

Knowledge, Attitudes, and Practices on Halal Certification Management for Small and Medium Food Entrepreneurs in Kota Kinabalu, Sabah

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ABSTRACT

This study on knowledge, attitudes, and practices of Halal Certification management was conducted to examine the level of knowledge about halal certification management among Small and Medium Enterprises (SME) in Kota Kinabalu, Sabah. In addition, it was also conducted to study the attitudes and practices performed by food entrepreneurs. This study employed a questionnaire consisting of four sections. Section A, B, C, and D consists of six to nine questions related to demographic information, knowledge, attitudes, and practices, respectively. A total of 384 respondents were involved in this study. Data analysis included frequency distribution, Chi-square test and Spearman's correlation to investigate the relationship between the factors. Based on study results, most respondents had high level of knowledge about Halal certification management. A total of 267 (69.6%) respondents had a score of more than 50%, and 117 (30.5%) respondents had a score of less than 50% for level of knowledge. Based on Chi-square values, all demographic factors (gender, age, religion, races, company type, total monthly earnings) showed significant association with knowledge levels. Meanwhile, based on Spearman's correlation, a very weak negative relationship was found between knowledge and attitude ($r=-0.103$, $p=0.043$), whereas no significant relationship was found between knowledge and practice ($r=0.048$, $p=0.344$) of respondents regarding halal certification management. Based on the findings, to maximise benefits from Halal certification, entrepreneurs should focus on implementing effective practices rather than merely acquiring knowledge. This can lead to increased market access, business growth, and economic prosperity.

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1. Introduction

The rapid growth of small and medium industries (SMI) has made them an integral part of the economy of Malaysia, contributing over 65% to employment and 50% of the nation's domestic product. As the majority of the population in Malaysia consists of Muslims (63.5%), it is crucial for small and medium food entrepreneurs to practice good halal certification management. The concept of halal certification has gained global recognition, and Malaysia's Halal Certification meets international standards such as Good Manufacturing Practice (GMP) and Good Hygiene Practice (GHP). This study aimed to examine the level of knowledge, attitudes, and practices of halal certification management among small and medium food

entrepreneurs in Kota Kinabalu, Sabah, and assess the inter relationship of those factors. Understanding the importance of good halal certification management not only serves as a quality marker but also improves overall organisational performance. Halal certification is a holistic application of the *halalan toyyiban* concept, ensuring that products are suitable for consumption, drinking, and use by consumers. The Malaysian Halal Certification Procedure Manual outlines the eligibility criteria and conditions for obtaining a halal certificate, which includes registration under the Companies Commission of Malaysia, a valid business license and compliance with halal standards. Various acts and laws are referenced in the formation of halal certification manuals, such as the Trade Descriptions Act 2011, Food Act 1983, Food Regulations 1985, Animal Act 1953, the Slaughterhouses Act 1993, and the Animal (Importation) Order 1962. These acts ensure that entrepreneurs apply good trade practices and protect consumers from health hazards, particularly in the food industry. By understanding the knowledge, attitudes, and practices of halal certification management among small and medium food entrepreneurs, this study can help improve the level of knowledge, attitude, and practice in halal certification management. It can also serve as a guideline and reference material for future research on halal certification management. Ultimately, this study aims to contribute to the growth of the halal industry in Malaysia and ensure that food products meet the halal requirements and maintain their certification status.

Based on the definition of SMI, entrepreneurs involved in this industry do not use sizable capital and mostly may consist of part-time workers (Sajiah *et al.*, 2021). Due to the growing development of the Small and Medium Food Industry in Malaysia, the halal certification system should also be practiced among small and medium food entrepreneurs. This is because most of the population in Malaysia consists of Muslims of which 63.5% are Muslims. In fact, by 2030, the global Muslim population is expected to increase by 7% from 23% of the world's population (Zizi, 2022). Today, more and more people are becoming aware and concerned about purchasing halal products, especially food products. To gain the trust of buyers, good Halal certification management must be improved among entrepreneurs. Furthermore, good management of Halal certification, especially among small and medium food entrepreneurs, can help SMI to grow further in line with the vision to make Malaysia a halal hub. Therefore, it is very important for every food entrepreneur to know the good management of halal certification so that the products produced would meet halal requirements as well as maintain halal certification status, as issued by the authorities. Moreover, it also aims to make food entrepreneurs aware of how important it is to increase knowledge and understanding of halal certification management to ensure the importance of consuming halal food to preserve the faith and spirituality of a Muslim.

Currently, there are still many small and medium food entrepreneurs who do not reflect good attitudes and practices in the management of Halal certification. This is apparent in food entrepreneurs that still underestimate the importance of ensuring that the halal assurance system is managed as best as possible despite the emphasis on the importance of halal issues, especially among food entrepreneurs. Food operators should be sensitive about good halal certification management. However, there may be a small number of food entrepreneurs that still do not understand the concept of halal and this could lead to the enactment of cases that violate the halal assurance system. For example, the issue of the existence of fake halal logos and halal certifications is increasingly prevalent in the country due to the attitude of self-serving entrepreneurs. Therefore, this study was conducted to examine the level of knowledge, attitudes, and practices of halal certification management among small and medium food entrepreneurs in Kota Kinabalu, Sabah. The results of this study can benefit not only entrepreneurs, but also keep the community open-minded in improving the level of knowledge, attitude, and practice in halal certification management.

2. Materials and Methods

In this study, a quantitative survey method using a questionnaire was used. A survey consisting of a series of questions was administered to a representative section of the population aiming to find out the opinions, attitudes, or behaviours of respondents on certain issues. The characteristics of a good survey consists of specific objectives, a good work plan, appropriate questions, appropriate sampling from the population, good analysis and management as well as reliable sources and accurate presentation of survey data (Fink, 2003). The survey was self-administered and the questions in the survey were included in a test form on knowledge, attitudes and practices in halal certification management. The form was distributed to small and medium food entrepreneurs around the Kota Kinabalu area.

2.1 Sample Size Determination

The target population was small and medium food entrepreneurs in Kota Kinabalu who implement halal assurance system. Kota Kinabalu was chosen as the study location due to its accessibility, population density, cultural context, relevance to the research topic and availability of selected target group. These factors make it an ideal location for conducting a survey among small and medium food entrepreneurs. Initially, the total population was not easily estimated since there are no comprehensive census data due to frequent change in numbers. Furthermore, information is scarce from reliable sources. There is no data on the total number of small and medium food entrepreneurs in Kota Kinabalu nor in the state of Sabah. Therefore, the sample size for this study was estimated using the Cochran formula (1997) because the information on the population of small and medium food entrepreneurs in Kota Kinabalu, Sabah was not available. The formula is shown below:

$$n_0 = \frac{(Z)^2(p)(q)}{e^2} \quad (1)$$

Where:

Z = 1.96 (95% Confidence level)

p = The maximum possible ratio will result in a maximum sample size which is 0.5

q = 1 - p

E = Acceptable margin of error for the estimated portion

2.2 Sampling Method

Small and medium food entrepreneurs in Kota Kinabalu were selected as the population by purposive sampling, a type of sampling in which respondents are chosen based on certain criteria that fulfil the purpose of the study. Purposive sampling is often used in studies that require specific characteristics for a population of interest (Notoatmodjo, 2010). In this study, the study sample only focused on the population of small and medium food entrepreneurs in Kota Kinabalu. According to Sekaran and Bougie (2009), this sampling technique is suitable when a limited category of people has the requisite information that is sought. Based on the Cochran formula above, a sample size of 657 entrepreneurs as respondents was calculated. However, only 384 respondents completed the questionnaires. Due to the non-random selection of purposive sampling, limitations like selection bias may be present. Consequently, the findings might not represent other populations or regions accurately. However, justification from Rascoe's rule of thumb was applied. According to Rascoe (1975), it is deemed suitable in most studies if the total number of respondents that answered the questionnaire is between >30 and <500. Obtaining large sample size and pilot testing efforts help mitigate these issues.

2.3 Study Instruments

The questionnaire was used as a tool to collect data/information on the level of knowledge, attitudes and practices of halal certification management among small and medium entrepreneurs in Kota Kinabalu. The questionnaire form was distributed online to the respondents. All questions were concise and in Malay to make it easier for respondents to understand the questions and to ensure that respondents would not take long to complete the questionnaire.

2.4 Data Collection Process

This study was conducted on small and medium food entrepreneurs in Kota Kinabalu, Sabah. To conduct this study, an online questionnaire was distributed to the respondents. The questionnaire was built based on Latif and Rahman (2020) with some modifications to align with the study objectives. It consists of four sections; section A includes demographic information while section B, C and D, includes questions on the

respondent's knowledge, attitudes, and practices towards halal certification management, respectively. A pilot study (n, 30) was conducted to ensure that the questions in the questionnaire were easy to understand and able to provide the data desired by the researchers. It was conducted before the actual study was conducted to determine the reliability of the questions provided.

2.5 Data Analysis

Data analysis for this study was carried out using IBM SPSS statistical software package version 26. The statistical tests used in data analysis were descriptive and inference statistics. The analyses carried out included:

a) Frequency distribution

Frequency distribution or frequency analysis was conducted on respondents' demographic characteristics such as gender, age and religion. Analysis results were expressed as average and percentage values and presented in a table and/or bar chart. Through descriptive statistical analysis methods, the data obtained is easier to interpret.

b) Chi-square Analysis

Inference statistics is used to make estimates about population characteristics based on the characteristics of a representative sample. Therefore, conclusions can be drawn regarding the nature of a population through the inference statistics method (Alias, 1997). In this analysis method, the Chi-square method was used where the purpose is to study the relevance of the respondents' demographic factors and the respondents' level of knowledge.

c) Spearman Correlation Analysis

The correlation method was used to study the strength of the relationship between two continuous variables (Pallant, 2005). The Spearman correlation test was used in this study where it is a 'nonparametric' statistical test used to analyse data that are not normally distributed (Hauke and Kossowski, 2011). In this study, the Spearman correlation test was used to examine the strength of the relationship between two variables; the relationship between the level of knowledge and attitudes in the management of halal certification among small and medium food entrepreneurs in Kota Kinabalu and the level of knowledge and halal certification management practices among small and medium food entrepreneurs in Kota Kinabalu. The r value indicates the strength of whether there is a weak or strong association between the variables. In this study, the r value (Table 1) was used as described by Davis (1971).

Table 1. Correlation coefficients

Coefficient value, r	Description
0.70 or more	A very strong link
0.50 – 0.69	Strong links
0.30 – 0.49	Simple relevance
0.10 – 0.29	Weak linkage
0.01 – 0.09	Very weak link

3. Results and Discussion

Prior to the actual survey, a pilot study was conducted on 30 respondents who had been selected among small and medium food entrepreneurs in Kota Kinabalu, Sabah. According to Kumar (2005), a total of 30

respondents is sufficient to conduct a pilot study. In addition, the time taken to answer this survey form was within 5-10 minutes. According to Bond and Fox (2007), the reliability of a survey is indicated by an alpha value of 0.70 or above. Alpha Cronbach's results obtained after conducting the overall reliability test of this questionnaire was 0.726 and this indicated that the questions in the questionnaire were suitable.

3.1 Demographic

In this study, a total of 384 respondents consisting of small and medium food entrepreneurs in Kota Kinabalu, Sabah were involved. The data analysis of this section is on the demographic characteristics of entrepreneurs including gender, age, religion, race, type of enterprise, and monthly income. The demographic data presented in Table 2 represents a group of people, with the majority being women (69.8%) and individuals between the ages of 31 and 40 (54.4%). The most prevalent religion is Islam (68%), and the largest ethnic group is Sabah native (43.5%). The majority of the individuals are employed in sole proprietorships (68%), and the most common monthly income range is RM1000-RM2999 (37.2%). Notably, a significant portion of the population earns less than RM1000 (17.7%). The presence of sharing companies is minimal, with only 4.7% of the individuals being involved in them.

Table 2. Frequency and percentage of respondents involved in this study

No.	Demographics	Category	Frequency	Percent (%)
1.	Gender	Men	116	30.2
		Woman	268	69.8
2.	Age	21 - 30 years old	97	25.3
		31 - 40 years old	209	54.4
		41 -50 years old	62	16.1
		51 -55 years old	12	3.1
		56 years and older	4	1.0
3.	Religion	Islam	261	68.0
		Christian	62	16.1
		Buddha	35	9.1
		Hindu	26	6.8
4.	Race	Malay	103	26.8
		Chinese	62	16.1
		Indian	52	13.5
		Sabah native	167	43.5
5.	Company type	Sole proprietorship	261	68.0
		Sharing	18	4.7
		Private Limited	105	27.3
6.	Total monthly earnings	Less than RM1000	68	17.7
		RM1000 - RM2999	143	37.2
		RM3000 - RM4999	91	23.7
		RM5000 - RM6999	34	8.9
		RM7000 - RM8999	11	2.9
		RM9000 and above	37	9.6

3.2 Knowledge of Halal certification

In this study, a total of 9 questions were used to test the level of knowledge of small and medium food entrepreneurs in halal certification management. Based on Figure 1, out of the 380 respondents, 90.9% correctly defined Halal certification, demonstrating a high level of knowledge among small and medium food entrepreneurs in Kota Kinabalu. The definition of Halal certification is a document that states Halal on a product to be consumed, drunk, and used by Muslims (Zainal Abidin, 1993). JAKIM in each state branch plays a role in implementing activities related to halal certification such as inspection and monitoring of premises (Norliza, 2006). A total of 50.3% of respondents correctly identified JAKIM as the body responsible, while 50.3% were incorrect or uncertain. The Malaysian Halal Certification Procedure Manual serves as a guide for obtaining Halal certificates, with 60.9% answering correctly. Regarding the section involved in Halal certification, 70.3% answered correctly. Almost all respondents (99%) knew that food product manufacturers are eligible to apply for Halal certification. Industries that need to obtain Halal certification are all industries except the service industry. These industries include the food products industry, the slaughterhouse industry and the goods used by Muslims (JAKIM, 2004).

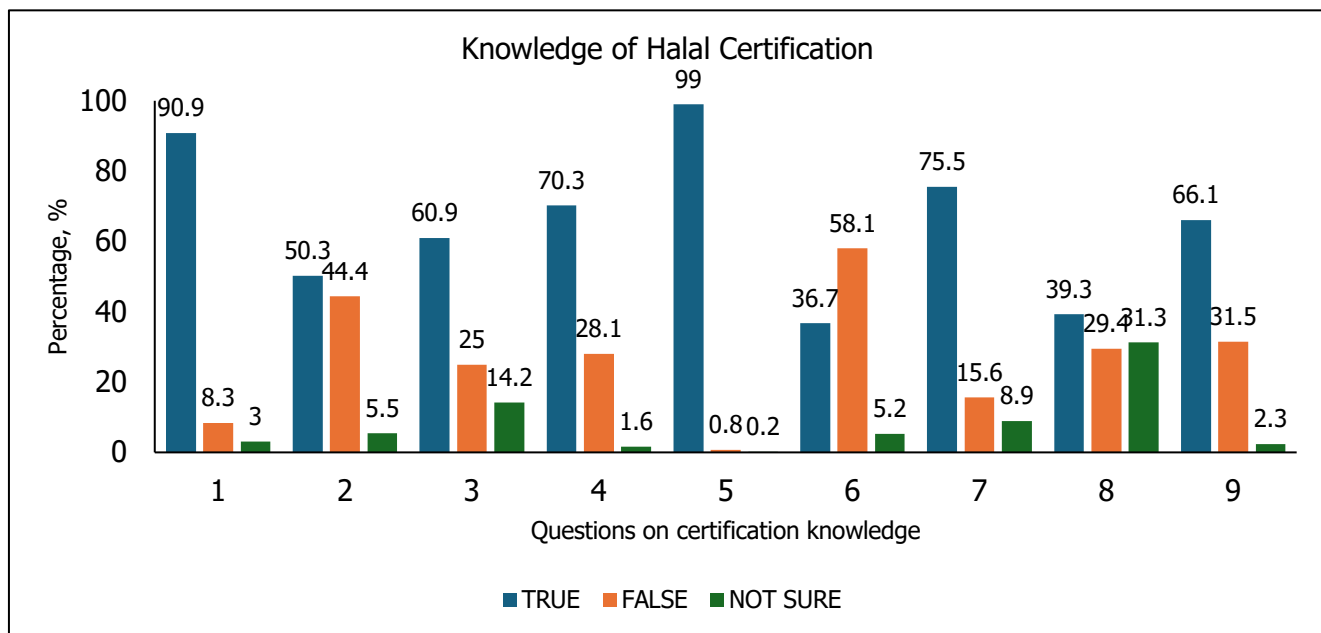


Figure 1: Halal Certification Knowledge

Only 36.7% of respondents correctly identified the industries requiring Halal certification. The most important part of Halal certification is documentation. Complete documentation such as business registration, industry profile, description of the products used, and the rest helps to obtain Halal certification more easily (MPPHM, 2005). A total of 75.5% understood the importance of documentation for obtaining certification. Only 39.3% of respondents knew that the validity period of the Malaysian Halal Certification is 2 years where it will be monitored to ensure that the industry that obtains the Halal certificate follows the correct implementation procedures (SIRIM, 2004), and 66.1% identified JAKIM as the issuer of the Halal certification logo. Respondents needed to answer 9 questions to test their knowledge of halal certification. Their level of knowledge was determined based on the predetermined scoring standards where in this study, entrepreneurs who scored more than 50% on halal certification knowledge were counted as knowledgeable respondents. Meanwhile, respondents who scored less than 50% were less knowledgeable respondents (Murat *et al.*, 2004). Most respondents who scored more than 50% were 267 (69.5%). Meanwhile, 117 (30.5%) respondents scored less than 50% and this might be due to various reasons, including inadequate training or education on the subject, lack of familiarity with the specific requirements for different industries, or insufficient understanding of JAKIM's role in implementing activities related to halal certification. Additionally, some may not have accessed or been aware of relevant resources such as the Malaysian Halal

Certification Procedure Manual and JAKIM's guidelines. From the data, it can be concluded that most small and medium food entrepreneurs in Kota Kinabalu have a high level of knowledge on halal certification management.

3.3 Attitude towards Halal certification

To find out the attitude of food operators towards halal certification, respondents were asked to choose a statement in the questionnaire using a five-point Likert scale. According to Table 3, 92.2% of respondents strongly agreed that entrepreneurs, especially Muslims, should understand the concept of Halal, while 86.7% stressed the importance of knowing Halal certification management to avoid misuse of Halal logos, withdrawn or fake certificates. Several important things that need to be implemented to ensure compliance with halal certification guidelines are implementation of the main elements in Halal certification, namely halal and toyyib elements (Khairul Anwar *et al.*, 2017). Therefore, by referring to the guidelines on the concept of halal, it can make it easier for entrepreneurs to distinguish between halal and haram (Nor Aini & Mohd Ali, 2013). A total of 79.7% believe Halal certification should meet convincing criteria of using Halal materials, encompassing activities and employees (Nor Aini and Mohd Ali, 2013).

Table 3. Frequency of respondents based on attitude

No.	Questions	SDS	DS	NS	A	SA
		n (%)	n (%)	n (%)	n (%)	n (%)
1.	In your opinion, is it important for especially a Muslim entrepreneur to know the concept of halal?	0	0	0	30 (7.8)	354 (92.2)
2.	In your opinion, is it important for especially a Muslim entrepreneur to know about halal certification management?	0	0	2 (0.5)	49 (12.8)	333 (86.7)
3.	Do you believe that the recognition of a halal certificate must meet convincing criteria that it is made of halal materials?	0	0	5 (13)	73 (19)	306 (79.7)
4.	As an entrepreneur, do you play a role in ensuring compliance with halal certification guidelines?	0	0	0	69 (18)	315 (82)
5.	As an entrepreneur, you will not display counterfeit halal logo before obtained JAKIM's recognition?	0	0	0	19 (4.9)	365 (95.1)
6.	Will you make sure a product has the right halal logo before making a purchase?	0	0	40 (10.4)	90 (23.4)	254 (66.1)
7.	Will you not proceed to buy a food product after knowing that the halal certificate for the product has been withdrawn?	0	0	21 (5.5)	44 (11.5)	319 (83.1)
8.	Will you not continue selling food products after knowing that the food is not halal certified by JAKIM?	0	0	6 (1.6)	39 (10.2)	339 (88.3)

Likert scale consists of 5-Strongly agree (SA), 4-Agree (A), 3-Not sure (NS), 2-Disagree (DS) and 1-Strongly disagree (SDS).

Most entrepreneurs ensure compliance with Halal certification guidelines and refrain from displaying unauthorized Halal logos. This is because displaying the halal logo is illegal and if convicted, can be fined up to RM1 million or imprisoned for not more than three years or both for individuals, while for companies or corporate bodies, it is a fine of up to RM5 million (National Security Council, 2022). A total of 66.1% of respondents strongly agreed on checking the Halal logo before purchasing products. They disapprove of continuing to buy food products with withdrawn or unrecognized Halal certificates. This is because, a

recalled and unrecognised halal certificate reflects a product that does not meet the standards to obtain a valid Halal certificate. The attitude score was then analysed through the number of scores obtained for each respondent. This study found that most respondents, 377 (98.2%), obtained excellent scores ranging from 81-100 while the remaining 7 (1.8%) respondents received good scores ranging from 61-80. The study found that a majority of food entrepreneurs in Kota Kinabalu, Sabah had positive attitude towards halal certification. They understood the importance of knowing halal concepts and proper halal certification management to avoid misuse of Halal logos and certificates. Most respondents strongly agreed on implementing halal and toyyib elements, ensuring compliance with guidelines, checking halal logos before purchasing products and disapproving the purchase of products that have withdrawn or unrecognized halal certificates. Most respondents received excellent scores in the attitude assessment, indicating a commitment to proper halal certification management among small and medium food entrepreneurs in the area.

3.4 Respondents' level of practice

In this study, the practice on halal certification management was studied among respondents consisting of small and medium food entrepreneurs around the Kota Kinabalu area. There were 8 questions that respondents had to answer in this regard.

Table 4. Frequency of respondents based on Halal certification practices

No.	Questions	SDS	DS	NS	A	SA
		n (%)	n (%)	n (%)	n (%)	n (%)
1.	I display a halal logo that has been legally issued by the authorities	0	0	21 (5.5)	87 (22.7)	276 (71.9)
2.	I ensure that the materials used are from animals that are halal to Muslims according to sharia law.	0	0	4 (1.0)	62 (16.1)	318 (82.8)
3.	I make sure that the ingredients used are from animals that have been slaughtered according to sharia law.	0	0	5 (1.3)	93 (24.2)	286 (74.5)
4.	I make sure the product provided does not contain <i>najis</i> according to sharia law.	0	0	0	62 (16.1)	322 (83.9)
5.	I make sure the product provided edible, non-toxic, non-intoxicating and not detrimental to health.	0	0	0	65 (16.9)	319 (83.1)
6.	I make sure the product processed or manufactured not using faecal contaminated equipment by sharia law.	0	0	3 (0.8)	44 (11.5)	337 (87.8)
7.	I make sure the product does not contain any of the proportion of parts of human being or the products thereof that are not permissible by sharia law.	0	0	0	30 (7.8)	354 (92.2)
8.	I make sure the product is isolated from other food which do not comply with the halal requirements during preparation, processing, packaging, storage and transportation.	0	0	0	81 (21.1)	300 (78.1)

Likert scale consists of 5-Strongly agree (SA), 4-Agree (A), 3-Not sure (NS), 2-Disagree (DS) and 1-Strongly disagree (SDS).

In the survey of 385 respondents in Table 4, 71.9% agreed to displaying legally issued Halal logos, while 82.8% and 74.5% ensured materials from animals were Halal and slaughtered according to Sharia law. A total of 74.5% strongly agreed on using Sharia-compliant animal sources. The majority of

respondents followed hygiene practices in complying with Halal certification management, with 83.9% ensuring products were clean, 83.1% ensuring product safety, and 92.2% avoiding non-permissible human parts. A total of 78.1% practiced separating Halal products from non-Halal during preparation, processing, storage, and transportation. The attitude score was then analysed through the number of scores obtained for each respondent. The study found that most respondents, 363 (94.5%) people, obtained a very good score between 81-100 indicating a strong commitment to proper halal certification management practices among food entrepreneurs in the area. The study revealed that a majority of small and medium food entrepreneurs in Kota Kinabalu have excellent practices in halal certification management. Most respondents agreed on displaying legally issued Halal logos, using halal materials from animals slaughtered according to Sharia law, and ensuring product hygiene and safety. They also practiced separating halal products from non-halal during preparation, processing, storage, and transportation.

3.5 Chi-square Test

In this study, Chi-square test was used to examine the relationship between demographic factors and the level of knowledge on halal certification management among small and medium food entrepreneurs in Kota Kinabalu, Sabah. Based on Table 5, the Chi-square value that assessed the relationship between level of knowledge and demographic factors such as gender, age, religion, race, type of enterprise, and monthly earnings showed that there was a significant and positive relationship. It can be concluded that all demographic factors affect respondents' level of knowledge.

Table 5. Relationship between respondents' level of knowledge and demographic factors

Demographic factors	X² value	P value
Gender	32.251	0.001*
Age	226.417	<0.001*
Religion	80.904	<0.001*
Race	100.510	<0.001*
Company type	42.644	0.011*
Total monthly earnings	210.795	<0.001*

*Chi-square test, significant at $p < 0.05$

3.6 Relationship between Knowledge-Attitude

The correlation coefficient between knowledge and attitude is $r = -0.103$, indicating a weak negative association. This means that as knowledge increases, attitude tends to decrease, or vice versa. The significance level of $p = 0.043$ (2-tailed) suggests that this correlation is statistically significant at the 0.05 level. This implies that there is a genuine relationship between the two variables, and changes in one are likely to be accompanied by changes in the other. This indicated that knowledge of halal certification management by the respondents may not positively reflect their attitude in good halal certification management.

3.7 Relationship between Knowledge-Practice

The correlation coefficient between knowledge and practice is $r = 0.048$, indicating a very weak association. This means that there might be little evidence showing that increase in knowledge may lead to increase in practice, or vice versa. Furthermore, $p = 0.344$ (2-tailed) is above the 0.05 level, indicating that this correlation is not statistically significant. This suggests that the association between knowledge and practice is not statistically meaningful. This is in contrast to another study which found that awareness of good halal certification management positively influences the practices of food entrepreneurs (Nor Ardyanti

et al., 2013). These findings indicate that while knowledge may not directly affect practice, there may be other factors at play that influence the adoption of good halal certification management practices such as regulatory demands or market trends that play a more crucial role in shaping halal management practices.

Conclusion

Based on the study that has been conducted, it can be concluded that the respondents consisting of small and medium food entrepreneurs in Kota Kinabalu had high level of knowledge in halal certification management. This can lead to increased market access, business growth, and economic prosperity. A majority of food entrepreneurs in Kota Kinabalu, Sabah, had positive attitude towards halal certification and followed best practices. Most agreed on implementing halal elements, ensuring compliance with guidelines, and rejecting products with withdrawn or unrecognized certificates. The majority of respondents scored highly in the attitude assessment, indicating a strong commitment to proper halal certification management practices among food entrepreneurs in the area. However, some food entrepreneurs should be given more in-depth exposure to implement good halal certification management particularly those who scored less than 50%. The data suggests that various factors influence halal management among small and medium food entrepreneurs in Kota Kinabalu, Sabah. Demographic factors like gender, age, religion, race, enterprise type, and income significantly impact knowledge about halal certification. However, there is a weak negative relationship between knowledge and attitude, indicating that increased knowledge might not necessarily lead to a more positive attitude. There was no significant correlation between knowledge and practice, suggesting that other elements such as regulatory demands or market trends play a more crucial role in shaping halal management practices. Future research should include in-depth interviews and cross-regional comparisons to better understand these dynamics and their implications. Programmes such as seminars and strategised Halal certification courses should be carried out especially for respondents who obtained low scores for level of knowledge. Training programmes and workshops can help them navigate Halal certification complexities. This may be used to further evaluate the differences in knowledge about halal certification pre and post intervention.

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