

3 CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodologies deployed in the study. The chapter provides description of the model of research framework, the process of how research is conducted, the sampling procedure, the data collection procedures and the data analysis technique.

The study is planned to be carried out by using the survey approach to obtain the information needed. It comprises of obtaining primary data, preparing questionnaires and sampling method. A random sampling of respondents is conducted in Klang Valley, Selangor state in Malaysia.

3.2 Theoretical Framework

The objectives of this study are four-fold: 1) To identify the factors that influence the consumers purchase intention. 2) To identify the relationship among the factor of consumers' attitude, health consciousness behaviour and religiosity effect towards purchase intention of Functional Food. 3) To examine whether the variables health consciousness mediates between the independent variables (Attitude) and dependent variables (Purchase intention of Functional Food). 4) To examine whether the variables religiosity mediates between the independent variables (Attitude) and dependent variables (Purchase intention of Functional Food).

The theoretical model and construct measurements of research constructs such as Attitude Towards Functional Food, Health Consciousness, Religiosity Effect and Purchase Intention of Functional Food are introduced in this chapter. The research framework indicating the factors influence the purchase intention of Functional Food is developed as represented in Figure 3.1. In this research, three factors (Health Consciousness, Attitude Towards Functional Food and Religiosity Effect) are identified as independent variables to model on Purchase Intention of Functional Food.

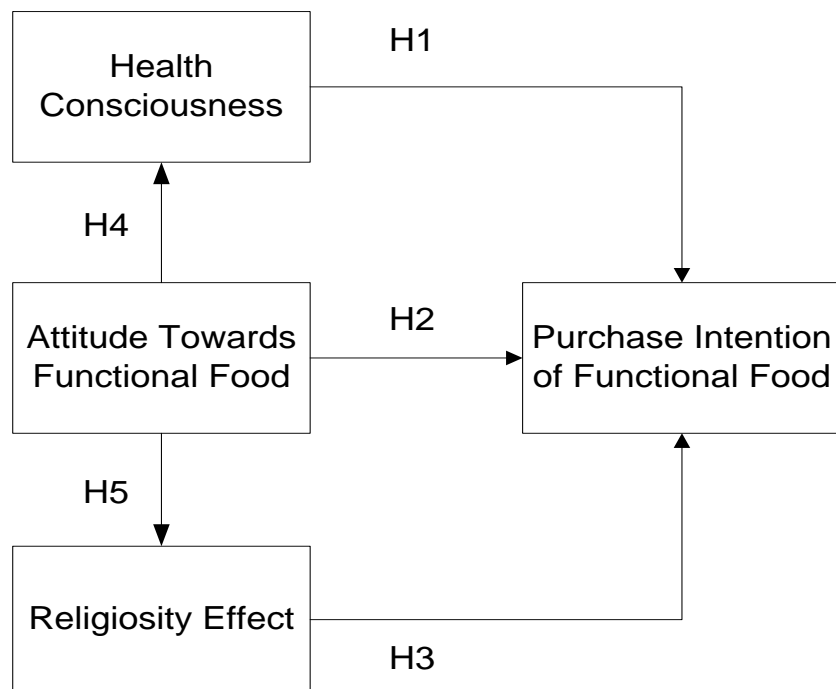


Figure 3.1 The Model Of Research Framework

Firstly, the attitude on Functional Food product is believed to be a factor and is tested with intention to purchase Functional Food. Secondly, intention to purchase Functional Food is examined with consumers' health consciousness value. Thirdly, we hypothesized that consumers are reluctant to buy

Functional Food if Functional Food does not fulfil the requirement of religion practice.

- H1: There is significant positive relationship between consumer's health consciousness behaviour and purchase intention.**
- H2: There is significant positive relationship between consumer's attitude on Functional Food and purchase intention.**
- H3: There is significant positive relationship between religiosity influence and purchase intention.**

Following on that, Hypothesis 4 (H4) is formed to test whether health consciousness influence the consumer's attitude toward Functional Foods. Behaviour and attitude of individual could be influence by religion value. Hypothesis 5 (H5) hypothesized the mediating effect of religiosity influence between attitude and purchase intention.

- H4: Health consciousness mediates between attitude and purchase intention of Functional Food.**
- H5: Religiosity effect mediates between attitude and purchase intention of Functional Food.**

3.3 Research design

This study entitled "Functional Food and Malaysia Consumer" is a quantitative research that tries to obtain information through investigation of quantities information and study their relationships in Malaysia population. This study wishes to illustrate the theories and hypotheses pertaining to phenomena.

The researcher presented previous researches in literature review in order to introduce the reader some basis idea of Functional Food and draw near with preliminary ideas regarding the research problem. The purpose is to bring the reader up-to-date with current literature on the topic, providing proofs and reference for this research and forms the basis for future research.

The researcher used the qualitative approach in order to test the relationship. Based on the hypothesis and theory, the collection of data was done through questionnaires. Verification and validation of data were done using software packages such as SPSS. The research method includes cross-sectional data collection and analyses using Descriptive Statistic Analysis, Reliability Tests, Correlation and Multiple Regression Analysis., Correlation, Multiple Regression analysis and Sobel test were adopted to test the relationship of variables.

3.4 Sampling and data collection

The sample was collected to represent Malaysian population. The approach to generalize from the sample to Malaysian population is to use a random selection procedure to ensure that the sample have proportional representation of races and gender. According to the population statistics from Department Of Statistics Malaysia (2010), 67% of populations are Malays, 24.3% are Chinese, 7.35% are Indians and the remaining are other races. Therefore, the numbers of questionnaire were targeted to be collected back were divided into ratio of 6:3:1 with 60% of Malays, 30% of Chinese and 10% of Indian and other races.

3.5 Data Analysis Procedure

SPSS version 17.0 is employed to analyze the collected data for the purpose to test the hypotheses. The following data analyses procedures were conducted.

3.5.1 Consumer survey

Cross-sectional consumer data were collected through a survey within Klang Valley. Klang Valley is an area in Malaysia comprising Kuala Lumpur and its suburbs of Selangor which has highest population rates in Malaysia. The statistic of population is expanding from year to year. This metropolitan area has a large number of migrants from other states within Malaysia who come to work. Consequently, the survey done in Klang Valley is best portrayed of Malaysia population.

Questionnaires were delivered to individual randomly for resident of Klang Valley. Three hundred of questionnaires were targeted to collect beside over the ratio of of 6:3:1 with 60% of Malays, 30% of Chinese and 10% of Indian and other races. Respondents were personally contacted via email, phone, SMS, Facebook, and requested to complete a questionnaire sent via email. Besides, the researcher also approached respondents in restaurant. Permission were asked and explained in brief on the purpose of the research before respondents filled up the questionnaires.

The survey instrument consisted of a five pages questionnaire with six sections was designed. The questionnaire included multiple filler items in

order to limit common method error variance. Factors included are health consciousness, attitude on Functional Food and religiosity value and purchase intention on Functional Food. The assessment was measured using a five-point Likert scale (1 – Very Unimportant, to 5 - Very Important) and (1- Strongly Disagree, to 5 – Strongly Agree).

The questionnaire started with introductions on Functional Food and its definition. Examples and Functional Food target functions are illustrated in table format with diagram to let respondents have a common understanding on the Functional Food. At Section 1, the questionnaire starts with general questions to study respondents understanding on Functional Food. Section 2 consists of questions regarding consumers' purchase intention of Functional Food. Section 3 evaluate about respondents' health consciousness with Functional Food. Assessments on respondents' attitude toward Functional Food were done in Section 4 which was extracted from the study of Urala & Lähteenmäki, (2005). Section 5 evaluate about respondents' opinion on religiosity value using Religious Commitment Inventory -10 (RCI-10) developed by Worthington et al (2003). In the last part of questionnaire, demographic characteristics such as gender, age, ethnic group, religion, employment status, income, marital status and educational level of each respondent were requested.

3.5.2 Data analysis technique

The construct measurement of the research constructs are described in the following sections:

i) Descriptive Statistic Analysis

Descriptive statistics are used to interpret the basic features of the data in a study. They are easier to work with. Normally, descriptive analysis is used to interpret and summarise data. From there, descriptive analysis provides a description of the sample (Marshall and Jonker, 2010). Descriptive statistic analysis provides summaries and may enable comparison across research instrument components. Besides these, descriptive analysis helps to examine the tendencies, spread, normality, and reliability of a data set.

ii) Reliability and Validity Tests

Reliability and validity test is used to ensure it is valid and reliable to represent the result from the survey. Internal consistency analysis (Cronbach's alpha) is used to confirm the reliability of each research factors. Validity refers to the degree in which the test conducted or other measuring device is truly measuring what the research intended it to measure.

iii) Normality Test

Researchers would use normality test to measures whether the input data is normally distributed. Normality test is used to measures a goodness of fit of a normal model to the data.

iv) Correlation

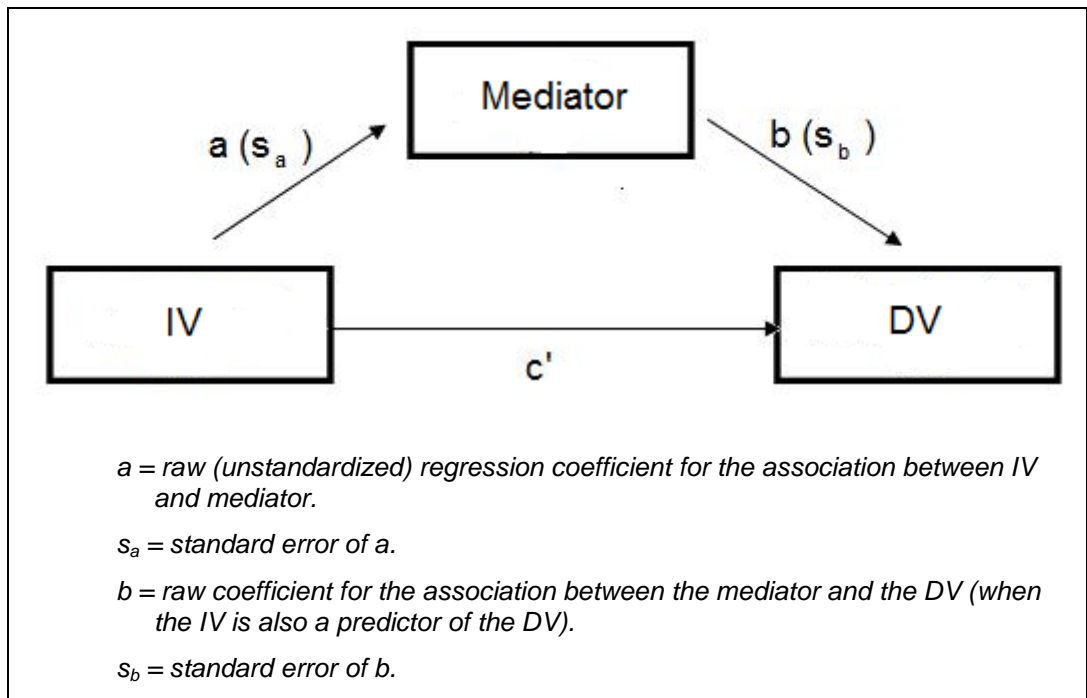
A correlation is used to see the relationship between two (or more) normally distributed interval variables. The Pearson's correlation is used to find a correlation between at least two continuous variables. The value for a Pearson's can fall between 0.00 (no correlation) and 1.00 (perfect correlation). Two variables can be perfectly related, but if the relationship is not linear, Pearson's correlation coefficient is not an appropriate statistic for measuring their association (Lowrey. 2005).

v) Multiple Regression Analysis

Multiple Regression Analysis is used to analyze linear relations between two or more variables. The purpose is used to understand the causal relationships between independent variables with dependent variables.

vi) Mediation Test

As explained by Preacher (2010), a variable may be considered a mediator to the extent to which it carries the influence of a given independent variable (IV) to a given dependent variable (DV). Sobel Test is used to test whether a mediator carries the influence of an IV to a DV.



Source : <http://people.ku.edu/~preacher/sobel/sobel.htm> (2010)

Figure 3.2 Mediation Test

3.6 Measurements of variables

Following sections present construct and their corresponding source used for questionnaire.

3.6.1 Health Consciousness

The items to construct health consciousness are adapted from few different sources. There are 12 questions adopted to test Health Consciousness.

Item	Question	Source
1	I consider myself as very health conscious	Chen (2009), Squires et al (2001), Krutulyte, R., et al. (2010),
2	I am prepared to eat as healthily as possible	
3	I think that I take health into account a lot in my life	
4	I think it is important to know how to eat healthily	
5	My health is so valuable to me that I am prepared to sacrifice many things for it	
6	I continually ask myself whether something is good for me	
7	I think often about whether everything I do is healthy	
8	I ask myself all the time whether the things I eat are good for me	
9	I am alert on my health	
10	I choose food carefully to ensure good health	
11	I think of myself as a health conscious consumer	
12	I prefer unprocessed, natural foods to ensure I have a healthy life	

Table 3.1 Health Consciousness construct

3.6.2 Religiosity Effect

The Religious Commitment Inventory -10 (RCI-10) used by Rahadian (2008) is adopted in this study to measure religiosity level. Participants indicated their level of religiosity on ten of five- point Likert type item statements from (1) “Very Unimportant” to (5) “Very Important”. The ten-questionnaire as following:

Item	Question	Source
1	My religious beliefs lie behind my whole approach to life.	Rahadian (2008)
2	I spend time trying to grow in understanding of my faith.	
3	It is important to me to spend periods of time in private religious thought and reflection.	
4	Religious beliefs influence all my dealings in life.	
5	Religion is especially important to me because it answers many questions about the meaning of life.	
6	I often read books and magazines about my faith.	
7	I enjoy working in the activities of my religious organization.	
8	I enjoy spending time with others of my religious affiliation	
9	I keep well informed about my local religious group and have some influence in its decisions.	
10	I make financial contributions to my religious organization.	

Table 3.2 Religiosity Effect Construct

3.6.3 Attitude towards Functional Food

The survey instrument used for this study is adopted from the Urala & Lähteenmäki, (2005). There are 26 items used to test the attitude of consumer towards Functional Food.

Item	Question	Source
1	Functional Foods help to improve my mood	Urala & Lähteenmäki, (2005)
2	My performance improves when I eat Functional Foods	
3	Functional Foods make it easier to follow a healthy lifestyle	
4	I can prevent disease by eating Functional Foods regularly	
5	The idea that I can take care of my health by eating Functional Foods gives me pleasure	
6	Functional Foods can repair the damage caused by an unhealthy diet	
7	I am prepared to compromise on the taste of a food if the product is functional	
8	I actively seek out information about Functional Foods	
9	Functional Foods are completely unnecessary	
10	Functional Foods are a total sham	
11	The growing number of Functional Foods on the market is a bad trend for the future	
12	For a healthy person it is worthless to use Functional Foods	
13	It is great that modern technology allows the development of Functional Foods	
14	I only want to eat foods that do not have any medicine-like effects	
15	Health effects are not appropriate in delicacies	
16	Functional Foods are consumed mostly by people who have no need for them	
17	It is pointless to add health effects to otherwise unhealthy foods	
18	Functional Foods promote my well-being	
19	The safety of Functional Foods has been very thoroughly studied	

20	I believe that Functional Foods fulfil their promises	
21	Functional Foods are science-based top products	
22	If used in excess, Functional Foods can be harmful to health	
23	In some cases Functional Foods may be harmful for healthy people	
24	Using Functional Foods is completely safe	
25	The new properties of Functional Foods carry unforeseen risks	
26	Exaggerated information is given about health effects	

Table 3.3 Attitude Towards Functional Food Construct

3.6.4 Intention To Purchase Functional Food

The items to construct Purchase Intention are adapted from few different sources. There are 8 questions adopted to test construct of Purchase Intention.

Item	Question	Source
1	I will consider purchasing Functional Food	Tarkiainen and Sundqvist (2005), J. Barreiro- Hurle et al (2008), Krutulyte, R., et al. (2010),
2	I will purchase Functional Food	
3	I will be glad to recommend others to purchase Functional Food with these product specifications.	
4	I intend to buy Functional Food in the near future	
5	People, who are important to me, think that I should buy Functional Food	
6	I would buy a new Functional Food product just out of curiosity	
7	It is fun trying Functional Food one is not used to	
8	I am likely to choose Functional Food products in future	

Table 3.4 Intention To Purchase Functional Food Construct

3.7 Conclusion

This chapter discussed and explained in details on the application of research methodology. It covered from the topic on how the sample was gathered and conducted from population to sampling frame, research analysis instrument and data analysis procedure. In the following Chapter 4, the researcher will discuss finding from the analysis to examine whether it has met the objective of the study.