, processed, and produced in a hygienic way to create healthy human consumption.

6.7   Chapter Summary

This chapter presented the hypothesized structural model, while the results of the hypotheses under it were supported. The hypothesized model, which included the proposed hypotheses (H1 to H10), was tested using SEM based on covariance. Using SEM, the relationships within a set of structures with sample data may be investigated, while the proposed models would be tested (Breckler, 1990; Kline 2015). According to prediction, eight dimensions or first-order structures were found to reflect the application of the Halal food wholesomeness model. It was also highlighted that the wholesomeness model implementation framework could be developed. Despite the

results of the relationships, the implication model was shown to be positively associated with attitude, habit, individual awareness, information resources, information knowledge, and traceability. Furthermore, the Halal food industry is encouraged by the increasing demand for initiating its growth through the global supply chain. The Halal food market is faced with several problems and challenges. Notably, this research was motivated by the increasing authenticity and adulteration concerns within the global Halal food industry. The lack of systematic analysis and reliable structure in managing the Halal food chains were other reasons for conducting this study. Although several Halal studies were based about the Halal food market, a limited number of studies established a formal model for the implementation of wholesomeness of Halal food among Muslim communities.

The discussion in earlier chapters demonstrated the importance for the Muslim community to implement proper Halal food planning, including building and maintaining a model of Halal food implementation to grant credibility to customers. However, the setting for this study was limited to the food and beverage industry of Malaysia, which provides Halal-processed food. As a result of leadership in the global Halal food space, the current study was performed in Malaysia as a research setting, which continued to lead the field of Halal requirements, legislation, management, and supply chain processes (Reuters, 2015). Furthermore, CB-SEM was used to examine the calculation model validity and test the interaction between the constructs. This evaluation was a comprehensive multivariate study, which allowed a more reliable evaluation of performance. The findings of this analysis suggested that six fundamental dimensions were identified for the final model of wholesomeness in the food industry. To illustrate, the tests were found to be statistically relevant. It was also found that the implementation of wholesomeness model had a significant impact on Malaysian

Muslim consumers' view of the wholesomeness of Halal food items by utilizing reliable and trustworthy sources of knowledge to achieve an understanding of Halal food. In the background of the packaged food and beverage sectors, this work underlined the essential aspects of the concept of wholesomeness model implementation. The scales, which were constructed along with the research implications, have been aimed to be useful for further study and applications. Overall, the results of this report have offered a broad information base on the Halal food market and may provide valuable perspectives for academic applications and business.