

FACTORS INFLUENCING INFORMATION
SEEKING BEHAVIORS FOR HALAL FOOD
AMONG MALAYSIAN MUSLIMS CONSUMERS
IN MALAYSIA

FIRAS SALEH MUSTAFA SMARI

UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

UNIVERSITI SAINS ISLAM MALAYSIA

FACTORS INFLUENCING INFORMATION SEEKING
BEHAVIORS FOR HALAL FOOD AMONG MALAYSIAN
MUSLIMS CONSUMERS IN MALAYSIA

Firas Saleh Mustafa Omari

Thesis submitted in partial fulfillment for the degree of
DOCTOR OF PHILOSOPHY IN
SCIENCE AND TECHNOLOGY

UNIVERSITI SAINS ISLAM MALAYSIA

April 2021

AUTHOR DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

Date: 29 April 2021

Signature: 

Name: Firas Saleh Mustafa Umari

Matric No: 4140102

Address:

Jordan University of Science and
Technology/ Faculty of Science and Arts
Irbid- Jordan

UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA



AUTHOR DECLARATION AND COPYRIGHT

Author's Full Name:

FIRAS SALEH MUSTAFA OMARI

Student's Number:

4140102

Title:

FACTORS INFLUENCING INFORMATION SEEKING BEHAVIORS FOR HALAL FOOD AMONG MALAYSIAN MUSLIMS CONSUMERS IN MALAYSIA

Academic Session:

2nd Semester 2020/2021

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

I hereby declare that the work in this thesis as:

CONFIDENTIAL

Contains confidential information under the Official Secret Act 1972.*

RESTRICTED

Contains restricted information as specified by the organization where research was done.**

OPEN ACCESS

I agree that my thesis to be published as online open access (fulltext).

I acknowledged that Universiti Sains Islam Malaysia (USIM) reserves the right as follows:

1. The thesis is solely owned by Universiti Sains Islam Malaysia as stated in the Universiti Sains Islam Malaysia Intellectual Property Policy.
2. The library of Universiti Sains Islam Malaysia has the right to publish my thesis as online open access (fulltext) and make copies for the purpose of research or teaching and learning only.

(Signature of Student)

0238241

(MyKAD No./ Passport No.)

Date: 29th April, 2021

(Signature of Supervisor)

Dr. Norhidayah Azman

(Name of Supervisor)

Date: 29 Apr 2021

Notes: *If the thesis is confidential, please attach with the letter from the organization with period and reasons for confidentiality.

**The restricted thesis will be published as online access (fulltext) after 3 years from the date produced.

ACKNOWLEDGEMENT

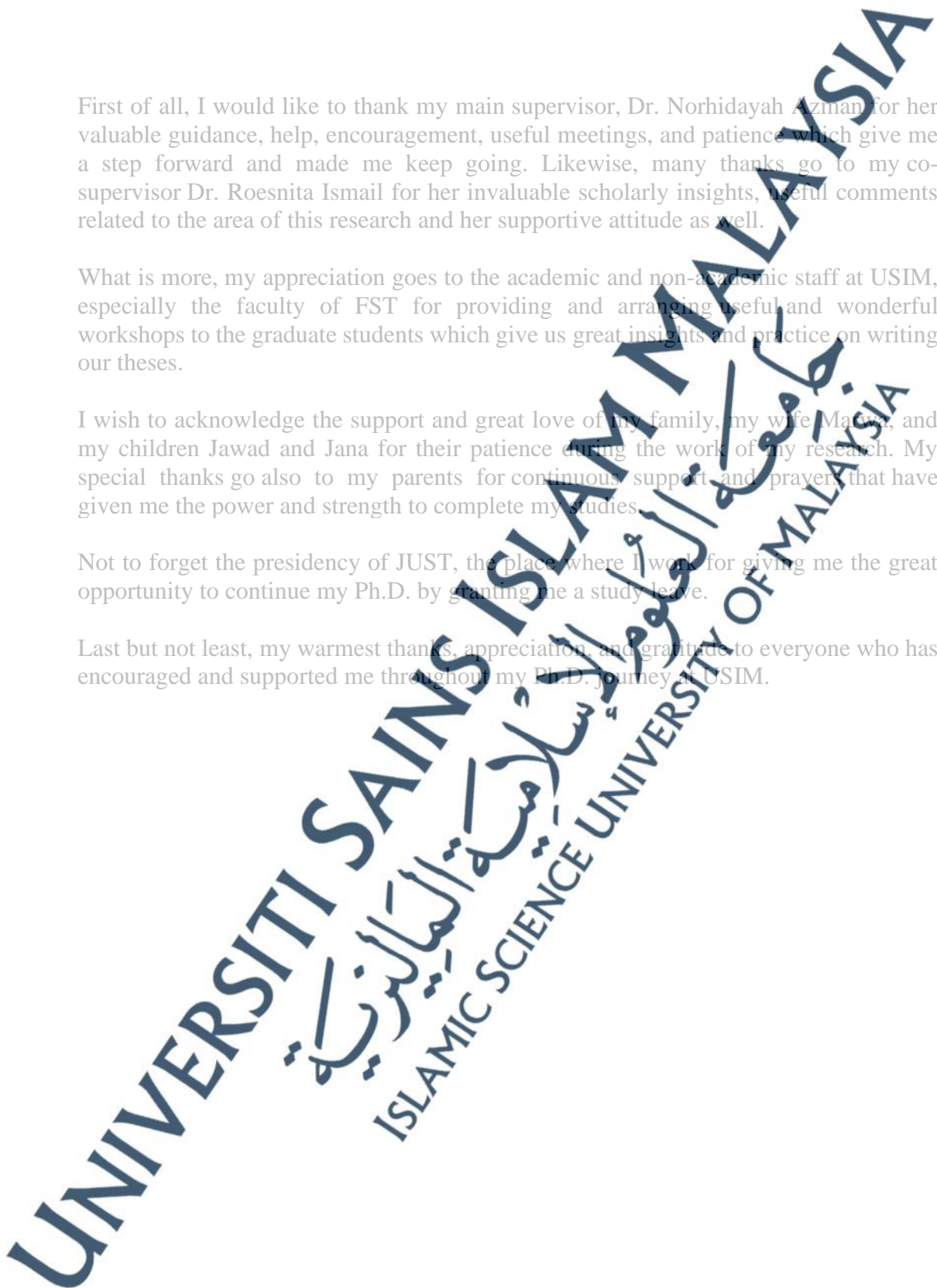
First of all, I would like to thank my main supervisor, Dr. Norhidayah Azman for her valuable guidance, help, encouragement, useful meetings, and patience which give me a step forward and made me keep going. Likewise, many thanks go to my co-supervisor Dr. Roesnita Ismail for her invaluable scholarly insights, useful comments related to the area of this research and her supportive attitude as well.

What is more, my appreciation goes to the academic and non-academic staff at USIM, especially the faculty of FST for providing and arranging useful and wonderful workshops to the graduate students which give us great insights and practice on writing our theses.

I wish to acknowledge the support and great love of my family, my wife Marwa, and my children Jawad and Jana for their patience during the work of my research. My special thanks go also to my parents for continuous support and prayers that have given me the power and strength to complete my studies.

Not to forget the presidency of JUST, the place where I work for giving me the great opportunity to continue my Ph.D. by granting me a study leave.

Last but not least, my warmest thanks, appreciation, and gratitude to everyone who has encouraged and supported me throughout my Ph.D. journey at USIM.



ABSTRAK

Dalam ekonomi global yang terbaru ini, kelakuan mencari maklumat produk makanan halal menjadi isu utama bagi umat Islam di Malaysia. Walau bagaimanapun, penyelidikan dan kajian secara konsisten menunjukkan keraguan dan ketidakpastian di kalangan pengguna Islam dalam mencari produk makanan halal disebabkan oleh kemunculan pelbagai isu-isu di pasaran Malaysia. Oleh itu, kajian ini telah dijalankan untuk menangani faktor-faktor yang mempengaruhi tingkah laku mencari maklumat untuk mencari produk makanan halal di pasaran Malaysia dan dengan itu memperoleh persepsi tentang makanan halal melalui kerangka konseptual yang dicadangkan. Walaupun pelbagai model telah dicadangkan sebelum ini mengenai tingkah laku mencari maklumat, model-model ini tidak menghubungkan sifat-sifat manusia, iaitu sikap, kebiasaan, dan kesedaran individu yang mempunyai proses pengesanan. Komponen proses pengesanan telah ditambah kepada kerangka konseptual yang diadaptasi untuk mencapai objektif utama kajian semasa yang meningkatkan kemampuan proses pencarian informasi produk makanan halal di kalangan pengguna Muslim Malaysia. Kajian ini bertujuan untuk memberi penjelasan mengenai proses mencari maklumat makanan halal dengan menghubungkan atribut manusia yang disebut dengan proses pengesanan untuk memastikan penggunaan sumber maklumat yang boleh dipercayai dan sahih, dan dengan itu mencapai proses pencarian yang berkesan untuk maklumat makanan halal. Oleh itu, kajian ini dianggap sebagai sumbangan penting dalam penyelidikan bidang tingkah laku mencari maklumat untuk produk makanan halal. Soal selidik berstruktur telah disuria berdasarkan kajian terdahulu untuk mencapai matlamat utama kajian ini. Sebanyak 482 soal selidik telah diedarkan menggunakan persampelan rawak mudah dan persampelan geografi kepada individu Muslim Malaysia di kawasan berbeza di Kuala Lumpur. Sebanyak 407 soal selidik yang sah telah dikembalikan dan digunakan dalam analisis menggunakan SPSS dan AMOS untuk menguji hipotesis penyelidikan. Analisis data mendedahkan bahawa pekali regresi (R^2) sebanyak 0.79% menunjukkan bahawa 79.9% variasi dalam pembolehubah kebebasan makanan halal dijelaskan oleh tujuh pembolehubah bebas iaitu sikap, kebiasaan, kesedaran individu, sumber maklumat, proses pengesanan, kesedaran maklumat, dan kebolehsasaran. Penemuan kajian ini mencadangkan bahawa hubungan antara sifat-sifat manusia yang telah disebutkan dan proses pengesanan memastikan persepsi tentang makanan halal secara menyeluruh. Sehubungan itu, kajian ini memberi bantuan yang berpotensi kepada pengguna Muslim Malaysia dalam mencari maklumat bagi makanan halal. Oleh kerana penyelidikan ini terhad kepada pengguna Muslim Malaysia, penyelidikan dan kajian masa depan yang berkaitan dengan pengguna bukan Islam di Malaysia dan juga di negara lain boleh dipertimbangkan. Sehubungan itu, makanan halal harus disediakan secara bersih, diawak, dan dihasilkan agar selamat untuk dimakan secara umum.

ABSTRACT

In the new global economy, the information-seeking behavior of halal food products has become a central issue for Muslims in Malaysia. However, research and studies have consistently shown the doubt and uncertainty among Muslim consumers in searching for halal food products because of the emergence of many issues in the Malaysian market. Therefore, this study has been conducted to address the factors influencing information-seeking behavior for searching halal food products in the Malaysian market and hence attaining the perception of wholesomeness of halal food through a proposed conceptual framework. Although various models have been previously proposed on information-seeking behavior, none of these models were based on linking human attributes, namely: attitude, habit, and awareness of individuals with process verification. The component of process verification has been added to the adopted conceptual framework to achieve the main objective of the current study, which is enhancing the abilities of a searching process for halal food product information among Malaysian Muslim consumers. This study aims to shed light on the process of searching a piece of halal food information by linking the mentioned human attributes with process verification to ensure using credible and trusted information sources and therefore attaining an effective searching process for halal food information. Thus, this study is considered an important contribution to the research in the field of information seeking behavior for halal food products. A structured questionnaire has been developed based on previous studies to achieve the main objectives of this study. 482 questionnaires have been distributed using simple random sampling and geographical sampling to Malaysian Muslim individuals in different areas in Kuala Lumpur. A total of 407 valid questionnaires have been returned and used in the analysis using SPSS and AMOS to test the research hypotheses. The data analysis revealed that the regression coefficient (R^2) of 0.799 indicates that 79.9% of the variations in the dependent variable of wholesomeness of halal food are explained by the seven independent variables, i.e., attitude, habit, awareness of individuals, sources of information, process verification, awareness of information, and traceability. The findings of this study suggest that linking between previously mentioned human attributes and process verification ensures the perception of wholesomeness of halal food. Accordingly, this study provides a potential guide to Malaysian Muslim consumers in seeking information for halal food. Since this research is limited to Malaysian Muslim consumers, future research and studies related to non-Muslim consumers in Malaysia and even in other countries might be considered. Accordingly, halal food should be hygienically prepared, treated, and produced so as to be healthily safe for human consumption in general.

Keywords: Information seeking behavior, halal food, human attributes, information sources, factors, Malaysian Muslim consumers.

المُلخَص

في الاقتصاد العالمي الجديد لقد غدا سلوك البحث عن المعلومات الخاصة بالمنتجات الغذائية الحلال من القضايا الأساسية للمسلمين في ماليزيا ومع ذلك فقد أظهرت الأبحاث والدراسات باستمرار حالة الشك وعدم اليقين بين المستهلكين المسلمين خلال البحث عن المنتجات الغذائية الحلال بسبب ظهور العديد من القضايا في السوق الماليزية لذلك تم إجراء هذه الدراسة لمعالجة العوامل التي تؤثر على سلوك البحث عن المعلومات في البحث عن المنتجات الغذائية الحلال في السوق الماليزية وبالتالي الوصول الى التصور الخاص بطبيعة وكمية الغذاء الحلال من خلال إطار مفاهيمي مقترح.

على الرغم من أنه تم في السابق اقتراح نماذج مختلفة بشأن سلوك البحث عن المعلومات إلا أن أيًا من هذه النماذج لم يعتمد على ربط السمات الإنسانية وهي الاتجاهات والعادة والوعي لدى الأفراد بالتحقق من العملية المراد تحقيقها. فقد تم إضافة عنصر التحقق من العملية إلى الإطار المفاهيمي المعتمد لتحقيق الهدف الرئيسي للدراسة الحالية وهو تعزيز قدرات عملية البحث عن معلومات منتجات الأغذية الحلال بين المستهلكين المسلمين الماليزيين. فهذه الدراسة تهدف إلى تسليط الضوء على عملية البحث عن معلومات الطعام الحلال من خلال ربط السمات البشرية المذكورة بالتحقق من العمل المراد تحقيقها لضمان استخدام مصادر معلومات موثوقة ومعتمدة وبالتالي تحقيق عملية بحث فعالة عن معلومات الأغذية الحلال وبالتالي تعتبر هذه الدراسة مساهمة وأضافة مهمة في البحث في مجال المعلومات الخاصة بسلوك البحث عن المنتجات الغذائية الحلال لقد تم تطوير استبيان منظم بناء على دراسات سابقة لتحقيق الأهداف الرئيسية لهذه الدراسة وتم توزيع 482 استبيان باستخدام عينات عشوائية بسيطة وأخذ عينات جغرافية للأفراد المسلمين الماليزيين في مناطق مختلفة من كوالالمبور ثم تم إسترجاع ما مجموعه 407 استبيان صالحا باستخدامها في التحليل باستخدام برنامج الحزمة الإحصائية للعلوم الاجتماعية لاختبار فرضيات البحث. كشفت تحليل البيانات أن معامل AMOS و برنامج تحليل النماذج اللحظية SPSS هو 0.799 مما يشير إلى أن 79.9% من العبارات في المتغير التابع لكامل الغذاء الحلال تفسر R2 الانحدار بواسطة المتغيرات السبعة المستقلة وهي الاتجاه العام لإدراك الأفراد مصادر المعلومات التحقق من العملية والوعي بالمعلومات الشيع.

تشير نتائج هذه الدراسة إلى أن الرابطين السمات البشرية التي سبق ذكرها والتحقق من العملية يضمن إدراك كامل عن الغذاء الحلال وعليه تقدمت الدراسة تحليل المعامل للمستهلكين المسلمين الماليزيين في البحث عن معلومات عن الطعام الحلال نظرًا لأن البحث كان مقصورا على المستهلكين المسلمين الماليزيين فمن الممكن إجراء البحوث والدراسات المستقبلية المتعلقة بالمستهلكين غير المسلمين في ماليزيا وحتى في بلدان أخرى بناء على ذلك وعموما يجب إعداد الطعام الحلال ومعالجته بطريقة بشكل صحي ليكون آمن وصحي للاستهلاك البشري.

TABLE OF CONTENTS

AUTHOR DECLARATION	ii
ACKNOWLEDGEMENT	iv
ABSTRAK	v
ABSTRACT	vi
AL-MULAKHKHAS	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xv
LIST OF APPENDICES	xvii
LIST OF ABBREVIATIONS	xviii
CHAPTER 1: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Research Questions	7
1.4 Research Objectives	7
1.5 Significance of the Research	8
1.6 Research Scope	9
1.7 Operational Definitions	11
1.7.1 Halal Food	11
1.7.2 Attitude	11
1.7.3 Habit	11
1.7.4 Awareness of Individual	11
1.7.5 Information Seeking Behavior	12
1.7.6 Traceability	12
1.7.7 Wholesomeness	13
1.7.8 Process Verification	13
1.8 Thesis Outline	13
CHAPTER 2: LITERATURE REVIEW	15
2.1 Introduction	15
2.2 Theories in Human Behaviours	16

2.2.1	Theory of Reasoned Action	17
2.2.2	Theory of Planned Behaviour	18
2.2.3	Triandis Model	20
2.3	Factors Influencing the Information Searching Behaviour for Halal Food and the Used Origin of Information	21
2.3.1	Factors Impacting the Intention of Accepting Halal Food among Religious Consumers	22
2.3.2	Awareness Factor of the Searching of Halal Food Products among Malaysian Muslim Families	22
2.3.3	Factors Influencing Behavioural Intention for Young Muslims' Consumption of Halal food in Klang Valley, Malaysia	23
2.3.4	Information Searching Behaviour and Origin of Information	24
2.3.5	Online Information Credibility for Youth	24
2.3.6	Factors Affecting the Perspective and Choice of the Origin of Information	25
2.4	Related Studies of Information Searching Behaviour	26
2.4.1	International Studies	26
2.4.2	Malaysian Studies	29
2.5	Key Gaps Addressed by this Research	42
2.6	Attributes of Halal Food Challenges	42
2.6.1	Traceability	43
2.6.2	Wholesomeness	44
2.7	Process Verification	45
2.8	Data and Definitions of Research Variables	45
2.9	Summary	47
CHAPTER 3. THEORETICAL FRAMEWORK		48
3.1	Introduction	48
3.2	Proposed Framework	49
3.3	Hypotheses	50
3.4	Human Attributes	51
3.4.1	Attitude	51
3.4.2	Habit	52
3.4.3	Awareness of Individual	53

3.5	Information Seeking Attributes	54
3.5.1	Sources of Information	54
3.5.2	Awareness of Information	56
3.5.2.1	Familiarity and Prior Success	56
3.5.2.2	Trustworthiness	56
3.5.2.3	Packaging	57
3.5.2.4	Cost	57
3.5.2.5	Quality	58
3.5.2.6	Accessibility	58
3.6	Summary	59
CHAPTER 4: RESEARCH METHODOLOGY		60
4.1	Introduction	60
4.2	Research Design	60
4.3	Research Methodology Related to This Study	61
4.4	Data Collection Procedure	62
4.5	Data Collection and its Phases	65
4.5.1	Experts and Pilot Study Phase	65
4.5.1.1	Experts' Validation	65
4.5.1.2	Pilot Study	67
4.5.1.2.1	Reliability	68
4.5.1.2.2	Validity	68
4.5.2	Confirmatory Factor Analysis (CFA) Phase	69
4.5.3	Structural Equation Modeling (SEM) Phase	73
4.6	Population and Sampling Techniques	74
4.6.1	Population and Sampling Size	74
4.6.2	Sampling Techniques	75
4.7	Construction of the Questionnaire	78
4.8	Human and Information Seeking Metrics of Halal Food Products	81
4.9	Data Analysis	84
4.10	Summary	85
CHAPTER 5: DATA ANALYSIS, FINDINGS AND DISCUSSION		86
5.1	Introduction	86
5.2	Sample Distribution	86

5.3	The Descriptive Analysis	87
5.3.1	Gender	88
5.3.2	Age	89
5.3.3	Career	90
5.4	Descriptive Statistics Findings of Independent Variables	92
5.5	Kmo and Bartlett's Test	92
5.6	Reliability Test	93
5.7	Pearson Correlation Findings of the Variables	94
5.8	Multiple Regressions Analysis	96
5.9	Data Analysis Using AMOS	99
5.9.1	Confirmatory Factor Analysis	99
5.9.1.1	Confirmatory Factor Analysis of Attitude Variable	99
5.9.1.2	Confirmatory Factor Analysis of Habit Variable	103
5.9.1.3	Confirmatory Factor Analysis of Awareness of Individual Variable	107
5.9.1.4	Confirmatory Factor Analysis of Process Verification Variable	110
5.9.1.5	Confirmatory Factor Analysis of the Variables of Information Sources	114
5.9.1.6	Confirmatory Factor Analysis of Awareness of Information	115
5.9.1.7	Confirmatory Factor Analysis of Traceability Factor	119
5.9.1.8	Confirmatory Factor Analysis of Wholesomeness Variable	123
5.9.2	Structural Equation Modelling	127
5.9.2.1	The Measurement Model	129
5.9.2.2	Summary of Model Fit	133
5.9.2.3	Evaluation of the Structural Model	134
5.10	Summary of Model Fit	137
5.10.1	Hypotheses Testing Using AMOS	138
5.11	Summary	147
CHAPTER 6 RECOMMENDATIONS AND CONCLUSION		149
6.1	Introduction	149
6.2	Key Findings	149
6.2.1	Implementation Model of Wholesomeness	155
6.2.2	Valid Dimension of the Wholesomeness of the Model	156

6.3	Research Contributions	163
6.3.1	Primary Contributions	164
6.3.2	Secondary Contribution	168
6.4	Implications of Findings	168
6.5	Research Limitations	170
6.6	Recommendations for Future Research	171
6.7	Chapter Summary	171
	REFERENCES	174

UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

LIST OF TABLES

Table	Page
Table 1.1: Summary of Analytical Framework	11
Table 2.1: Summary of previous international and Malaysian studies of information searching behaviours	32
Table 2.2: Pros and cons of presented studies in Table 2.1	388
Table 2.3: Definitions of variables	Error! Bookmark not defined.46
Table 4.1: Differences between Deductive and Inductive Approaches to Research	61
Table 4.2: Determining Sample Size for Research Activities, Educational and Psychological Measurement	75
Table 4.3: Human and information seeking metrics of local food products	83
Table 5.1: Specification of sample distribution	87
Table 5.2: Frequencies of gender factor	90
Table 5.3: Frequencies of the age factor	91
Table 5.4: Frequencies of occupation factor	93
Table 5.5: Mean and standard deviation results	94
Table 5.6: KMO and Bartlett's test	93
Table 5.7: Cronbach's Alpha of each variable	93
Table 5.8: Pearson correlation result of the variables	94
Table 5.9: Multiple regressions analysis	97
Table 5.10: ANOVA table for the regression model	97
Table 5.11: Regression coefficients	100
Table 5.12: Deleted items of attitude factor	103
Table 5.13: Indices of the measurement model on attitude factor	104
Table 5.14: Estimates and the value (T) of attitude factor	103
Table 5.15: Deleted items of habit factor	105

Table 5.16: Indices of the measurement model on habit	106
Table 5.17: Estimates and the value (T) of habit factor	107
Table 5.18: Deleted items of individual awareness factor	108
Table 5.19: Indices of the measurement model on the awareness of individual factor	109
Table 5.20: Estimates and the value (T) of awareness of individual factor	110
Table 5.21: Removed items of process verification factor	112
Table 5.22: Indices of the measurement model on process verification	113
Table 5.23: Estimates and the value (T) of Process Verification Factor	113
Table 5.24: Estimates and the value (T) of the factors of information sources	115
Table 5.25: Deleted items of information awareness factor	117
Table 5.26: Indices of the measurement model on awareness of information factor	118
Table 5.27: Estimates and the value (T) of awareness of information factor	119
Table 5.28: Removed items of traceability factor	121
Table 5.29: Indices of the measurement model on traceability factor	122
Table 5.30: Estimates and the value (T) of traceability factor	123
Table 5.31: Indices of the measurement model on wholesomeness factor	126
Table 5.32: Estimates and the value (T) of wholesomeness factor	127
Table 5.33: Indices of the measurement model	132
Table 5.34: Indices of the structural model	136
Table 5.35: Standardised causal effects of the structural model and hypotheses assessment	139
Table 6.1: The hypotheses and summary of the results	155
Table 6.2: Summary of finalised measurement items based on findings	162

LIST OF FIGURES

Figure	Page
Figure 2.1: Theory of reasoned action (TRA)	18
Figure 2.2: Theory of planned behaviour (TPB) model	20
Figure 2.3: Schematic of the Triandis model	21
Figure 3.1: Proposed framework	49
Figure 5.1: Grouping of the participant based on gender	89
Figure 5.2: Age distribution of the study sample	90
Figure 5.3: Occupation graph of the study sample	91
Figure 5.4: Initial measurement model of attitude	100
Figure 5.5: The end measurement model of attitude factor	102
Figure 5.6: First measurement model of habit	104
Figure 5.7: The end measurement model of habit	106
Figure 5.8: Initial measurement model of individual awareness	108
Figure 5.9: The end measurement model of individual awareness	109
Figure 5.10: Initial measurement model of process verification	111
Figure 5.11: The end measurement model on process verification factor	113
Figure 5.12: The measurement model on information sources factor	114
Figure 5.13: The initial measurement model on the awareness of information factor	116
Figure 5.14: The end measurement model on awareness of information factor	117
Figure 5.15: Initial of the measurement model on traceability factor	120
Figure 5.16: The end measurement model on traceability factor	121
Figure 5.17: Initial of the measurement model on wholesomeness factor	124
Figure 5.18: The end measurement model on wholesomeness factor	125
Figure 5.19: Initial of the measurement model	131
Figure 5.20: The end measurement model	133

Figure 5.21: Initial of the structural model

135

Figure 5.22: The end structural model

137

Figure 6.1: Final Framework

167

UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية الماليزية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

LIST OF APPENDICES

Appendices		Page
Appendix A	Questionnaire	208
Appendix B	Expert's Validation	216
Appendix C	List of Publications	218

UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

LIST OF ABBREVIATIONS

AGFI	Adjusted Goodness of Fit Index
AMOS	Analysis of Moment Structures
ANOVA	Analysis of Variance
BI	Bibliography Instruction
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CMIN	Minimum value of the discrepancy between the model and the data
CMIN/DF	The chi-square divided by its degree of freedom
EFA	Exploratory Factor Analysis
GFI	Goodness of Fit Index
HPAM	Halal Product Acceptance Model
IB	Information Behavior
ICT	Information and Communication Technology
IFI	Incremental Fit Index
IL	Information Literacy
ISB	Information Seeking Behavior
IT	Information Technology
JAKIM	Jabatan Kemajuan Islam Malaysia (Department of Islamic Development Malaysia)
MRA	Multiple Regression Analysis
NFI	Normed Fit Index
OPAC	Online Public Access Catalog
PCFI	Parsimonious Comparative Fit Index
PSI	Psychological Instrument
RFI	Relative Fit Index
RMR	Root Mean Square Residual
RMSEA	Root Mean Squared Error of Approximation
SEM	Sequential Equation Modelling
SME	Small Medium Enterprise

SML	Social Media for Learning
SPSS	Statistical Package for Social Sciences
TLI	Tucker Lewis Index
TM	Triandis Model
TPB	Theory of Planned Behavior
TQM	Total Quality Management
TRA	Theory of Reasoned Action

UNIVERSITI SAINS ISLAM MALAYSIA
 جامعة العلوم الإسلامية
 ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The significance of information about seeking behaviour of halal food product originates from the Muslim population in the world, which constitutes a quarter of the world's population (Bohari et al., 2013). The significant number of Muslims has made a strong impact on the international market, and the increase in this number has encouraged global interest among food producers worldwide (Bohari et al., 2013) and high demand for halal food among global marketers (Fard & Amiri, 2018). Essentially, halal food products are the major parts of the consumption in Malaysia, which mostly consists of the Muslim population (Lim et al., 2020). Provided that the selection of halal food products is based on several factors, including packaging, quality, price, country of origin, ingredient list, halal logo, and production by Muslims, halal food is the most preferred selection among Muslim consumers (Isyoyowati, 2015).

Halal food demand originates from the Muslims' belief based on the regulations of Islam to consume only halal food, which also prompted the researchers of information behaviours to reinforce their efforts to conquer the obstacles in the practice of halal food in Malaysia. Notably, there has been an increase in the responses towards halal among Muslim consumers as it enhances Islamic beliefs and practices (Fard & Amiri, 2018). Due to the importance of wholesomeness, which indicates the permissible requirements of halal food for Muslims, the implementation of total quality management (TQM) is pivotal to market halal products (Karim, et al., 2020). Besides, provided that the approaches made in halal certification are not the only aspects focuses

by the manufacturer, wholesomeness and quality assurance could enhance the demand for halal products, making these aspects essential in halal food (Omari, Azman & Ismail, 2019a).

Information Behaviour (IB) is an area of social informatics, which represents the methods of processes sought, understood, and perceived by individuals seek upon seeking information in various life aspects (Omari, Azman & Ismail, 2019a). In this case, Information Seeking Behavior (ISB) is defined as “a purposive process of seeking the information as a consequence of a need to satisfy some goals” (Superio, Oliveros & Palcullo, 2018). Extensive research has been performed in the field of ISB, such as the professional model of information seeking for lawyers, healthcare, and engineers (Wijetunge, 2019). Therefore, a several models have been developed for halal food products (Suhartanto et al., 2019). However, few studies presented the association between two types of models, including information seeking and human information behaviour models. It was presumed in this research that the relationship between the features of human information (e.g., perception, consciousness, and practice) and those of information seeking (e.g., the origin of information, process verification, and consciousness of information) might facilitate searching, which contributes to the wholesomeness of halal food products among Malaysian Muslim consumers. This study aims to determine the correlations between human features and efficacious searching for information-seeking behaviour for halal food products.

A novel conceptual framework was formulated to investigate the factors of information-seeking behaviour for halal food products among Malaysian Muslim consumers. Furthermore, the methods applied by Malaysian Muslim consumers in navigating and searching for information was investigated, including the factors of information-seeking behaviour for halal food products. As a result, it was found that the

wholesomeness of halal food was a crucial aspect, which encouraged effective searching for halal food among consumers using linking perception, practice, consciousness, process verification to ensure that reliable origin of the information is used. Subsequently, an efficacious searching process for halal food information could be achieved, leading to the solution to halal food problems in Malaysia.

1.2 Problem Statement

Recent reports were made on some factors related to information-seeking behaviour for halal food products, including the information about ingredients, individual's consciousness, practice, Islamic laws, and perception. To illustrate, Yusoff and Adzharuddin (2017) identified the ambiguity in the determination of halal products due to the challenges occurring among 340 Muslims in the industry in Bangi, Selangor, Malaysia. It was indicated that awareness factor had a high correlation with information-seeking behaviour among Muslim families, while Aiedah Abdul Khalek et al. (2015) determined the elements impacting the Malaysian youth Muslims' behavioural attempt of consuming halal food at the Private Higher Learning Institutions of Malaysia, particularly the individuals aged from 16 to 35 years old. Additionally, it was found that the attempt of consuming halal food in Klang Valley, Malaysia was frequently influenced by the positive perceptions of young Muslims and their behavioural dominance towards halal food. Meanwhile, a model was proposed by Borzooei and Asgari (2013) to reduce the influence of religious commitment on the association between the halal brand and buying attempt. It was highlighted in this study this model was used to identify the impacts of the halal brand relationship as the intermediate between religiosity and buying attempt. The impact of confidence, loyalty,

and dedication to brands indicated that the strong association of the brand with consumers is considered as a significant area of research.

Previous studies consistently illustrated the doubt and uncertainty among Muslim consumers. This corresponded with the finding by Abdul Majid et al. (2015), Muslim consumers search for a halal food which is identified with the issue of halal logo abuse by the producer. Meanwhile, the verification of the halal status in food or other groceries was challenging, particularly when the food was pre-packaged or processed (Saba, 2017). As an example, identifying whether the correct method is used to slaughter a chicken was challenging when the chicken has been cut into several parts. Accordingly, the research problem highlighted in this study highlighted the doubt and uncertainty felt by the Muslim consumers upon their attempt to buying a food product.

Another issue related to halal status was the non-compliance of the food manufacturers to the Malaysian Halal Standards and their incapability of presenting any documents to prove that their products were eligible for the halal status. This issue was added with the application of the fake halal logo on noodle products made in Malaysia (The Sun Daily, 2014), which could lead to negative impacts on consumers, specifically Malaysian Muslims. Moreover, authentication refers to procedures of verifying the compliance of food to the details of its label (Hashim et al., 2017), and this issue was also present in terms of the originality of products and ingredients. As a result, advanced technology in the meat processing industry, imposture and poor production have become widespread as they bring financial advantages (Zhanget al., 2017). Notably, the problem highlighted in study by Riaz and Chaudry (2018) was whether combination or merging took place between the halal product and other similar materials, including pork derivatives at places where they were low-priced and widely available.

Moreover, Halal food information issue is starting to get the place and attention in the market, and it is very influencing in marketplace, particularly in most Islamic countries (Katuk et al., 2020). Among halal issues that arisen are lack of proper information about hygienic practice at processing premises and the expiration of halal certification (Faizal et al., 2013). At the same time, halal logistics capabilities are critical in ensuring that the halal integrity of the supply chain works from farm to serving table. Halal food information issues have been discussed and highly obtained attention by the Prime Minister of Malaysia. (Baharuddin et al., 2015).

Besides the safe consumption food for Muslims being a doubtable aspect, the inadequate cooperation among the world's halal certification authorities enhanced this doubt on the originality of the halal certification (Katuk et al., 2020). Additionally, JAKIM is faced with the issue related to the rate of halal logo administration, which is possibly due to the absence of complete research and development unit to investigate, analyze, and perform an on-site inspection (Karim, et al., 2020). However, the research is now performed by a third party, allowing the implementation of the halal status at a specified time. Malaysia has a special position in the global halal market. It was the first country that assigns a government agency to regulate its halal matters and certification. Other issues are lack of information's include the slaughtering of poultry and meat produces in a manner inconsistent with the rites of Islam and food ingredients intermixed with non halal materials (Baharuddin et al., 2015). It is also difficult to verify the wholesomeness and halalness of meat in some groceries especially when they come prepackaged or processed (Baharuddin et al., 2015).

This study will try to investigate Malaysian perceptions toward efficacious searching for halal food among consumers in Malaysia. The current study stresses on

the significance of information which can improve consumers' attitude toward halal food consumption.

Many theorists emphasized that the combination of the halal and Halal concepts is essential to achieve the wholesomeness of food products, which is beyond the 'pork and alcohol-free' or 'developed by Muslims' status (Liow, 2012). Similarly, a strong association is present between traceability and the halal concept, which encourages transparency and guarantees the accessibility of information in the supply chain. To illustrate, several enforcements programs were organized by the Malaysian authorities after the implementation of the Trade Description Act 2011, in which various food manufacturers and premises were reported for the use of counterfeit halal certificates on the product packaging or at the premises (Ibrahim et al., 2012). Therefore, it is indicated from the issues that discovering new methods of seeking halal food information is crucial to capture the perception of halal food wholesomeness and to effectively seek halal food information. Notably, efficacious searching is achieved through the association of human features, including an individual's perception, practice, and consciousness, with process verification.

In summary, this study mainly aims to determine the impacts of the association of human features (e.g., perception, practice, and consciousness of an individual) with process verification to effectively seek information on halal food. Therefore, the importance of halal food wholesomeness was emphasized, which encouraged efficacious searching for halal food among consumers by associating the human features with process verification to solve halal food problems in Malaysia.

1.3 Research Questions

RQ1: What are the factors influencing the information-seeking behavior regarding halal food product among Malaysian Muslim consumers?

RQ2: Is there any relationships among human attributes and process verification in searching for information about halal food product?

Sub RQ2:

- 1) Does attitude have influence on process verification in searching for information about halal food product?
- 2) Does on practice have influence on process verification in searching for halal food product information?
- 3) Does awareness of individual influence process verification in searching for information about halal food product?

RQ3: Is there any relationship between existing halal food model with the features of the existing information-seeking behavior model to ensure that halal food product information could be sought effectively?

1.4 Research Objectives

RO1: To determine the factors influencing the information searching behavior for halal food product information among Malaysian Muslim consumers.

RO2: To determine the correlation between human attributes and process verification in searching for halal food product information

Sub RO2:

- 1) To identify the correlation between attitude and process verification in searching for halal food product information.

2) To determine the correlation between Habit and process verification in searching for halal food product information.

3) To determine the correlation between Awareness of Individual and process verification in searching for halal food product information.

RO3: To develop a model to integrate the human perceptions of halal food to predict effective information-seeking behavior among Malaysian Muslims.

1.5 Significance of the Research

The primary focus of this research is to arrive at the perspective of halal food product wholesomeness among Malaysian Muslim consumers after the reliable origin of the information is used to identify their perception, practice, and consciousness regarding halal food. This area of study is significant as it becomes an extension to the low number of studies clarifying this issue, particularly in the context of the Malaysian market, leading to the importance of proposing a conceptual framework to illustrate the information-seeking behavior among Malaysian Muslim consumers for halal food products.

The significance of information seeking behaviour of halal food product originates from the high Muslim population in the world, which constitutes a quarter of the world population. Meanwhile, the importance of acquiring valid information regarding halal food was presented by Liow (2012) and Faizal et al. (2013), who found that the business organization expands after the acquirement of halal certification. Essentially, halal certification is implemented in the food industry to ensure a uniform system of Islamic practice, including safety and hygiene. It is also regarded as a method of expanding the business growth, especially in Malaysia, which majorly consists of the Muslim population.

1.6 Research Scope

This research has surveyed Malaysian Muslim consumers in the Malaysian market to determine the factors of information searching while acquiring halal food product information. The benefits of halal food are diverse, including safety and hygiene, the increase in consumers and tourists, improved market signals, and business growth. Halal food products are also incorporated in the hospitality sector. Notably, the prominence of halal food in business gains a wider range of interest beyond religion and be involved in Malaysia's role as a tourism destination. To illustrate, Rahman et al. (2011) stated that the expenditure for food and beverages amounted to RM9.72 billion, which was accountable to tourist expenditure (as cited in *Tourism Malaysia*, 2010). It was also illustrated by Abdul Raufu et al. (2012) that health was the most crucial element of consciousness among Muslims.

Provided that Muslims are attracted to halal brandings, such as Halal finance in banking and finance industry, including Halal insurance, halal branding was found to influence Muslim consumers to purchase "halalan tayyiban food", which corresponded Wilson and Liu (2010), who debated that halal branding was essential in gaining interests among Muslim consumers. Notably, the halal industry does not only impact Muslims, but it also attracts the Non-Muslim users as it indicates selection of lifestyle and quality assurance on a global scale (Karim, et al., 2020). Moreover, halal food products are crucial for consumption among most of the Muslims in Malaysia (Karim, et al., 2020). Besides fulfilling the shariah requirements in the Islamic view, halal food is useful in the hygiene, sanitation, and safety aspects.

Table 1.1: Summary of Analytical Framework

<p>Research Questions</p>	<p>RQ1: What are the factors of the information-seeking behaviour regarding halal food product among Malaysian Muslim consumers?</p> <p>RQ2: What are the correlations between human attributes and process verification in searching for information about halal food product?</p> <p>Sub RQ2:</p> <ol style="list-style-type: none"> 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 awareness of individual and process verification in searching for information about halal food product? <p>RQ3: How can the human features of the existing halal food model be linked with the features of the existing information-seeking behavior model to ensure that halal food product information could be sought effectively?</p>
<p>Research Objectives</p>	<p>RO1: To determine the factors influencing the information searching behavior for halal food product information among Malaysian Muslim consumers.</p> <p>RO2: To determine the correlation between human attributes and process verification in searching for halal food product information</p> <p>Sub RO2:</p> <ol style="list-style-type: none"> 1) To identify the correlation between attitude and process verification in searching for halal food product information. 2) To determine the correlation between Habit and process verification in searching for halal food product information. 3) To determine the correlation between Awareness of individual and process verification in searching for halal food product information. <p>RO3: To develop a model to integrate the human perceptions of halal food to predict effective information-seeking behavior among Malaysian Muslims.</p>
<p>Sources of Data</p>	<p>Survey, target population were Muslims who are living in Kuala Lumpur, Sample size: 384</p>
<p>Technique of Analysis</p>	<p>Quantitative, Structural Equation Modelling (SEM)</p>
<p>Findings</p>	<p>In conclusion, it is expected a positive relationship between the attitude of consumers towards Halal food, habit of consuming Halal food, individual's awareness and process verification of Halal food information, information sources used for seeking Halal food, awareness of information towards Halal food and traceability of Halal food information, with perception of wholesomeness, which leads to effective searching for Halal food information.</p>

1.7 Operational Definitions

This section explains the terminology used in this study.

1.7.1 Halal Food

Halal is an Arabic term which means lawful and permissible which is permitted by Allah SWT and there are no restrictions found from the sources of Syariah. Halal food means food, which is not made of, or does not contain any part of the animal which is forbidden in Islam (for example pork) and is free from any non-halal elements.

1.7.2 Attitude

Attitude towards the behavior is referred to as the respondents' favorable or unfavorable evaluation to perform certain behaviors. In this study, the attitude towards the behavior is the respondents' unfavorable or favorable evaluations in consuming halal food (Ajzen, 2001).

1.7.3 Habit

Habit is the pathway created by the neurons, after repetition of certain behaviors that would stay fixed and durable. Several studies, which incorporated TPB in food-related behaviour, implemented habit as an independent predictor of intentions (Dangi, Narula & Gupta, 2020).

1.7.4 Awareness of Individual

Awareness is knowledge created through the interaction of an agent and its environment (Gutwin and Greenberg, 2002). Therefore, individuals' awareness could

be measured by monitoring and perceiving the information of the environment they are in. Muslim's awareness has a strong influence to educate the manufacturer of halal food products in the market. Notably, the understanding and awareness of the halal and haram concept are essential for Muslims as they could not solely adhere to the act and the authority.

1.7.5 Information Seeking Behavior

Information Seeking Behavior in this study is based on the model of information searching among the professionals, which originated from the research on seeking information from various sources, including colleagues, medias, handbooks, journal articles, their knowledge, and experiences (Leckie et al., 1996). In general, these sources of information could be categorized according to the types of channels, including formal, informal, internal, external, oral, and personal. Furthermore, formal sources including conferences, journals, and internal and external sources are within and outside of the organization, while oral or written sources include a paper copy or electronic text. Personal sources consist of an individual's knowledge, experience, and practices. Notably, the formal, informal, internal, and external sources could easily be identified in the literature.

1.7.6 Traceability

The traceability concept is important in the halal food industry as it enhances transparency, therefore reducing the effort for product recalls and the onus claims towards the manufacturers (Meuwissen et al., 2003). Furthermore, traceability is regarded as a transparent communication technique, which ascertains the accessibility of the information to the supply chain (Zailani et al., 2010).

1.7.7 Wholesomeness

The wholesomeness Halal food refers to shariah's requirements of the meat, hygiene, sanitation, and safety aspects, which make Halal food readily acceptable by consumers who are concerned about food safety and healthy lifestyle (Mannaa, 2020). According to Mannaa, M. (2020), the concepts of halal and goodness (Tayyib) were described by the wholesomeness of the food fulfilling the permissible requirements of the Islamic rule.

1.7.8 Process Verification

Process verification refers to the process of identifying and verification of halal food (Othman, Shaarani & Bahron, 2016). Halal food identification in Muslims community is highly demanded, worthy, and important (Othman, Shaarani & Bahron, 2016). Therefore, in this study, this is to enhance the searching process for halal food product information among Malaysian Muslim consumers.

1.8 Thesis Outline

This thesis is divided into six chapters. The first chapter briefly presents the research background, issue statement, research questions, research objectives, significance, and scope, including the thesis structure. The second chapter elaborates on the theories and reviews of literature related to the subject, followed by the third chapter, which presents the research theoretical framework, the suggested conceptual framework, and hypotheses. The fourth chapter presents the implemented methodology, which includes research approach and design, population and sampling techniques, research instrument, data collection and procedure, pilot study, and summary.

Following that, the fifth chapter focuses on the research findings, discusses the

empirical findings, and analyses the data. This thesis is concluded by the sixth chapter, which presents the conclusion and recommendations for upcoming research within the same area.

