

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**PROPENSITY TO PURCHASE ORGANIC FOOD:  
ITS ANTECEDENTS AND CONSEQUENCES ON  
ACTUAL PURCHASE BEHAVIOR**

**By**

**KHAIRUL NIZAM MAHMUD**



**Thesis submitted to  
Othman Yeop Abdullah Graduate School of Business,  
Universiti Utara Malaysia,  
in Partial Fulfillment of the Requirement for the Doctor of  
Business Administration**



**OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS  
UNIVERSITI UTARA MALAYSIA**

**PERAKUAN KERJA TESIS / DISERTASI  
(Certification of thesis / dissertation)**

Kami, yang bertandatangan, memperakukan bahawa **KHAIRUL NIZAM BIN MAHMUD**  
(We, the undersigned, certify that) \_\_\_\_\_

calon untuk Ijazah **DOCTOR OF BUSINESS ADMINISTRATION**  
(candidate for the degree of) \_\_\_\_\_

telah mengemukakan tesis / disertasi yang bertajuk:  
(has presented his/her thesis / dissertation of the following title):

**PROPENSITY TO PURCHASE ORGANIC FOOD:  
ITS ANTECEDENTS AND CONSEQUENCES ON ACTUAL PURCHASE BEHAVIOR**

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.  
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada:

**27 September 2020.**

(That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on:

**27 September 2020.**

Pengerusi Viva  
(Chairman for Viva)

**Prof. Dr. Wan Nordin Wan Hussin**

Tandatangan  
(Signature)

Pemeriksa Luar  
(External Examiner)

**Assoc. Prof. Dr. Mohd. Farid bin Shamsudin**

Tandatangan  
(Signature)

Pemeriksa Dalam  
(Internal Examiner)

**Prof. Dr. Nor Azila Mohd. Noor**

Tandatangan  
(Signature)

Tarikh: **27 September 2020**  
(Date)

Nama Pelajar  
(Name of Student) : **Khairul Nizam bin Mahmud**

---

Tajuk Tesis / Disertasi  
(Title of the Thesis / Dissertation) : **Propensity to Purchase Organic Food: Its Antecedents and Consequences On Actual Purchase Behavior**

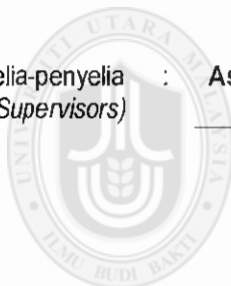
---

Program Pengajian  
(Programme of Study) : **Doctor of Business Administration**

---

Nama Penyelia/Penyelia-penyelia : **Assoc. Prof. Dr. Asmat Nizam Abdul Talib**  
(Name of Supervisor/Supervisors)

---



**UUM**  
Universiti Utara Malaysia

Tandatangan  
(Signature)

## PERMISSION TO USE

In presenting this dissertation in partial fulfilment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM). I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this dissertation in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in her absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation. It is understood that any copying or publication or use of this dissertation or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition given to me and to the UUM in any scholarly use which may be made of any material in my dissertation.

Request for permission to copy or to make other use of materials in this dissertation in whole or in part should be addressed to:



Dean of

Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

Malaysia

## ABSTRACT

The organic food industry is currently one of the emerging markets worldwide. People are beginning to understand the benefits of eating organic food instead of conventional food. Despite protecting the environment, people are concerned with healthy eating. This study focuses on the antecedents and consequences of actual behaviour towards the propensity to purchase organic food in Malaysia's organic food industry. The study conceptualizes consumption value and perceived value as a multi-dimensional construct which consists of seven dimensions of values, i.e. functional value, social value, emotional value, novelty value, conditional value, monetary value, and environmental concern. Using the quantitative method, the study investigates the relationships between factors by applying the Structural Equation Modelling with Partial Least Square (SEM-PLS) version 2.0 and involves 169 respondents from Kuala Lumpur. Of the 169 respondents, 37 are male and 132 are female, with 113 Malays, 31 Chinese, 24 Indians, and 1 Other. Out of 8 hypotheses tested, only 3 are supported by the results of the study. The analyses reveal positive relationships between functional value and social value and the propensity to purchase organic food, respectively. The results also show a positive relationship between propensity to purchase and actual purchase behaviour. In this study, although the purchase of organic food in Malaysia is growing, that is 58%, the supply of local organic products is still unable to keep up with the increased demand. Therefore, the findings of this study would help practitioners, researchers and marketers, as well as organic food producers to understand which factors are important and can be applied for their future research and strategies.

**Keywords:** Theory of Consumption Values, Perceived Value, Organic Food, Propensity to Purchase

## ABSTRAK

Industri makanan organik kini merupakan salah satu pasaran yang baru muncul di seluruh dunia. Orang ramai mula memahami faedah memakan makanan organik berbanding makanan konvensional. Di samping melindungi alam sekitar, manusia mementingkan pemakanan yang sihat. Kajian ini memberi tumpuan kepada anteseden dan akibat daripada tingkah laku sebenar terhadap kecenderungan membeli makanan organik dalam industri makanan organik di Malaysia. Kajian ini berkonsepkan nilai penggunaan dan nilai tertanggap sebagai satu konstruk multi-dimensi yang terdiri daripada tujuh dimensi nilai, iaitu nilai fungsi, nilai sosial, nilai emosi, nilai kebaruan, nilai bersyarat, nilai wang dan keprihatinan terhadap alam sekitar. Dengan menggunakan kaedah kuantitatif, kajian ini menyiasat hubungan antara faktor-faktor dengan menggunakan Pemodelan Persamaan Berstruktur Kuasa Dua Terkecil Separa (SEM-PLS) versi 2.0, dan melibatkan 169 responden dari Kuala Lumpur. Daripada 169 responden, 37 adalah lelaki dan 132 adalah perempuan, dengan pecahan 113 Melayu, 31 Cina, 24 India dan 1 lain-lain. Dari 8 hipotesis yang diuji, hanya 3 yang disokong oleh keputusan kajian ini. Analisis menunjukkan hubungan positif, masing-masing antara nilai fungsi dan nilai sosial dan kecenderungan untuk membeli makanan organik. Di samping itu, dapatan kajian juga menunjukkan hubungan positif antara kecenderungan untuk membeli dan tingkah laku pembelian yang sebenar. Dalam kajian ini, walaupun pembelian makanan organik di Malaysia sedang berkembang, iaitu 58%, bekalan produk organik tempatan masih tidak dapat memenuhi permintaan yang sedang meningkat. Oleh itu, penemuan kajian ini dapat membantu pengamal, penyelidik dan pemarkar, serta pengeluar makanan organik untuk memahami faktor-faktor yang penting dan dapat diterapkan pada kajian dan strategi masa hadapan mereka.

**Keywords:** Teori Nilai Penggunaan, Nilai Tertanggap, Makanan Organik, Kecenderungan untuk Membeli

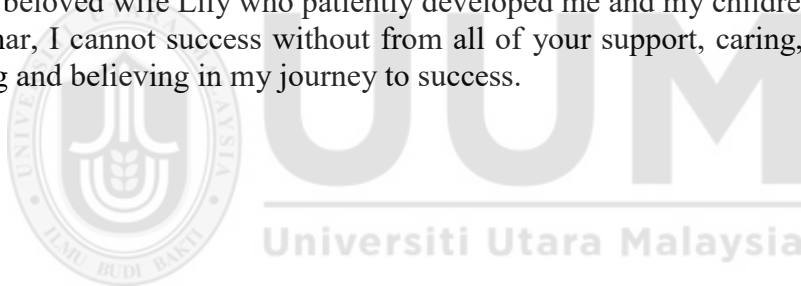
## ACKNOWLEDGEMENTS

Alhamdulillah, In the name of ALLAH S.W.T, the most gracious, the most merciful, the creator and custodian of the universe. Peace and blessings to our Prophet Muhammad (PBUH), peace and blessings of ALLAH S.W.T be upon him and to his family members, companions and followers. Thank you Allah S.W.T for your permission and blessing that is given to me in order for me to complete this dissertation research.

I would like to thank my supervisor Assoc. P. Dr. Asmat Nizam for his utmost sincere and persistent guidance, whose questions and comments have significantly presented valuable insights to this dissertation. His patience and motivation are highly commendable and appreciated and I thank her for being an excellent supervisor.

Additionally, I would like also to express my gratitude and thanks to everybody in OYA and COB of Universiti Utara Malaysia for their individual and collective supports. My sincere friends of DBA UUMKL who stood by me through all these years to share their thoughts and strength for me to move on when I was about losing it, especially my BFF Dr. Mohd Norsam. No words could express my gratitude to all of you. Last and not least my father, mother, father-in-law and mother-in-law, thank you for your supporting.

Finally, for my beloved wife Lily who patiently developed me and my childrens Mimi, Amin, Sayyid and Umar, I cannot success without from all of your support, caring, sacrificing and love for trusting and believing in my journey to success.



## LIST OF TABLES

Table 1.1 .....	17
Table 3.1 .....	73
Table 3.2 .....	74
Table 3.3 .....	75
Table 3.4 .....	76
Table 3.5 .....	77
Table 3.6 .....	78
Table 3.7 .....	79
Table 3.8 .....	80
Table 3.9 .....	81
Table 3.10 .....	83
Table 3.11 .....	86
Table 3.12 .....	89
Table 3.13 .....	91
Table 4.1 .....	98
Table 4.2 .....	99
Table 4.3 .....	101
Table 4.4 .....	102-103
Table 4.5 .....	104
Table 4.6 .....	108-109
Table 4.7 .....	111-114
Table 4.8 .....	116
Table 4.9 .....	117
Table 4.10 .....	118
Table 4.11 .....	122
Table 4.12 .....	124
Table 4.13 .....	124

## LIST OF FIGURES

Figures 1.1 .....	20
Figures 1.2 .....	22
Figures 2.1 .....	58
Figures 2.2 .....	62
Figures 3.1 .....	84
Figures 4.1 .....	106
Figures 4.2 .....	120
Figures 4.3 .....	121



## LIST OF APPENDIXES

Appendix A: Questionnaire.....	173-185
Appendix B: Summary of Consumer Behaviour.....	186-189
Appendix C: Summary of Organic Food - Global .....	190-192
Appendix D: Summary of Organic Food - Malaysia.....	193-195
Appendix E: Summary of TCV – Global.....	196-197
Appendix F: Summary of TCV – Malaysia.....	198
Appendix G: SPSS Analysis Result.....	199-208



## LIST OF ABBREVIATIONS

i.e.	id est. meaning for “that is”
KMO	Kaiser Meyer Olkin
MSA	Measure of Simple Adequacy
SPSS	Statistical Package for Social Science
TCV	Theory of Consumption Values
TIV	Total in Volume
TPB	Theory of Planned Behaviour
TRA	Theory Reason Action
VIF	Variance Inflation Factors
NGOs	Non-Governmental Organizations



## TABLE OF CONTENT

PERMISSION TO USE.....	ii
ABSTRACT.....	iii
ABSTRAK.....	iv
ACKNOWLEDGEMENTS .....	v
LIST OF TABLES.....	vi
LIST OF FIGURES.....	vii
LIST OF APPENDIXES .....	viii
LIST OF ABBREVIATIONS .....	ix
TABLE OF CONTENT.....	x
CHAPTER 1.....	13
INTRODUCTION .....	13
1.0 Overview of the Chapter.....	13
1.1 Background of Study.....	13
1.2 Problem Statement.....	21
1.3 Research Questions .....	27
1.4 Research Objectives .....	28
1.5 Significant of Study .....	28
1.5.1 Theoretical Contribution .....	28
1.5.2 Practical Contribution .....	29
1.6 Scope and Limitation of Study.....	30
1.7 Operational Definition.....	31
1.8 Organisation of Thesis.....	33
CHAPTER 2.....	34
LITERATURE REVIEW .....	34
2.1 Overview of the Chapter.....	34
2.2 Organic Food .....	34
2.3 Organic Agriculture and Food.....	36
2.4 Malaysian Organic Food Production and Market.....	37
2.5 Organic Certification and Standards .....	38
2.6 Perception on Organic Food.....	39
2.7 Consumption of Organic Food.....	40
2.8 Marketing Aspect of Organic Products.....	41
2.9 Consumer Purchase Behaviour.....	43
2.10 Propensity to Purchase Organic Food.....	44
2.11 Actual Purchase Behaviour .....	46
2.12 The Influence of Consumption Values on Propensity to Purchase Organic Food .....	47
2.12.1 Functional Value.....	48
2.12.2 Social Value.....	49
2.12.3 Emotional Value .....	50
2.12.4 Novelty Value .....	51
2.12.5 Conditional Value.....	52
2.13 The Influence of Perceived Value on Propensity to Purchase Organic Food ..	54
2.13.1 Monetary Value.....	54
2.13.2 Environmental Concern.....	55
2.14 Underpinning Theory.....	57
2.14.1 Theory of Consumption Value.....	57

2.14.2 Theory of Reasoned Action.....	60
2.15 Research Framework.....	62
2.16 Research Hypothesis Development.....	63
2.16.1 Theory of Consumption Values.....	63
2.16.2 Perceived Value.....	67
2.17 Actual Purchase Behaviour.....	69
2.18 Hypothesis Summary.....	70
2.19 Chapter Summary.....	70
<b>CHAPTER 3.....</b>	<b>71</b>
<b>RESEARCH METHODOLOGY.....</b>	<b>71</b>
3 Overview of the Chapter.....	71
3.1 Research Design.....	71
3.2 Measurements.....	72
3.2.1 Propensity to Purchase Organic Food.....	73
3.2.2 Actual Purchase Behaviour towards Organic Food.....	74
3.2.3 Functional Value towards Organic Food.....	75
3.2.4 Social Value towards Organic Food.....	76
3.2.5 Emotional Value towards Organic Food.....	77
3.2.6 Novelty Value towards Organic Food.....	78
3.2.7 Conditional Value towards Organic Food.....	79
3.2.8 Monetary Value towards Organic Food.....	80
3.2.9 Environmental Concern towards Organic Food.....	81
3.3 Demographic Variables.....	82
3.4 Study Population and Sample Size.....	82
3.5 Sampling Procedure.....	85
3.6 Data Collection Procedure.....	87
3.7 Pilot Test Study.....	88
3.8 Statistical Technic Used.....	89
3.9 Descriptive Analysis.....	90
3.10 Structural Equation Modelling (SEM).....	90
3.11 The Rationale for Choosing PLS-SEM.....	92
3.12 Partial Least Squares (PLS) Analysis.....	92
3.12.1 Convergent Validity.....	93
3.12.2 Discriminant Validity.....	94
3.12.3 Path Coefficient Estimation.....	94
3.12.4 Structural Path Significance in Bootstrapping.....	95
3.12.5 Prediction Relevance of the Model.....	95
3.13 Chapter Summary.....	96
<b>CHAPTER 4.....</b>	<b>97</b>
<b>RESULTS AND DISCUSSION.....</b>	<b>97</b>
4.0 Overview of the Chapter.....	97
4.1 Response Rate.....	97
4.2 Data Coding and Entry.....	98
4.3 Data Screening and Cleaning.....	99
4.4 Demographic Profile of Participants.....	100
4.5 Descriptive Statistics Analysis.....	102
4.6 Assumption of Normality.....	103
4.7 Model Specification.....	105
4.8 Measurement Model.....	107
4.8.1 Convergent Validity and Reliability.....	107

4.8.2 Discriminant Validity .....	109
4.9 Structural Model .....	115
4.9.1 Multicollinearity Test .....	115
4.9.2 Structural Model Path Coefficient .....	117
4.9.3 Coefficient of Determination .....	119
4.9.4 Effect Size .....	122
4.9.5 Predictive Relevance of the Model .....	123
4.10 Summary of the Findings.....	124
4.11 Chapter Summary .....	125
CHAPTER 5.....	126
CONCLUSION AND RECOMMENDATION .....	126
5.0 Overview of the Chapter .....	126
5.1 Recapitulation of the findings .....	126
5.2 Discussion .....	127
5.3 Influence of Consumption Values .....	129
5.3.1 Functional Value.....	129
5.3.2 Social Value .....	129
5.3.3 Emotional Value .....	130
5.3.4 Novelty Value .....	131
5.3.5 Conditional Value .....	132
5.4 Influence of Perceived Values .....	133
5.4.1 Monetary Value .....	133
5.4.2 Environmental Concern .....	133
5.6 Contributions of the Study .....	134
5.6.1 Theoretical Contributions.....	134
5.6.2 Managerial Implications .....	136
5.7 Limitation and Future Research Directions .....	138
5.8 Conclusion .....	140
REFERENCES.....	141
APPENDIX A Questionnaire .....	173-185
APPENDIX B: Summary of Consumer Behavior .....	186-189
APPENDIX C: Summary of Organic Food (Global) .....	190-192
APPENDIX D: Summary of Organic Food (Malaysia) .....	193-195
APPENDIX E: Summary of TCV (Global) .....	196-197
APPENDIX F: Summary TCV (Malaysia) .....	198
APPENDIX G: SPSS Analysis Result .....	199-208

## CHAPTER 1

### INTRODUCTION

#### 1.0 Overview of the Chapter

The objective for this study was to examine the factors that can influence Malaysian consumers when purchasing organic food. This dissertation commences with a brief discussion of the background of the study. Next, the statement of problem, research questions as well as the objectives, the scope and the significance of study are provided, followed by the organization of this thesis.

#### 1.1 Background of Study

Food health or security are issues of concern as consumer are increasingly conscious of the agricultural effect of their consumption habits. The increasing issue regarding new generations, increased education, health literacy as well as environmental sustainability all attributed to green movement's popularity (Kashif et al., 2020). The advent towards organic consumer behaviour has changed the value of different determining factors including consumers attitudes against the purchasing a product. Hence producers, marketers, as well as policymakers of organic food, need to learn about the history of the purchasing behaviour regarding organic food for the formulation of viable marketing strategy.

Majority of the consumers knew that green food are processed through environmentally sustainable technologies, does not cause environmental threat. Green food have numerous attributes, such as they are Originally produced, compostable, sustainable, carbon neutral, contain preservatives that become non-toxic or chemical permitted, were not tested by animals and have environmentally friendly labeling (Saleki & Sayedsaleki, 2012). Green food is a combination of organic and non-organic food (Mishra & Sharma, 2010). Green consumption is also encouraged via the purchase of green food (Suki, 2016). Nevertheless, green food were not same as the organic food. According to The Department of Agriculture of the Americas (USDA) describes an organic food generated without sewer sludge, herbicide resistant crops, fertilizers, genetic modification, antibiotics, radioactivity and inhibitors (Lim et al., 2014). In contrast, natural food or green food authorize additives (Saleki & Sayedsaleki, 2012). While, organic food means that the food is harmless to consume, of very good quality, considers the welfare of animals, healthful, and produced following the sustainable development principle (Liu, 2003). Figuratively, consumers would opt to consume organic food instead of green food (Bekele, Zhou, Kidane & Haimanot, 2017). There may be a great boundary among green food and organic food categories in order of how they should be grown, however both must take safety, health and environmental into account.

According to United States National Organic Standards Committee Department of Agriculture (USDA), organic food, encourages the use of sustainable energy and soil and water conservation to enhance the quality of the environment for future generations. Organic meat, poultry, eggs and dairy products come from animals that do not have antibiotics or hormones because they are raised without the most common pesticides. Fertilizers are manufactured with organic or sewage sludge components, bioengineered or ionizing (Kashif et al., 2020).

Conceptually, organic food as a result of organic philosophy practices and principles (Bourn & Prescott, 2002; Goldman & Hylton, 1972; Klonsky, & Tourte, 1998, as cited by Bostan et al., 2019). Some researchers Highlight an issue of "biological" or "natural" growth, whereas others outline "green" and "environmental friendliness" (Snyder & Spaner, 2010). Another classification also related to concept of modified chemicals being involved in organic farming (Gomiero, 2013; Mukherjee & Lal, 2013). Vindigni, Janssen, and Jager (2002) study provides a fascinating perspective, who argue the word organic mostly reflects a "process claim" but not a "product claim".

At the other end of the dimension, Velten, Leventon, Jager, and Newiq (2015) claimed that sustainable agriculture promotes sustainability including rural development by incorporating acceptable biological processes and restrictions. As soil degradation became among of the most severe threats to agricultural production worldwide (Damalas & Eleftherohorinos, 2011; Pimentel & Burgess, 2013), the consumption of organic food should be encouraged. Organic food using close to forty percent lesser energy than other food mainly as they do not using chemicals and pesticides (Bostan et al., 2019). The organic farming benefits through environmental, social and economic have increased global interest, including Malaysia. However, the main problem in organic farming is whether legislation in Malaysia develop a clear structure for any criteria concerning the labeling of food as “environmentally friendly” or “natural” including why consuming to this kind of food promotes increase in health of the consumer and environmental sustainability (Yogananda & Nair, 2019). To respect organic principles, farmers need to consolidate efficient management so that the final output can consist of better promotion of soil fertility, conservation of biodiversity and improvement of the quality of life (Hasanov & Khalid (2015).

As social and political pressures increase, many firms have begun to adopt organic marketing strategies and promote their environmentally-friendly food as a strategic value. But nevertheless, one of the main obstacles companies face is influencing consumer to buy organic food. That's because it is essential to distinguish between the so-called "green food" and "organic food" currently become popular to Malaysia. Green food is promoted as good quality, pollution-free, hygienic as well as healthier food (Lin, Zhou, & Ma, 2009). On the other hand, organic food can be defined as green food without any artificial fertilizers, pesticides, and additives in the process of production (Mohamad, Rushi, & Hashim, 2014). It is necessary to note that green food are not the same as certificated organic food.

The organic food brand in Malaysia is more commonly established than the green food brand. Half of the participants in a recent study did not recognize the difference between organic and green food (Yip & Janssen, 2015). Similarly, Yin, Linhai, Lili, and Chena (2010) discovered that people in China have a very poor awareness of organic food compared to people in developed countries. However, knowledge of organic food can differ from city to category of food. Green products have two standards: (a) green food, that represents a transitional stage between traditional and organic food, making minimal use of pesticides and fertilizers, and (b) organic food, which represents a full organic status. As mentioned from previous section, organic food can be defined as green food without any artificial fertilizers, pesticides, and additives in the process of production (Mohamad, Rusdi, & Hashim, 2014), while a green food label refers to a category of food that is grown in a safe and ecologically sound manner (McCarthy, Breda, Liu, & Chen, 2015). For food to be claimed fully organic, it has to be certified by an agricultural authority to ensure that the food is made, preserved and manufactured from artificially produced inputs and chemicals (Kashif et al., 2020).

The United States is the highest producer of organic food (46%), while in Asia, China is the leading country (7%) (Heinze, 2018). Table 1.1 explains the differences between organic food and green food.

Table 1.1  
*Differences between Organic Food and Green Food*

<b>Organic Food</b>	<b>Green Food</b>
No harmful chemicals or pesticides have been applied for at least two years for annual crops and three years for perennials.	Chemicals and pesticides can be used in a limited amount to improve soil quality and prevent pests.
Farms and processing plants are inspected annually in order to get their certificate extended.	Farms and processing plants are inspected every three years in order to get their certificate extended.
Certification of land and practices.	Certification of products.
No genetically modified organism (GMO).	Genetically modified organism (GMO) tolerated.

Source: Bekele, Zhou, Kidane, and Haimanot (2017)

Organic chickens, for example, differ from ordinary chickens because the former's breeding and growth require the 'normal way' technique rather than the use of a material, vaccine, and chemical to minimize the chickens' maturity age. The growth and breeding of conventional chickens involve using of non-halal vaccine, impure and dangerous for consumption. Organic chickens have high protein in their meat, which promotes antioxidant and anticancer to those who consume the meat, in comparison to non-organic chickens. A survey undertaken by Hay (1989) found that organic food were considered by those who had and had not purchased organic products to be good tasting, high quality, more nutritious and safer yet less appealing than conventional.

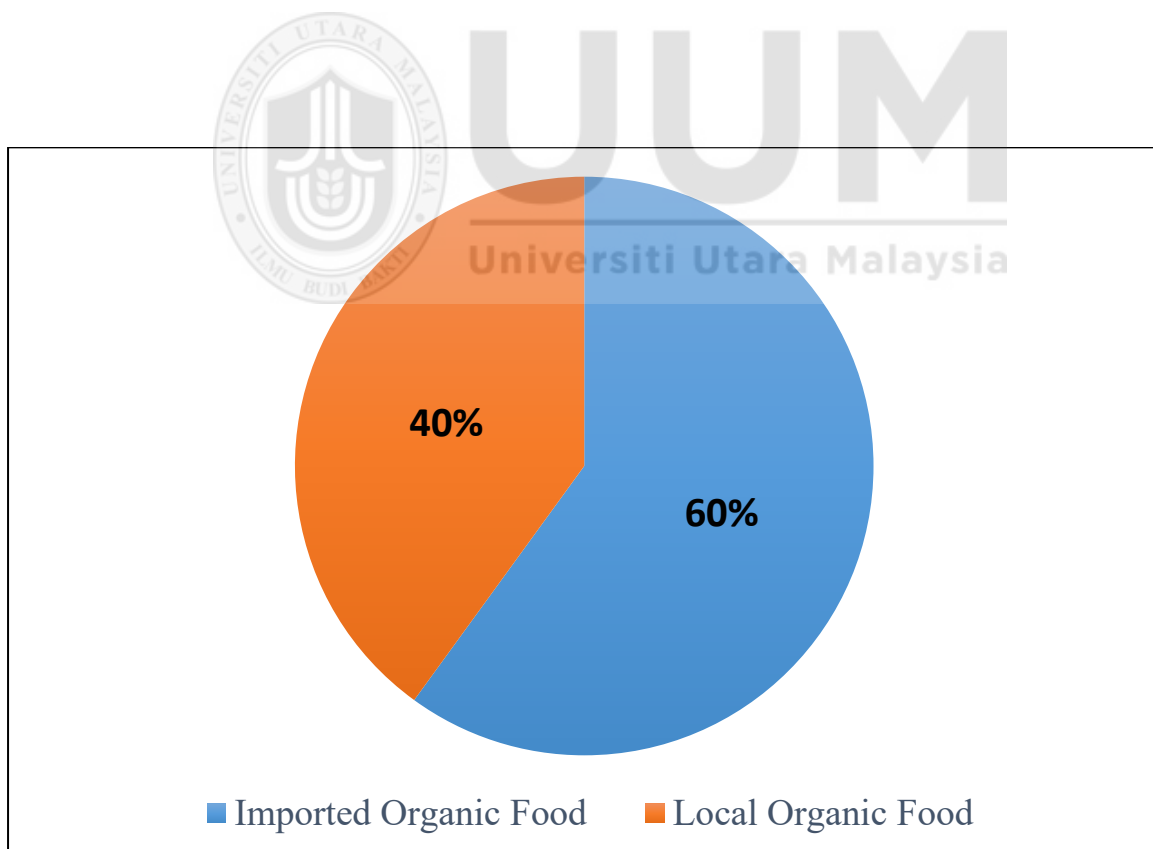
Malaysia, nowadays, the organic food demand is dramatically rising even though it is slow because of the changing healthy lifestyle that conventional food could not provide. For example, organic food packaging, one of the categories of organic food industry, reported a total 4% increase in value to reached RM10 million in 2017 (Euromonitor, 2018). Demand comes from changes in the fast-paced world's lifestyle that some have found wanting in conventional food safety. Furthermore, currently, consumer are concerned about the natural and healthy products and their environmental effects, giving rise to a constructive mind-set and intent to consume organic product (Suh, Eves, & Lumber, 2012). The most common reason for consumers to buy organic food, according to Ghali and Hamdi (2015), was the desire towards the wellness as well as the environmental protection (Kashif et al., 2020).

However, in Malaysia, the organic concept and development for organic food is still nascent and less consumption especially for local organic food (Chiew, Ismail, & Ishak, 2014). Today, as consumers desire to live a good life and a better quality of life, they choose organic food as an alternative for healthy food. As the number of environmentally responsible consumers is increasing, so is the amount of organic food in the market (Song, 2017). According to the World of Organic Agriculture 2019 report, there were 1.1 million registered organic producers in Asia in 2017. India has been the most organic country (835,000) preceded by Philippines (166,000). Ironically, as some countries didn't know the number of manufacturers but merely listed the companies, the number of producers could be higher. Faced with imminent environmental degradation, the government of Malaysia is encouraging the public to go organic (Nezakati, Hosseinpour & Hassan, 2014). Consistently, strict environmental regulations and regulatory framework for conscious control of air quality and greenhouse gases were outlined by the government in the country, as an attempt to accomplish environmentally responsible development and improve the public health (i.e., Environmental Quality Act 1974) (Suki,

2016). Subsidies are also provided by the local authorities to promote the organic industry in Malaysia through the Malaysian organic certification programme and the certification of farms in accordance with the Malaysian standard MS1529:2001 (Tiraieyari, Hamzah, & Samah, 2014).

Unfortunately, 'organic' does not mean 'natural' because there are no guarantees provided by nature. Organic food are often mistaken for 'natural food', which are assumed to be processed minimally and do not contain hormones, antibiotics, or preservatives (Gopalakrishnan, 2019). Because a business understands that consumers are willing to purchase a product because of its purported value and benefit, several food producers use the word "natural" instead of "organic" to brand minimally processed and preservative-free food (Organic Trade Association, 2018). For this reason, product locally manufactured or imported either from other countries should be labeled with the Malaysian Organic Scheme (MOS) to be accredited with "organic" as part of the Department of Agriculture's Crop Quality Control Division (SOM, 2015). The "Organic Certificate" is important to help the Malaysian organic industry grow and help consumers identify genuine organic products in the market. Liu (2003) notes that organic food should also be processed according to industry standards, which is also regulated by the concept of sustainable growth, to ensure that consumers eat high-quality food without risk or health effects. Organic farming encompasses cultural traditions, technological innovation, and scientific methods for the benefit of the environment and encourages reasonable economic relations and a better standard of living (Chiew, Ismail, & Ishak, 2014).

Economic growth, urbanization, globalization, and trade liberalization have significantly impacted consumers' food choices and preferences. As a result, organic food is the fastest growing market in the food industry in many countries (Dettman & Dimitri, 2010). The global sales for organic food and beverage reached USD89.8 billion in 2015 (Market Research Consulting Statistics, 2016). In Malaysia, however, the value of the local organic food is still low compared to imported organic food even though Somasundaram, Razali, and Santhirasegaram (2016) showed an increase in the Malaysian purchases for organic food which over 60 percent is imported, but they must bear a reliable 'certified organic' label from the source of the exporting countries (see Figure 1.1). The situation is, if organic food products are a better choice than conventional food products, then how to encourage consumers to consume the organic food especially local made organic food?



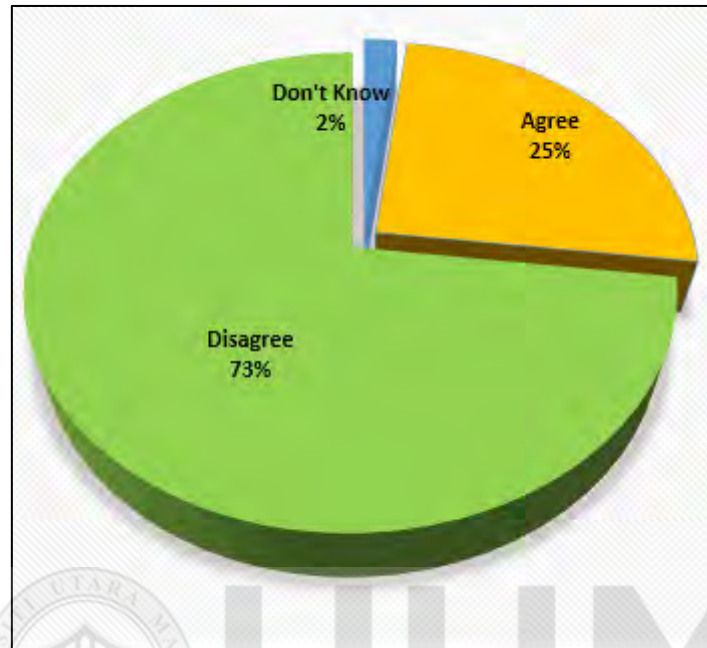
*Figure 1.1*  
Summary of organic food in Malaysia year 2016  
Source: Somasundram, Razali and Santhirasegaram (2016)

Therefore, in order to market the local organic food the development of organic food market prompted the Agricultural Research and Development Institute of Malaysia (MARDI) need to further grow the organic agriculture industry by numerous events and activities. Organic food was recognized as a potential field leading to economic development although there are no current statistic on the development of the organic food in Malaysia. Organic food production has been a ground-breaking plan for Malaysian agriculture to safeguard the strategic advantages. It is time that government of Malaysia reviewed its organic farming policies and changed its approach to ensuring that local organic industry is the agricultural sector's growth engine. The success of this industry requires comprehensive strategies and cooperation from the producers, marketers and government.

## **1.2 Problem Statement**

Currently, in Malaysia, local organic food remains a niche market, but one that is slowly growing, because misunderstanding amongst farmers, suppliers and consumers for broader reach in organics food value in local markets. Malaysian consumers tend to perceive that organic food rejuvenates human health and provides their bodies with full nutritional values (Leong & Ng, 2014). However, according to the IPSOS survey of Malaysian consumers of organic food (as shown in Figure 1.2), as of September 2018, only 25 percent indicated they consumed only organic food, while 73 percent did not eat organic food, and 2 percent did not know about organic food (Hirschmann, 2019). If organic food are perceived to be beneficial or give value, why only a 25 percent Malaysian consumers agreed to purchase them? Since 60 percent of organic food in Malaysia are imported, we can safely assume that 25 percent of the participants who agreed to consume organic food in 2018 mostly bought imported organic food. This situation begs the question about the percentage of local organic food consumption.

Hence, a study is needed to know about the current position of local organic food to safeguard the local organic food industry.



*Figure 1.2*  
Distribution of respondents who consumed organic food  
Source: Hirschmann (2019)

In the context of organic food purchase, several authors have asserted that retailers of organic food need to develop and incorporate appropriate organic marketing strategies to help customer decision-making. (Hughner et al., 2007). Marketing strategies involve environmentally sustainable food processing and distribution (e.g., organic food), Organic food Promotion and Communication (e.g., Advertising, promotional sales, distribution and public relations), and Eco-friendly labelling (Groening, Sarkis, & Zhu, 2018; Hughner et al., 2007). Nevertheless, majority of preceding research conducted in Malaysia from variables affecting propensity to purchase organic food used more on the Theory of Planned Behaviour (TPB) or the Theory of Reasoned Action (TRA). However, few studies (e.g., Suki, 2016) employed the Theory of Consumption Values (TCV) for green products, especially organic food.

Consumers' purchasing power, consumption habits, and awareness of food safety and health problems have increased the purchase patterns of organic food (Mohamad et al., 2014). The MARDI's 2010 study found that over 90 percent consumers in Malaysia were aware of organic goods and associated them with clean, healthy or all-naturally occurring chemicals but still less of promotion on the local organic food. Although, it's revealed that 53.8 percent of Malaysian consumers consumed organic product at least once in six months (Suhaimie, Ibrahim, & Wahab, 2016). However, such finding does not translate into a higher purchase and consumption of local organic food. Somasundaram, Razali, and Santhirasegaram (2016) found that only 40 percent of Malaysian consumers who purchase local organic food are regular consumers, and at present, limited studies were carried out to identify whether consumers prefer local or imported organic food and the percentage of local organic food. Research findings of consumer desire to buy organic food would educate manufacturers, suppliers, and marketers about consumer willingness to eat organic food despite being more costly than conventional food (Clifton & Simmons, 2003; Joshi & Rahman, 2015). Such finding provides insight into the trend of the organic food market within Malaysia. Furthermore, the present study shall assess the consumers of Malaysia's propensity to purchase either local or imported brand of organic food.

A large number of research on organic food based on the personal factors of consumers that drive attitudes and purchasing behaviour similar to organic food (Aertsens, Verbeke, Mondelaers & Van-Huylenbroeck, 2009). Personal reasons including environmental issues, expertise, perceived consistency, emotions, health awareness, nutritional issues, taste of food and product quality (Chen, Chen & Tung, 2018; Rana & Paul, 2017; Song, 2017; Verhoef, 2005; Yogananda & Nair, 2019). Interestingly, mixed results on the connection between the attitudes of consumers and their purchase of organic food are reported (Aschemann-Witzel, &

Niebuhr, 2014). Numerous studies reported that certain consumers do not consume organic food even though there are positive behaviour (Pearson, Henryks, & Jones, 2011). Aschemann-Witzel and Niebuhr (2014) noted young consumers held extremely favourable attitudes towards organic food, but its real purchases remained small. Previous studies found that consumers who care about the environment do not necessarily behave in favour of the environment (Ohtomo & Hirose, 2007). An individual who appreciates and is concerned about the environment does not necessarily behave organically or tend to purchase organic food. An individual may purchase organic food if he or she is normatively pro-environmental (Ajzen, 1991). According to Miller (2005), intention drives behaviour. Woodruff (1997) stated that value is the most important source of competitive advantage because values have become a consumer's concern in purchasing behaviour (Huang, An, & Yo, 2019). From a psychological point of view, the term value refers to an individual's centrally held belief system, which prompts him/her to act (Rana & Paul, 2017).

However, several scholars noted the existence of a value-action gap in customers' purchase behaviour (Young, Hwang, McDonald, & Oates, 2010) as well as a significant gap between intention to purchase and actual purchase behaviour (Peattie & Crane, 2005). A gap between value and action or "value-action gap" occurs when an individual does not act consistently with his or her belief, value, or attitude (Ohtomo & Hirose, 2007). The value-action gap also known as attitudes and behaviour act (Popovic, Bossink, & Van der Sijde, 2019). According to Ooi, Kwek, and Keoy (2012), value-action gap is the gap that occurs when an individual's values or behaviour do not correspond to his/her actions. A value-action gap is a gap between the high value that people place in the environment and the relatively low level of action that people take to address environmental problems (Dickson, 2001, p.97).

Value has been observed to be a strong indicator of customer buying intention (Bui, 2005). However, its role in a consumer's purchase decision has not been widely examined (Schiffman & Kanuk, 1997). Suki (2016) argued that consumer worry about green product performance, price and tangible benefits that add value to the products. Therefore, in this study consumption values are used to predict the propensity of consumers to purchase organic food as there is insufficient literature in consumption values and organic food in Malaysia. Moreover, Popovic, Bossink, and van der Sijde (2019) recommended future studies to explore the antecedents of the 'value-action gap' among organic consumers to provide insight into the organic consumption for companies to formulate organic and sustainable marketing strategies. As different people attach different important values to their purchasing behaviour, it is important to examine to what consumption values and perceived values influence consumer choice of organic food.

In organic industry, a large number of past studies used the TPB or TRA to understand the purchasing behaviour of organic food (Chan, 2013; Ooi, Kwek, & Koey, 2012; Punitha & Azmawani, 2011; Ramayah, Lee, & Osman, 2015). However, TPB and TRA have certain limitations in predicting behaviour: Firstly, the intention determinants shouldn't have be restricted to subjective norms, perceived behavioural control and attitude. Other factors may influence behaviour. According to Werner (2004) and Ajzen (1991), TPB or TRA can only describe 40 per cent of behaviour. According to Werner (2004) and Ajzen (1991), TPB or TRA can only illustrate 40 per cent of actions. Secondly, the assumption that people can act is often unfounded. In practice, restrictions, such as restricted ability, time, climate or unintentional behaviours and restrict freedom of action. Moreover, time frame between the propensity to purchase and actual purchase behaviour is not addressed by the theory whereby the intention of an individual might change from time to time.

Lastly, environmental or economic aspects which would affect the propensity of a consumer to carry out specific behaviour are not included in the TPB and TRA. Even when they are taken into account, their influence is normative. Unconscious motives are not taken into account because the theories assume that people are reasonable and follow systematic assessments, based on available information. In contrast, a study by Zailani, Iranmanesh, Hyun and Ali, (2019) on consumption values, which have a significant effect on willingness to pay for biofuels, whereby this result indicates that the theory of consumption values is a powerful theory in explaining drivers' willingness to pay. However, the factors that affect these values are unclear. Therefore, Zailani et al. (2019) suggested to investigate the antecedents of consumption values. Although extensive study has been undertaken to reveal the predictors and effects of the intention to buy, it is still known an area for further research as it can be influenced by a number of psychological, philosophical, social, and economic factors. Scholars have described intention as a perception of a person leading to the performance of a particular activity or the subjective possibility of an individual's relationship with action (Ajzen & Fishbein, 1977; Fishbein & Ajzen, 1975). The scholars concerned revealed the predictive relation of attitude and subjective norms with intention in the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975). In an effort to expand the TRA, however, the precedent of intention was found to be the attitude towards actions, the subjective norm, and the degree of perceived behavioural regulation, known as the expected behaviour theory (TPB) (Ajzen & Driver, 1992) (Ajzen & Driver, 1992). Davis (1989) validated perceived utility and perceived ease of use as precedents of purpose in another theoretical perspective, which is the technology acceptance model (TAM). Meanwhile, a decomposed theory of planned actions (TPB) was suggested by Chau and Hu (2001), where TAM and TPB were combined and perceived utility, perceived ease of use, behavioural attitude, subjective norms, and perceived behavioural control were modelled as the precedents of purpose.

However, one of the important theories in the field of market research is the theory of consumption value (TCV), which explains the reasons for the value of a certain consumer's preference. The TCV indicated that to calculate the purchasing propensity of consumers is not only limited to organic food goods, but also to various categories of products, such as halal products, adoption of mobile banking and choice of destination (Maharum, Md Isa & Salahuddin & Saad, 2017). It is assumed that TCV may be another primary theory that can be used instead of using TPB and TRA to calculate the purchasing propensity of consumers (Maharum, Md Isa & Salahuddin & Saad, 2017). Because for these limitations of TPB and TRA, this study used the Theory of Consumption Values (TCV) as it predicts behaviour more accurately than the TPB or TRA (Teoh & Nor Azila, 2015).

### **1.3 Research Questions**

Based on the discussion above, consumption values and perceived values could have a direct impact on the propensity to purchase organic food as according to Werner (2004) TPB or TRA can describe only 40 per cent of actions. However, research on such a relationship in the organic industry in Malaysia remains limited. This study aimed at fulfilling such a gap. Specifically, the present study attempted to answer the following research questions:

1. Do consumption values (functional, social, emotional, novelty, and conditional) influence the propensity to purchase organic food?
2. Do perceived values (monetary and environmental concerns) influence the propensity to purchase organic food?
3. Does propensity purchase organic food influence actual purchase behaviour?

## **1.4 Research Objectives**

Four research objectives were formulated as follows:

1. To determine the influence of the consumption values (functional, social, emotional, novelty, and conditional) on the propensity to purchase organic food.
2. To investigate the influence of perceived values (monetary and environmental concern) on the propensity to purchase organic food.
3. To assess the influence of propensity to purchase organic food toward an actual purchase behaviour.

## **1.5 Significant of Study**

The objective of this study is to examine the determinants of choosing organic food from the Theory of Consumption Values. It is hoped that the findings of this research will be useful for manufacturers of organic food in Malaysia and scholars in developing a theory on consumer purchase behaviour of organic food. The contributions are further elaborated below.

### **1.5.1 Theoretical Contribution**

As mentioned earlier, most studies on organic purchase behaviour adopted the TPB framework (Afzaal & Ahmad, 2012; Chan, 2013; Hong, Nasreen & Madi, 2013; Iman Khalid & Yuserrie, 2011; Kim & Chung, 2011; Tan, 2013;), or TRA (Nabsiah, Rahbar & Tan, 2011; Ooi, Kwek & Tan, 2012; Punitha & Azmawani, 2011; Ramayah, Lee & Mohamad, 2010; Vazifehdoust, Taleghani, Esmailpour, Nazari & Khadang, 2013). However, there are limited studies on theory of consumption values in Malaysia regarding consumer choice behaviour on organic product (Ahmad & Omar, 2018; Alesia et al., 2014; Suki, 2016; Suki, 2015; Teoh & Nor Azila, 2015). The summary of the literature in as per Appendix C.

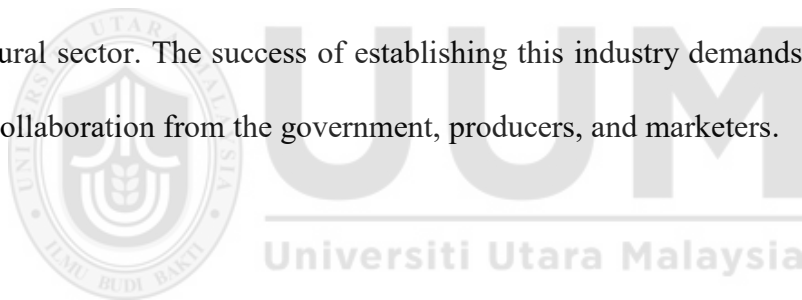
This study will extend the theory of consumption values (TCV) by adding two variables so that choosing organic food could be further understood. By using the consumption values theory, the proposed study also seeks to add to the existing literature on organic food consumption. Most studies used the consumption values theory focused on environmental concern (Alesia et al., 2014; Lin & Huang, 2012), attitude (Alesia et al., 2014; Teoh, 2015), and satisfaction (William & Soutar, 2009) rather than monetary value to predict consumer choice behaviour regarding organic food. However, as suggested by Omigie, Zo & Rho (2015), there is a need to consider monetary value of consumption of organic purchase in future studies. Furthermore, past studies tended to consider organic monetary value in TPB but not TCV.

This study will also contribute to the existing literature on organic food by testing functional values (price and quality), emotional value (product perception), social value (social influence and self-identity), novelty value (product knowledge), conditional value (choice behaviour), monetary value (money benefit) and environmental concern. The present research also hopes to address inconsistent findings in the literature of the influence of these values on consumer choice behaviour.

### **1.5.2 Practical Contribution**

At a practical level, the findings of the research may enable authorities and manufacturers to restructure marketing strategies in terms of segmentation, positioning, advertising and promotion. The findings could help organic food manufacturers to understand what values consumers are seeking in deciding to consume organic food so that the manufacturers could position their food better. Also, such insight could assist the manufacturers in segmenting, targeting, and positioning their product or brand. That is, such finding could enable the manufacturers to customise their existing food to meet the needs of their consumers.

The findings of this study may likewise be noteworthy to different organisations that want to improve their customers' purchase behaviours and increase their sales or profitability. Finally, there is still a distinct lack of trust among consumers towards product that is labelled "organic", even with the Government's certification efforts. More needs to be done to overcome the prevailing issue of credibility and trust in the marketplace. In general, there is a lack of awareness among producers, retailers, and consumers of the wider extent of organic production and processing standards in local markets. Although, organic food has been considered a new industry that contributes to economic growth. The production of organic food has become an innovative strategy for the Malaysian agricultural structure to sustain its competitive advantages. It was timely for the Malaysian government to review its organic farming policy and change its paradigm to ensure that the organic food industry becomes the engine of growth for the agricultural sector. The success of establishing this industry demands comprehensive strategies and collaboration from the government, producers, and marketers.



## **1.6 Scope and Limitation of Study**

The purpose of this study aimed to determine the antecedents of propensity to purchase organic food. The study focused on consumers who patron major shopping malls located in Kuala Lumpur. Kuala Lumpur was chosen because the tendency to purchase organic food is higher in Kuala Lumpur than in other cities. The statistics showed that 65 percent of organic markets tend to be concentrated in Kuala Lumpur, followed by Johor Bahru (15%), who attracts Singapore consumers, and Penang (10%) (Toh, Dominic & Shanmugam, 2018).

## 1.7 Operational Definition

Operationalizing or operationally defining a concept to make it assessable is conducted by looking at the behavioural aspects or properties indicated by the concept. These aspects are then interpreted into recognizable and quantifiable components to build an indicator of measurement of the concept (Sekaran, 2003). In this research, the influential factors indicated or suggested by previous research that could influence consumer purchase behaviour were tested in the Malaysian context. The following outlines the operational definition of the key concepts in this study.

**Purchase Behaviour:** Consumer purchase behaviour relates to the consumption of products or services triggered by a decision-making process, which involves activities by consumers when obtaining, retrieving, and disposing of products or services (Somasundram, Razali, & Santhirasegaram, 2016).

**Consumption Values:** Consumption values address explicit and implicit reasons and motives when people make purchasing decisions that explain why consumers prefer a specific product or service (Seth et al., 1991).

**Functional Value:** Suki (2016) defined functional value as the perceived or derived benefit from conditional, practical, pragmatic or physical output.

**Social Value:** Social value is characterized as the perceived or obtained benefit in respect of one and sometimes more cultural groups. Depending on the demographic, socio-economic and cultural ethnic groups, this social gain can be positive or negative (Teoh & Nor Azila, 2015).

**Emotional Value:** Emotions typically stem from environmental occurrences and take form depending on the situation. In consumer preferences, emotional values can emerge in meaningful ways, such as loyalty, appreciation and enthusiasm, and in negatively, such as intimidation, rage and regret (Lin & Huang, 2012).

**Epistemic Value:** The epistemic value can often be defined as the benefit interpreted and extracted from any kind of curiosity, information need as well as innovations (Solaiman et al., 2017).

**Perceived Value:** Perceive value is a set of attributes related to the observation of a product's value (Chen & Chang, 2012).

**Monetary Value:** Monetary value is an intangible worth that is measured by monetary costs and benefits associated with the purchase or use of good and service (Lee et al., 2007).

**Environmental Concern:** Environmental concern reflects the degree to which people are conscious of environmental problems and endorse attempts to address them and/or the ability to directly contribute to their solution (Dunlap & Jones, 2002).

**Organic Food:** Organic food can be defined as green products that are produced without any artificial fertilizers, pesticides, and additives added (Chattopadhyay & Khanzode, 2019).

## **1.8 Organisation of Thesis**

This dissertation is organized into five chapters: Introduction, Literature Review, Research Method, Result, and Discussion and Conclusion. The following is an overview of each Chapter:

Chapter 1 provides the background of the study, problem statement, research questions, research objectives, the scope of research, and the significance of the research. Chapter 2 reviews related literature to establish a theoretical framework with hypothesis. This chapter also discussed the theories that underpinned the present study. Chapter 3 comprises a research framework, hypothesis development, and the method used in this inquiry. This chapter also talks about the research design, functional definition, measurement of variables, population and sampling, and pilot study. Lastly, the technique and data analysis are also discussed. Chapter 4 discusses research results. Also included in this chapter is the overview of data analysis. This chapter reports the descriptive findings of the participants. It also presents the result of the reliability, validity, correlations, and multiple regression analyses. Chapter 5 discusses the findings presented in the previous chapter by relating them to the literature and theory. The managerial implications are also highlighted, as well as the directions for future research, limitations of the study, and conclusion.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Overview of the Chapter

In the earlier section, the background of the study, problem statement, research questions, research objectives, scope, significance, and operational definition of key terms were presented. Next, a review of the relevant literature is offered in this chapter. In particular, the discussion will focus on the dependent variable, which is consumer purchase behaviour, and two independent variables, namely consumption values (functional value, social value, emotional value, novelty value, and conditional value) and perceived value (monetary value and environmental concern). Also, the consequence variable (actual purchase behaviour) is also examined. One of the main roles in the literature review is to develop a research model and hypothesis. In formulating the hypothesis, relevant theories will also be presented. This chapter ends with a summary of key points.

#### 2.2 Organic Food

Organic food can also be described as green products not involve adding any additives, pesticides and artificial fertilizers in the process of production (Kashif et al., 2020; Mohamad, Rushi, & Hashim, 2014). Products can only be considered organic once processed according to the standards in all areas of production, which enable the products to be certified as such (Yogananda & Nair, 2019). Organic food is the food that is not manufactured by radiation exposure, agricultural chemicals and prohibits any additional adhesives of chemical ingredients (Savithri & Lavanya, 2019).

In Malaysia, incentives was given to farmers under Malaysian organic certification program to promote organic food production but also register farms according to Malaysian MS1529:2001 standards (Tiraieyari, Hamzah, & Samah, 2014). Food processed domestically or purchased from the other country should be classified with "Organic" by Malaysian Organic Scheme, under the Crop Quality Control Division of the Agriculture Department (SOM, 2015). According to Aslam and Chen (2019), organic food must be produced in accordance with standards developed by the industrial body following the environmental sustainability principle whereas consumer can purchase good products with no fear and health risks.

A decision-making process for purchasing organic food is difficult to define, because of organic food awareness does not translate into actual consumption of organic foodstuffs (Aslam & Chen, 2019; Briz & Ward, 2009; Kashif et al., 2020; Shepherd, Magnusson & Per-Olow, 2005). The low purchasing trends also signal that awareness does not translate into an actual purchase (Tarkiainen & Sundqvist, 2009). However, some researchers found an increased number for consumers willing to purchase organic food after considering various problems, such as health (Newsom et al., 2005; Savithri & Lavanya, 2019) including the environment (Saleki & Seyedsaleki, 2012). The current research examined key factors affecting consumer propensity to purchase organic food throughout the emerging market in Malaysia using Consumption Values Theory (TCV) model.

### **2.3 Organic Agriculture and Food**

Organic farming promotes the health of agro-ecosystems, including biodiversity, biological cycles, and soil biology. (Hossain & Pei, 2016; Sagari, Kumar, & Rao, 2019). Instead of using synthetic materials to perform some particular roles within the system, it stresses the use of cultural, biological and mechanical activities (Bagher, Salati & Ghaffari, 2018). Promoting land, air and water quality through the elimination among all forms from pollution expected to emerge by farming practices. Therefore organic farming was an innovative way in agriculture farming that attaches interest to both technical and economic perspectives and to people's health (Aslam & Chen, 2019; Samik & Nordin, 2012).

The US National Council of Organic Standards in December 2000, the agriculture department has set the global standard for the organic concept. Organic food that grown by the farmers whom prioritize use of natural resources as well as the conservation of water and soil that enhance the quality of environment towards future generations (Gopalakrishnan, 2019). Organic poultry, dairy products or processed food are produced through livestock without antibiotics or hormones for development (Rizzo et al., 2020). Organic food are processed without any traditional pesticides, radiation by bioengineering or ionizing and synthetic fertilizer. Production must meet a specified organic standard and must be accredited with a recognized certifying authority for products to be considered organic (Tiraieyari, Hamzah, & Abu Samah, 2014).

## 2.4 Malaysian Organic Food Production and Market

In the early stage, organic farming in Malaysia was initiated by the Center for Environment, Technology, and Development, Malaysia (CETDEM), then by private bodies or Non-governmental organizations (NGOs). CETDEM has played a leading and influential role in finding concerns with traditional farming practices. CETDEM also concentrated on environmental degradation, planting workers' health through pesticide use, food protection and sustainable agriculture. However, many innovative organic farms were founded only in the 1990s, like Negeri Sembilan Ecofarm, Lifestyle Farm at Melaka and Perak Sustainable Living Centre, as well those in Kuantan and Pulau Pinang. Organic food is still a niche market, and is beginning to rise. There were 131 hectares in 2001 of organic farms in Malaysia. The Malaysian Department of Agriculture (DOA) reported 27 organic producers nationwide. Development of organic products in East Malaysia is restricted for fruits and vegetables. The DOA, in 2013 registered a total of 89 farms, totaling 1,634 hectares of organic farming land, with 49 farmers were validly certified.

Inside Malaysia, the local organic food industry remains small, with over 60 percent of organic food items being imported (Somasundram, 2016). Agricultural sector in Malaysia was about 7.3 percent (RM99.5 billion) of the Gross Domestic Product (GDP) in the year 2018 (DOA, 2019). Organic food is considered a new market leading to economic growth. Organic food processing is a revolutionary agricultural strategy on Malaysia system in order preserving its strategic advantages. The Third National Agricultural Policy (NAP3) has realized several main benefits with organic agriculture, particularly export possibilities from the organic niche market, which could yield capital gains for Malaysia.

Among the Government's measures to enforce this program is to enable smaller-scale farmers to participate in agriculture of organic (Abdul Latiff, Othman & Muhamad, 2018). It has been, too, the policy of the Government to increase the income of producers. The government targeted organic agriculture in the Ninth Malaysia Plan (2006–2010), which was estimated to have a financial value of over USD 200 million over five years. By 2010 the Ministry of Agriculture expected to have 20,000 hectares of organic farms and 4,000 hectares of domestic production each year (Tiraieyari, Hamzah, & Abu Samah, 2014). The vegetable farming hub in Malaysia can also be found in Cameron Highlands where the organic vegetable farms Grace Cup Pte Ltd. (Pahang, Malaysia) and Cameron Organic Produce Pte Ltd. (Pahang, Malaysia) have been founded.

Major national organic companies namely Zenxin and Country Farm Organics have been active in the sale and distribution for organic food. The presence of specialty shops disrupted the supply for organic food throughout Malaysia operating throughout the country. Approximately 70 per cent of organic food products were marketed through specialist grocery markets and chain of supermarkets. Whereas the remaining was provided by wet & home markets and conventional retail outlets (Stanton, 2011).

## **2.5 Organic Certification and Standards**

Malaysian government has also adopted national guidelines on organic agriculture and organic food. Malaysia's DOA outlines the scheme certification and guidelines in 2002. The scheme has been redesigned in 2003 then renamed to Organic Scheme of Malaysia (MOS). Organic product manufactured in compliance with the national MS1529 legal standard must feature the logo of organic. The MOS is still minimal because it is just includes vegetable product and animal product, while processed food have not yet been included (Samik & Nordin, 2012).

The scheme is available to all farmers participating in the processing of fresh organic produce. A group of trained agricultural officers were assigned to carry out field inspections to verify the farming activities or practices adhere to organic standards. The Ministry of Agriculture stated in 2002 supporting tools such as extension, research and development would concentrate on organic farming growth in Malaysia (Abdul Latiff, Othman & Muhamad, 2018). The exporting for certified organic product often rely on the legislation of the host country. Around 70 farm owners are currently certified by MOS to produce organic product for the export and local market (Tiraieyari, Hamzah, & Abu Samah, 2014).

## **2.6 Perception on Organic Food**

The term “organic” conveys a number of consumer images, behaviours, and beliefs (Barry, 2002; Chiciudean et al., 2019). The commonest terms related to organic food were "food no pesticides" or "crops grown throughout a natural atmosphere" (Chandrashekar, 2014; Davies et al. 1995; Makatouni, 2002). It was reported “chemical-free” are the commonly associated term to organic food within the United States, then by “homegrown or natural”, and “environment-friendly or healthier” (Christopher et al., 2019).

Different people have common perceptions of organic food. The understanding of these products often relates to interest, society, style of living as well as business atmosphere where products are put on the market (Arifin, Dihanah & Wahid, 2019). How consumers know regarding organic food influences the understanding of organic food, and their expectations are from the product. Some people also perceive organic food negatively. Consumers associate organic food with costly products, loss of faith or reputation and even if the product is manufactured as per requirements (Raab & Grobe, 2005; Rodiger & Hamm, 2015).

Organic food is often shown to have a bad taste, an irregular appearance, low in size and not desirable (Baker 2007; Dacina & Ruxandra, 2015). Some consumers are skeptical about whether organic food has positive impact on their quality of life and health. Consequently, certain consumers are not prepared to pay higher prices for organic food (Rizzo et al., 2020).

On the other hand, some consumers classify a premium organic food with high quality (Jonas & Roosen, 2005; Li, Wang, & Gong, 2019). Organic food products are seen as branded items, suggesting premium quality brand. They're sold in a special shop, with premium command price, was bought by some kind of limited market segment known as middle- and upper-income category (Giovanni & Nucifora, 2002; Song & Liew, 2019).

## **2.7 Consumption of Organic Food**

The past decade saw a significant change in eating habits from conventional toward organic food. Organic food are becoming increasingly common, With the consumer increasingly worried regarding their wellbeing and environment. The use of organics food has increased enormously in many countries and that represents a increasing demand in healthy food (Chinniceet al. 2002; Li, Wang, & Gong, 2019) and escalating awareness of the value of healthy eating (Christopher et al., 2019; Giovanni & Nucifora, 2002). Many customers purchase organic food, primarily for health reasons, as they do not contain pesticides and the items are safe for use by children (Makatouni, 2002; Song, 2017). Some consumers also purchase organic food because it tastes better than traditional food (Radman, 2005; Song, 2017).

Nowadays, food consumption habits are rapidly evolving, says Dumea (2012). Concerns like the environmental consciousness, safety issues and food nutritional value affected consumers buying decisions for healthy food (Rizzo et al., 2020). Empirical studies showed that consumers bought organic products because they are cheaper and healthier, have good dietary needs and good quality but are more ecologically responsible than conventional products (Stoleru, Munteanu & Istrate, 2019). Despite the bright side, due to rising prices, poor appearance, small income and low availability are some of the major barriers to organic products consumption (Bhattarai, 2019; Padel & Foster, 2005; Radman, 2005; Robles et al., 2005; Song, 2017; Stoleru, Munteanu, & Istrate, 2019; Wier & Calverley, 2002; Zanolli et al., 2002; Zakowska, 2007).

In addition, according to Laux (2013), based on Resources Center for Agricultural Marketing (AgMRC), several problems, including the lack of organic raw resources, should have to be highlighted as it may potentially affect the short-term growth of the organic sector. A shortage of available organic raw resources, like organic wheat or sucrose, could make food manufacturers unable to remain competitive in the market.

## **2.8 Marketing Aspect of Organic Products**

The biggest concern with the promotion of organic products is the supply chain (Yogananda & Nair, 2019). Organic products are subject to normal procedures, including production, packaging, marking, shipping, transportation, distribution and pricing. A certifying body should supervise the processing of organic products of the country, which is normally associated with an international certification authority. This relates to good agricultural practices, where the authority completely implements and controls the procedural practices of the farm.

Implementing organic farming practices promotes the commercialization of organic goods in the global market (Hossain & Pei, 2016; Stefanic et al., 2001). Organic products are marketed on the basis of consumer, producer and seller faith elements. Consumers are assured that the products follow requirements and are made in compliance with requirements. Whereby, the manufacturers or distributors must comply with the manufacturing and corporate ethics standards, and the product packaging shows all information about organic products. A supply chain also plays an important role in supporting organic product, as this means how organic product are sold and met consumers. Previous research has shown that distribution networks are one of several greatest barriers to the promotion of organic product (Aigner, Wilken, & Geisendorf, 2019; Millock et al., 2007).

Generally, prices are higher for organic products than conventional ones. Price is one of the biggest barriers to the commercialisation of organic products (Aigner, Wilken, & Geisendorf, 2019; Radman, 2005), and the consumer and retailer obstacle (Kontogeorgos & Semos, 2008). The high price comes from high operating cost, in particular labor costs and income loss or opportunity cost as farmers turn from traditional farming into organic farming (Aigner, Wilken, & Geisendorf, 2019; Stefanic et al., 2001). If consumers believe the value is greater than the price, they are willing to pay for the products and vice versa.

## 2.9 Consumer Purchase Behaviour

Blackwell, Miniard, and Engel (2001) defined consumer purchase behaviour as linked directly to the use (before and after) of service or product caused by the decision-making process, which involves activities by consumers when they obtain, retrieve, and dispose of products or services. Walter and Paul (1970, as cited by Shiau, Yu, & Hui, 2015) defined purchase behaviour as when people purchase and use the product or service. Pratt (1974) defined it as when cash and check the exchange of goods or services are involved. Francken (1983) defined it when consumers are pleased with the products or services which will produce repeated intention to purchase. According to Schiffman and Kanuk (2010), consumer behaviour is about searching, buying, using and evaluating the actions of the services and products to meet demand. Kotler and Armstrong (2012) defined consumer purchase behaviour as to how people, associations, and organizations, pick, buy, using and dispose of product, service, idea, or expertise to satisfy demand of consumer's. Psychologists claimed that one of the strongest variables in determining the strength of a model is the quantity of support received by an individual (Wells, 2014). Furthermore, consumer purchase behaviour is considered a new area of research without established academic body of its own (Blackwell, Miniard, & Engel, 2001). Consumer purchase behaviour models are many, developed from other research disciplines such as psychology (individual study), sociology (group study), social science (group study), anthropology (societal influence), and economics. (Kotler & Armstrong, 2012).

From a marketing perspective, consumer purchase behaviour most probably becomes an important area of research with the development of marketing concepts and models (Reed, Forehand, Puntoni, & Warlop, 2012). In their model, Kotler and Armstrong (2012) proposed that the characteristics of the buyer affect how they feel and react to stimuli. They also postulated that the decision-making process affects the behaviour of the buyer.

In addition to buyer characteristics, Kotler and Armstrong proposed that purchase behaviour, including of organic food products, is affected by value factors, consumption factors, cultural factors, social factors, and psychological factors. Wilkie (1994, as cited by Priest, Carter, & Statt, 2013) described consumer behaviour as a intellectual, physical and emotional activity people who participate when choosing, buying, using or disposing of product to meet their desires and needs. Hence, to predict consumer behaviour, marketers need to understand how, where, and why consumers behave (Gopal & Jindoliya, 2016). Appendix B presents previous studies on consumer purchase behaviour.

## **2.10 Propensity to Purchase Organic Food**

The literature defines propensity to purchase as an individual's strategy, intention or action to carry out an action or achieve a particular objective, and in this case, a purchase of organic food (Harland, Staats, & Wilke, 1999). The propensity of a consumer to act is seen as the primary determinant of potential behaviours. When the behaviour is under one's control, the propensity to behave can be predicted with significant accuracy (Ajzen & Fishbein, 1980). Therefore, behaviour can also be evaluated if the propensity to conduct is high. When someone's inspired by those behaviours, then, he/she will decide to act or not to act. Consumption propensity is one's behaviour against a certain brand that happens because of the decision to act. This assessment can be affected through different factors, such as brand characteristics, other consumers' expectations and the interpretation of a producing countries (Wang, Li, Barnes, & Ahn, 2012), that also arises out of quality issues (Sharma, 2011).

The dependent variable in the study is the propensity to purchase that can be defined as the buying power of the mind (Ajzen & Fishbein, 1980). The propensity construct is often a factor among three important antecedents of behavioural attitudes, perceived behavioural control and subjective norms (Holst & Iversen, 2011). This construct represents the motivation or preference of a person to follow a specific behaviour. (Conner & Armitage, 1998). This can also be used as the primary determining factor as well as indicator of potential purchasing decisions (Ajzen, 1991). Therefore, most studies on propensity to purchase applied the theory of planned behaviour because this theory proposes that intention leads to behaviour. By implication, propensity could be used to calculate the proximity of behaviour (Holst & Iversen, 2011). However, due to certain situations these do not mean a complete connection between propensity and behaviour.

The assumption is whether the TPB model could be implemented in significant adequacy or predictability in action, although there was no readily available indicator of real behaviour (Conner & Armitage, 1998; Francis, Eccles, Johnston, Walker, Grimshaw, & Foy, 2004). The construct for propensity are essential to TPB, as this factor has been anticipated to combine all the motivating factors or behaviour antecedents (Ajzen, 1991). Ma and Yang (2018) argued that it's important to decide propensity to purchase because it's difficult to determine consumers' expectations, whereas companies tend to understand this only after the product has been purchased. The literature suggests several factors that influence organic food purchase behaviour. They comprise availability, environmental impact, premium price, food safety, health benefits, taste, quality and nutritional value (Massey, O'Cass, & Otaha, 2018; Rana & Paul, 2017). Thøgersen, Pedersen, Paternoga, Schwendel, & Aschemann-Witzel, (2017) suggested, apparent market homogeneity is motivations for consuming organic food from different country.

Rana and Paul (2017) commented, in this context research should be performed using information of emerging countries to understand consumer behaviour. Therefore, the present study was carried out on the propensity to purchase organic food to address the research gap examining the antecedents influencing the purchase of organic food for Kuala Lumpur based on the theoretical factors discussed from the problem statement and past studies (Appendix C on previous studies on organic food globally and Appendix D on studies conducted in Malaysia).

### **2.11 Actual Purchase Behaviour**

Understanding of actual purchase is essential to support scholars understand customer needs and identify the marketing strategy for business survival (Rana & Paul, 2017). According to Ajzen (1991), actual purchase is customer purchase of a product or service. Past studies on actual purchase behaviour used determinants, like intention (Al-Ekam, 2013), perceived behavioural control (Zia-ur-Rehman & Dost, 2013), and subjective norms (Pomsanam, Napompech, & Suwanmaneepong, 2014). Shafiq, Raza, and Ziaur-rehman (2011) found that actual purchase differed by industry. Sheth, Newman, and Gross (1991) found that consumption values affected consumer preference for products or services. Understanding customer needs and purchase behaviours are important for effective decisions in retail (Levy & Weitz, 2001). According to Ikeda, De-Oliveira & Campomar (2005), understanding the definition of interest from the consumer viewpoint allows enrichment, creation, and enhancement for strategies to influence propensity to purchase to actual purchase. With regard to organic food, said by Nielsen and Hamm (2008), there has been a substantial gap among propensity and actual purchase behaviour. Their research discovered that 50 percent of consumers purchased organic food, but in fact only 15 percent actually buy. As few scholars

have investigated the actual purchase behaviour of organic food, especially in Kuala Lumpur, it is significant to explore this topic.

## **2.12 The Influence of Consumption Values on Propensity to Purchase Organic Food**

It seems that human values do not have a direct influence on actions, but rather that attitudes mediate the relationship. It is widely accepted that these values are symbolic, whereas behaviours are more contextual and stronger behavioural predictors. The central aspect of every business transaction is products and services. There are several factors that affect the consumers' propensity when choosing to buy a product or service. Values are known as major and essential determinants of human behaviour. They establish a personal system of values, arranged along a spectrum of relative importance to each other within a set. Due to its intangible existence and discrepancies in opinions about it, value is one of the most elusive variables in consumer behaviour. Value is not something you have, but it is what you can bind to something that defines your personal opinion on that thing to be liked or hated to some degree. And because multidimensional outcomes are generated by the consumption of goods or services (Sandstrom et al., 2008; Holbrook, 1994; Sheth, Newman & Gross, 1991), values attached to or gained from them are also multidimensional, and are referred to as consumption values (Williams & Soutar, 2000; Sheth et al., 1991). Consumption values, illustrating why consumers choose to purchase or not to purchase (or use or not to use) a particular product, why consumers choose one form of product over another, and why consumers choose one brand over another. The principle refers to decisions covering a complete variety of product forms. Consumption values consist of functional, social, emotional, novelty and conditional.

### **2.12.1 Functional Value**

Sheth et al. (1991, p. 160) described functional value is the perceived benefit gained from the capacity for functional, utilitarian, or physical output of an alternative. Functional value refers to the quality of the product features, which is physical and their utilitarian advantages (Sheth, Newman, & Gross, 1991). Quality, selection, usability, convenience, protection, pricing, brand etc. are amongst the most common elements relating to functional value (Ballester & Estela, 2016; Morgan, Lugosi & Ritchie, 2010). The values of a product's efficiency, durability, truthfulness and quality are considered to be functional values (Xiao & Kim, 2009). According to the economic benefit theory, preferences are made by considering the maximum functional value of a product or service (Zailani, Iranmanesh, Hyun & Ali, 2019). A consumer who is about to purchase a product determines whether he/she wants the value of the product and whether it has certain qualities (Sheth et al., 1991). In addition, consumers who practice purchasing behaviour under these determinants, are acting with economic and rational thought (Long & Shiffman, 2000). The benefits that consumers assume from a product varies by product characteristics and personality traits. Through marketing literature, needs are considered the basis of consumer purchasing behaviour (Sheth et al., 1991). The decision of consumers to purchase a product or service is caused by product characteristics and features (Williams & Soutar, 2009) and satisfying the functional needs (Zahid & Ahmed, 2017; Bodker, Gimpel, & Hedman, 2009). Price was considered to be the functional value most important (Wang, Liao, & Yang, 2013). Other studies, however, found that functional value did not affect purchase behaviour (Lin & Huang, 2012; Williams & Soutar, 2009).

### 2.12.2 Social Value

The social value defined by Sheth et al. (1991, p. 161) as perceived value derived in the form of association of an option for one or even more special group members. Social value indicates the perceived utility of products gained from favorable relations of the product with the personal geographical, economic, financial, political and cultural aspects of a consumer, and from good product knowledge leads to the societies to which consumers belong or expect to belong (Sheth et al., 1991). Openness and hospitality of people, fair treatment, sincere customer service and willingness to support are factors which can build social values (Noypayak, 2009). Furthermore, it examines social value regarding the social class, symbolic value, consumerism, group influence and leadership of opinion (Schiffman & Kanuk, 1997). The reference community represents certain people where the individual can associate shared values or personal beliefs, behaviours and attitudes. In marketing, reviews communities, such as family members, effect on consumer decisions and expectations (Schiffman & Kanuk, 1997).

Conspicuous use, which includes purchasing a single product to deliver a message, indicating that everyone can see that person using that product (Zailani, Iranmanesh, Hyun & Ali, 2019). Conspicuous use consumption that consumer potentially enhance reputation, and determines a product's social value (Sheth et al., 1991). Social value, as defined by Turner (1991), is “the processes whereby people directly or indirectly influence the thoughts, feelings, and actions of others” (p. 1). Studies found that social value, as the way of thinking, classifying and evaluating things, was related to purchase behaviour (Szabo & Kratki, 2018; Turner, Oakes, Haslam, & McGarty, 1992). Social value was one of the elements found to encourage consumers to buy luxury brands in Taiwan (Hung et al., 2011). Cheah, Phau, Chong, and Shimul (2015) reported a similar finding in Australia.

Xia, Ahmed, Ghingold, Hwa, Li, and Ying (2006) found that a wife influenced her husband to purchase. Friends were found to significantly influence parents' purchasing decisions (Ishaque & Tufail, 2014). Regarding organic food products, it is insightful to carry out a study to find out to what extent social values play a role in influencing consumer propensity to purchase organic food

### **2.12.3 Emotional Value**

Sheth et al. (1991, p. 161) described emotional value when perceived value gained from the ability of an alternative to express feelings or psychological influences. Although any product created can create emotional value for consumers, it is generally associated with the consumption of aesthetic and hedonic goods, such as organic food (Asshidin, Abidin, & Borhan, 2016). The consuming hedonic goods highlights all elements of consumer behaviour connected to the multi-sensory, imagination and emotional dimensions of one's product experience, as this activity is a pleasure-seeking one (Holbrook & Hirschman, 1982, p. 92).

Goods of hedonic are multi-sensory and provide knowledge, enjoyment, enthusiasm, etc. Any products can become as emotional as anyone sees that as well (King, 2002). Measuring emotional value, William and Soutar (2009) used elements of scale such as feeling happy, drinking and having fun. Emotional value is the gain that is extracted from the emotional and dramatic circumstances. This value is related to the consumer's reaction to a product (Kim & Kim, 2009). Emotional values can grow positively in consumption preferences like nostalgia, excitement, and loyalty, or negatively like anger, guilt and fear (Zailani, Iranmanesh, Hyun & Ali, 2019).

Emotional value was found to increase the lifestyle of smartphone users (Ting et al., 2011). Liu, Ly and Bai (2008) also demonstrated that emotional value affected purchase behaviour among young consumers in China. Chandra (2014) found that consumers who felt that they were part of a group of exclusive people chose to purchase a premium product because of the status already attached to it. Kim, Forsythe, Gu, and Moon (2012) showed that emotional value determined the demand for the products. Syrjala, Leipamaa-Leskinen, and Laaksonen (2015) also found that emotional value had an impact on purchase among young adult consumers because such a purchase enabled them to show off (Asshidin, Abidin, & Borhan, 2016). Other studies also found the impact of emotional value on purchase behaviour (Butcher, 2005; Koshkaki, 2014). These studies suggest that when consumers are emotionally connected with the product or brand, such a connection influences their purchase behaviour. Hence in this research, emotional value was included as one of the independent variables of consumer propensity to purchase organic food.

#### **2.12.4 Novelty Value**

Sheth et al. (1991, p. 162) describing novelty value the perceived worthwhileness acquired from the capacity of an alternative to rejuvenating, offer newness or even fulfill an intellectual curiosity. Consumers purchase that product whether they are familiar with current brand, have a strong interest about such a new product in the market or are eager to know the new product (Zailani, Iranmanesh, Hyun & Ali, 2019). Awareness has been the key characteristic which influences the decision-making process of a consumer when evaluating new products (Hanyu, Kishino, Yamashita, & Hayashi, 2000). Novelty value also is linked to human interest and the natural cognition need (Sheth et al., 1991). Schweizer (2006) argued that is the human genes redefine the desire to seek novelty. Is among the key advantages consumers expect through the experience (Williams & Soutar, 2009). One of the greatest reasons for consumers is to

encounter different and new ways of life including socio-cultural cultures, meet people, explore new food, raise knowledge, learn or explore (Andreu, Kozak, Avci, & Cifter, 2006; Jang & Cai, 2002; Kim, Noh, & Jogaratnam, 2007; Perrine, 2019). Brand shifting is a very normal activity for individuals who want to use new goods or technology (Schiffman & Kanuk, 1997). Consumers with creative purchasing patterns are identified as observational consumers, because they are looking for a choice (Hirschman, 1980). The most relevant psychological factor that underlies the behaviours of consumers searching for difference is “innovativeness” (Schiffman & Kanuk, 1997). Certain consumers tend to favor new products, while some people just make a purchase thus, the acceptance and adoption behaviour is still smaller in size. According to Wang, Liao, and Yang (2013), consumers’ behavioural propensity for new product use arises from the point of view of interest and novelty, as well as knowledge-seeking. Hence in this research, novelty value was included as the independent variable of consumer propensity to purchase organic food.

#### **2.12.5 Conditional Value**

Sheth et al. (1991, p. 162) describing functional value the perceived values obtained from an economic solution as a result of a circumstances faced by the selection maker. Conditional value exists when quality product depending on something like a specific situation or in circumstances where the goods are purchased (Sheth et al., 1991). Take the example in the case of a wedding, a wedding dress will be of importance or a winter jacket would be worth it in cold weather. Conditional value expresses its situational existence, implying that a product's perceived value could differ from one purchasing situation to another (Gallarza & Gil, 2006). Also in a similar situation the meaning may be interpreted differently over time because of previous experiences. Since conditional value appears to a decision-maker under some circumstances and conditions, its presence as a distinctive value element remains questionable

(Williams & Soutar, 2000). Previous researchers refer to conditional value to a common case with any additional values (Zailani, Iranmanesh, Hyun & Ali, 2019).

Consequently, this was not a value alone, however a circumstance whereby the other value increases importance. To support the statement, previous researchers eliminated the conditional value from consumption values, only four values remain (Denys & Mendes, 2014). However, conditional value could be defined as value which occur as a consequence of the certain condition and has been perceived at certain period by the consumer who is making a choice. In an unexpected condition, this alternative benefit occurs as a factors which is increasing social value or functional value (Candan, Unal & Ercis, 2013).

The values that conditional value derives by external factors, since the factors that affect the purchasing behaviour of consumers and their purchasing preferences occur from the external environment (Sheth et al., 1991). The definition for conditional value of a consumer could not be determined before a situation which changes the behaviour occurs (Zailani, Iranmanesh, Hyun & Ali, 2019). In some circumstances, for example, holidays, fiestas and special occasions, consumer should be notified of conditional value offered by the products they purchase (Sheth et al., 1991). As regards consumer behaviour, time and place are the common ground for the classification of conditional elements (Hassan, 2017). In the field of psychology the effect conditional elements were initially studied on human behaviour and in the 1970s and it has been researched throughout the marketing field. According to Candan and Yildirim (2013), the most detailed regarding this concern was done by Belk (1975, 1975, 1974), Lutz-Kakkar (1975), and (Reigen, 1976). Hence in this research, conditional value was included as among the independent variable of consumer propensity to purchase organic food.

## **2.13 The Influence of Perceived Value on Propensity to Purchase Organic Food**

The use of the perceived value conceptualization has been regarded as an important imperative for retaining customers, especially in fierce market competition, and has been regarded as the key to success for all companies (Huber et al., 2001). Since decades ago, it has become a fascinating topic, but the consensus on its meaning and concept has not been achieved and remains elusive (Sanchez-Fernandez & Iniesta-Bonillo, 2007). It has been shown that the use of the principle of perceived consumer value not only results in the development of more happy customers (Delgado-Ballester & Sabiote, 2015), but it is also found to have a direct effect on the purpose and loyalty of customer repurchase (Lin et al., 2005). Since the idea of perceived value is connected to product benefits, it is therefore necessary to consider how the consumer sees or considers this value and what kind of value or dimensions the organization should generate.

### **2.13.1 Monetary Value**

Monetary value a perceived value form measurable in addition to financial costs and benefits associated with the purchase or use of services and good (Lee et al., 2007, p. 20). Monetary value considered as financial benefit while making purchase throughout the context of price discount, whereas monetary costs are deemed a kind of loss that consumers must bear in return for purchase of service or product acquisition (Akbar, Ali, Ahmad, Akbar, & Danish, 2019; Alsheikh & Bojei, 2012; Gwinner et al., 1998; Zeithaml, 1988). If monetary benefits outweigh costs, the monetary value can be considered beneficial. By comparison, Matzler et al. (2006) said, monetary value is viewed as high where monetary cost is lower than financial benefits. Monetary value for present study refer to benefits of pecuniary consumers obtain for purchasing organic food, which would be considered as fairly priced, reasonably priced, healthy, safe, and cost efficient (Karjaluoto et al., 2012; Sweeney & Soutar, 2001).

Several researchers (Chamie & Ikeda, 2015; Chiou, 2004; Deng et al., 2010, Edward & Sahadev, 2011; Hong & Tam, 2006; Kumar & Lim, 2008). As for green product purchases, If consumer expect a good price for that products, their desire in making purchase of the products increases (Kuo, Wu, & Deng, 2009). Davies, Titterington, and Cochrane (1995) found price, perceived value for money and perceived quality influenced the demand for health food purchase. Bharathi, Ananthnag, and Nagaraja (2014) found that consumers considered value for money before making a purchase of organic products in India. Effendi, Ginting, Lubis, and Fachruddin (2015) found that availability, price, attitude, subjective norms, and value for money significantly influenced consumer propensity to purchase organic food.

### **2.13.2 Environmental Concern**

Environmental concern refers to the degree to which people are aware of problems regarding the environment and support efforts to solve them and or indicate the willingness to contribute personally to their solution (Dunlap & Jones, 2002, p. 485). Baudry et al. (2017) noted that safety, integrity as well as environmental impacts were three main components that influence purchasers towards their food consumption habit. Gosling and Williams (2010) suggested environmental concern as a mediator in describing the connection between environment-friendly actions and place-and-nature connections. Stedman, Beckley, Wallace, and Ambard (2004) Argued that insight into the relationship may help researchers understand how environmental issues cause people to demonstrate those ecological qualities and feel good about the particular location. Environmental concern may ultimately help to assess environmental commitment and turn into positive environmental attitudes, and there is strong evidence that environmental concerns are related to environmental commitment (Carmi,

Arnon, & Orion, 2015; Gifford & Nilsson, 2014; Kennedy, Krahn, & Krogman, 2015; Kennedy & Krahn, 2014; Zylstra, Knight, Esler, & Le Grange, 2014).

These causal analyzes suggested both cognition and emotion, according to the above inferences (i.e., environmental concern) are important predictors. The degree of consumer environmental concern as per Amyx et al. (1994), was associated toward the propensity to purchase for green product. This could directly influence organic food consuming, whereas this as mention by Schifferstein & Oude Ophuis, (1998) might not be a primary concern. Environmental consumerism were identified for a degree of environmental concern and consumer stewardship in making product purchasing decisions. This aspect can become a significant predictor for consumer behaviour. Furthermore, consumers agree that a certain products manufactured in a natural manner do not damage the environment. Consumer realize that instead of consuming organic food, consumer may help minimize the pollution of nature, protect the safety of water and soil and the use of chemical products in agricultural activity (Saleki & Seyedsaleki, 2012). Since food produced organically is considered less environmentally harmful than conventional food (Schifferstein & Oude Ophius, 1998; Williams & Hammit, 2001), a positive relationship between environmental concern for mother earth and the intention to purchase organic products could be speculated.

## **2.14 Underpinning Theory**

Underpinning theories are referred to as theories for understanding the social context in studies by Gregor (2002). The theories are structured to describe "how" and "why" things arise in the way they do. The theory underpinning a thesis is also used as a prism. The word "frame" is used in Orlikowski (2000) in the sense of evaluation, where certain characteristics are centred on and appear, and where the rest of the image falls into the background.

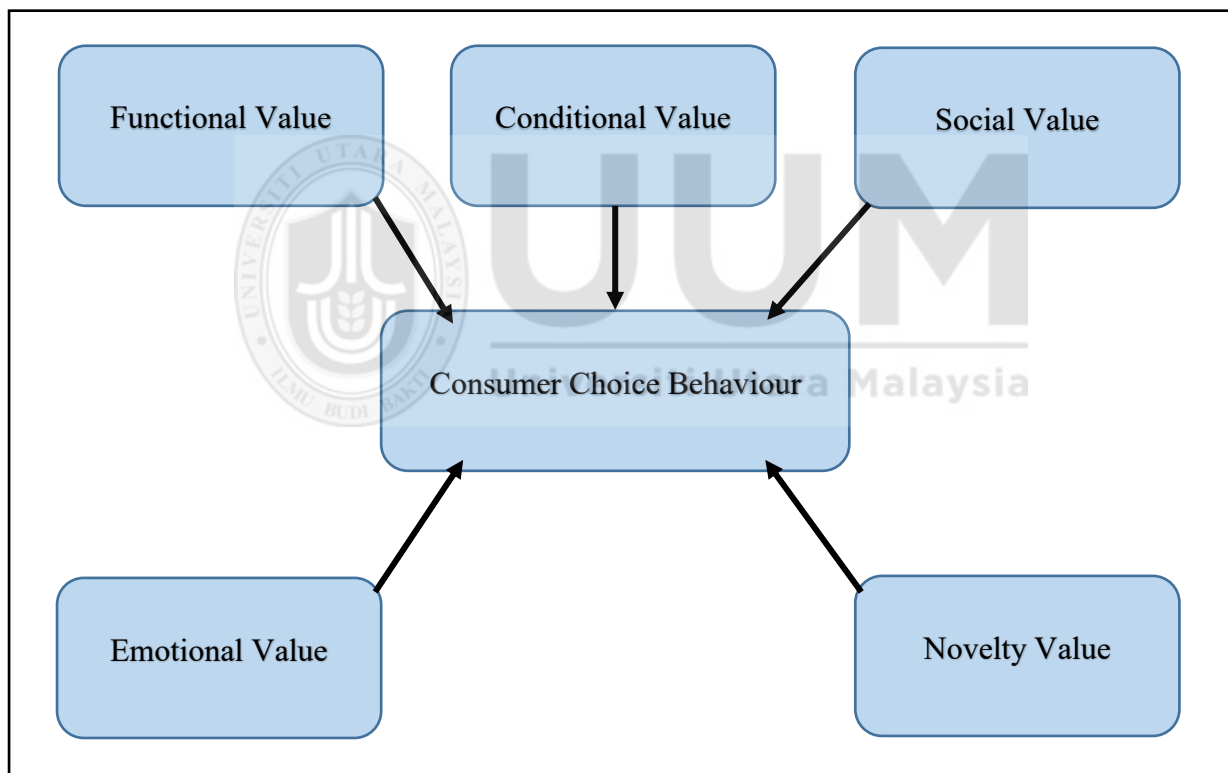
### **2.14.1 Theory of Consumption Values**

The fundamental theory used in this research is the Theory of Consumption Values. The theory is concerned with how consumers decide whether to buy or not to buy a certain product based on different preference values. The consumption value model developed by Sheth, Newman, and Gross (1991) describes a consumer's preference process, which includes values and motives in a purchase. According to Sheth et al. (1991), the theory of consumption values is evident with three fundamental propositions as below:

1. Consumer choice acts on a number of consumer values.
2. Consumption values are independent.
3. Consumption values make deferential influences in any choice situation.

This theory also proposes that consumers choose a product or brand by considering consumption values. Five primary consumption values could affect consumer choices and behaviour, such as functional, conditional, epistemic, emotional and social value, which is shown in Figure 2.1. Consumption values refer to approach required for achieve individual values (Lai, 1995). Values according to Sheth et al., (1991) are compared by activities and actions including consumption, ownership, social relationships and economic exchange.

Furthermore, consumption values were influential in nature, and are related towards consumer needs and motivation. The values then influence the decision to buy and their feeling with the purchase (e.g., satisfaction or dissatisfaction). If consumers feel dissatisfied with the purchase, they will change their future purchase behaviour and switch to other products (Shamsudin, 2012). Consumption values also explain why consumers desire a particular brand, product, or service. Based on the theory, consumers make value evaluation and then make an informed decision about whether to buy or not to buy a product or service.



*Figure 2.1*  
Theory of consumption values  
Source: Sheth, Newman, and Gross (1991)

Past research showed limited usage of consumption values theory in investigating consumer behaviour in organic food. However, it was applied to research intention to purchase green products (Suki, 2018), intention to purchase hybrid cars (Teoh & Nor Azila, 2015), green electric products (Alesia, Stephan, & Geoffrey, 2014), mobile application use (Wang et al., 2013), green products (Lin & Huang, 2012; Lin et al., 2010), adventure tourism (William & Soutar, 2009), and user experience of smartphones (Bodker, Gimpel, & Hedman, 2009). The theory was also used to investigate consumer behaviour in different countries, such as Malaysia (Teoh & Nor Azila, 2015; Alesia et al., 2014), Taiwan (Wang et al., 2013; Lin & Huang, 2012; Lin et al., 2010), Egypt (Bodker et al., 2009), and Australia (William & Soutar, 2009). Appendix E and F show the related past studies in other countries and Malaysia, respectively.

Sheth et al. (1991) argued that the principle of consumption values extends to all sorts of goods and services. However, like any theory, there are certain disadvantages to this theory too. The conditions under which the theory of consumer values are limited as described “the systematic preferences and voluntary preferences” (Sheth et al., 1991, p. 169). Teoh and Noor Azila (2015) found that the consumption values theory could justify 58.6 per cent of consumer behaviour, which was better than TPB or TRA. Consumption values, demonstrating the overt and implied causes and reasons, are helpful to understand consumer purchasing and market analysis (Bodker et al., 2009). Hence, applying consumption values theory can offer insights on behalf of practitioners, especially concerning marketing organic food.

### **2.14.2 Theory of Reasoned Action**

The Theory of Reasoned Action was established by Ajzen and Fishbein in 1975 and modified in 1980. The theory started as attitude theory, that contributed to research for behaviour and attitude. It has been used over understanding consumer behaviour, as well as establish suitable approaches. Ajzen and Fishbein (1980) recommended human behaviour may be clarified by attitudes. The foundational element of this theory is that persons are usually believed to be very rational and provide them with systematic use of the knowledge. “People are considering the consequences of an action until they start to participate from a specific action or not” (Ajzen & Fishbein, 1980, p. 5). The framework identifies behavioural expectations instead of beliefs as the primary predictors of behaviours. (Figure 2.1). In other words, the theory of reasoned action is a model for the prediction of behavioural intention. The consequent relationship of attitude from behaviour allowed the understanding of attitude influencing factors (Ajzen & Fishbein, 1980). The theory was introduced out of dissatisfaction with mainstream behavioural studies, many of the findings were poor correlations among measures of attitude and effects of intentional behaviour (Hale, Householder, & Greene, 2002).

According to the theory, the purpose of a person has become a feature with two fundamental elements: social norms and attitudes used to predict real action. (Miller, 2005). In addition Miller (2005) said, attitudes have been the number of values of a specific action measured by evaluations of beliefs, and subjective norms as people's influences on their behavioural intentions in their social environment. People's views, measured by a value to which every one of the consumer thoughts is attributed, would affect consumer's behavioural action. Ajzen (2005) specified that an individual intends to participate in certain behaviours and that that intention remains a behavioural tendency until an effort is made to turn the intention into action at the correct time and opportunity.

Many scholars believe the aim to carry out the action in question is that the clause most closely linked to a specific propensity towards action (Ajzen & Fishbein, 1975; Triandis, 1980; Fisher & Fisher, 1992; Gollwitzer, 1993). Literally, people are supposed to do what they want to do, except for unexpected incidents. The Theory of Reasoned Action was applied for numerous investigations into pro-environmental purchasing intention. Cheung & Chan (2000) investigated consumer behaviour and environmental attitudes in China, including measured environmental awareness, effect, inclination, as well as behaviour. He demonstrated that Chinese consumers expressed a significant ecological and green effect propensity to purchase. An important relation was also found in study conducted by Follows and Jobber (1999) to estimate environmentally friendly purchasing and environmentally responsible purchasing. They concluded that individuals, who thought the environmental implications of pro-environmental purchases were important and have been more likely to involve in green buying. They also found in their study that propensity was established as a Result of an environmental and individual impact assessment or trade-off.

Nik Ramli (2009) investigated eco-label recognition on the Green Marketing initiative in Malaysia, He showed that participants who had a high awareness of eco-label had more concrete awareness and desire to buy product with environmentally friendly elements. Lee (2008) researched gender disparities throughout the green purchasing behaviour of teen consumers, and the female consumers were found to be the primary green consumers. Generally, intensity for purchasing propensity as the substitute indicator for potential behaviours were a well-established literature hypothesis (Ajzen & Fishbein, 1980; Morrison, 1979). Therefore, in present study, the reasoned action theory were used as secondary theory to support the theory of consumption values.

## 2.15 Research Framework

Figure 2.2 shows the conceptual model showing the independent variables in this study, i.e., consumption values (functional, social, emotional, novelty and conditional value) and perceived values (monetary value and environmental concern), dependent variable (propensity to purchase organic food), and the consequence variable (actual purchase behaviour). Consumption values and perceived value both are supposed to have direct impact and indirect relationship to propensity to purchase organic food. The research model was developed primarily based on consumption values theory and reasoned action theory.

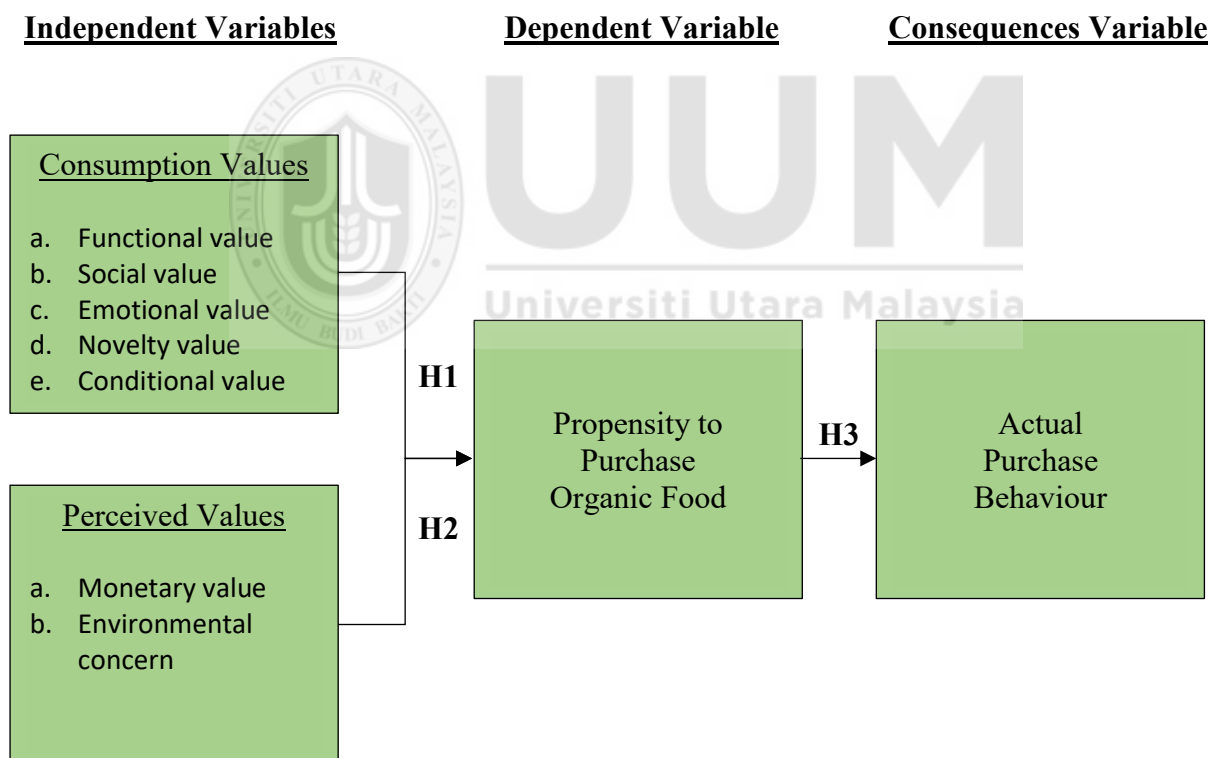


Figure 2.2  
Research model

## **2.16 Research Hypothesis Development**

This section discusses the relationship between the constructs of the study.

### **2.16.1 Theory of Consumption Values**

Consumption values theory implies the consumer's preference has become a result for different consumer values, which is functional, social and epistemic, which have a variety of influences on customer decision-making (Sheth et al., 1991). Preceding to research from Lin and Huang (2012) which used consumption values to examine consumer's behaviour of choice regarding green products purchases and suggested that consumption values be investigated further. This study adopted consumption values theory since values are an important part of decision making and have specific psychological elements that influence the interests and behaviours of consumers.

Functional value concerns the practical usefulness of product attributes which are physical and give utilitarian advantages (Sheth et al., 1991). Although previous literature (e.g., Lin & Huang, 2012; Lin, Huang, & Wang, 2010; Williams & Soutar, 2009) the functional value indicated had no significant influence on the purchasing behaviour of consumers, Wang et al. (2013) indicated the functional value had a positive impact on behavioural intent. Kekec (2015) found out functional value predicted consumer purchase behaviour in retails. Moosa and Hassan (2015) indicated the functional value had a strong impact on purchase behaviour. A positive relationship between functional value and purchase behaviour was also reported elsewhere (Solaiman et al., 2017; Teoh & Noor Azila, 2015). Therefore, the study indicated the following hypothesis:

H1a: Functional value positively influences propensity to purchase organic food.

Social value is the perceived product utility derived from the positive associations of the product with the particular geographical, demographic, socio-economic, political and cultural aspects of the consumer because from the strong acceptance in the social groups of product attributes to which the consumers be in the right place or wants to be in the right place (Sheth et al., 1991). Openness and hospitality of people, respectful treatment, sincere customer service and willingness to support are influences which can generate social values (Noypayak, 2009). In their research on the purchase of luxury brands among Chinese in Taiwan, Hung et al. (2011) indicated that social value positively correlated to purchase behaviour. Cheah, Phau, Chong, and Shimul (2015) investigated the purchase of luxury brands in Perth, Western Australia, and found that the purchase made was driven by social value, the intent to purchase a value, and the quality and brand of the products. In their study on the purchase of hybrid cars, Karunnayake and Wanninayake (2015) indicated that social value had a strong impact on purchase behaviour. Therefore, the study indicated the following hypothesis:

H1b: Social value positively influences propensity to purchase organic food.

Emotional value according to Sheth et al., (1991) are often derived in the product's ability to extract sensations as well as alter the emotional phase during consumption. Even though any producer may generate an emotional value to consumers, it's often generally implicated in a variety of hedonic and aesthetic products, like organic food. Hedonic product has multi-sensory characteristics, indicating experience-based use or excitement, etc. Growing substance could be as hedonic as individuals perceive it would be (King, 2002). Measuring emotional value, William and Soutar (2009) Common things such as feeling comfortable, loving consumption and having a good time.

In the framework of consumer propensity to purchase organic food, emotion are being defined when emotional feelings or reactions to component such as “situations, products, advertisements, and brands” (Sheth et al., 1991). In their research on smartphone use, Ting et al. (2013) indicated the emotional value increased the lifestyle of the purchaser and positively affected purchase behaviour. Similarly, Liu and Bai (2008), in their research on car purchase behaviour among consumers in Beijing, found that emotional value increased the recognition of friends. In addition, the consumers evaluated the purchase through an online blog or consumer review to indicate their satisfaction with the purchase (Liu & Bai, 2008). Therefore, the study indicated the following hypothesis:

H1c: Emotional value positively influences the propensity to purchase organic food.

Novelty value applies to presumed value gained from the capacity of a substitute to value enhancing, providing uniqueness or fulfill a request for information (Sheth et al., 1991). Consumer purchase the products because they are familiar with current brand, have a strong interest in a specific product or want to learn about the latest brand. Awareness were the key attribute influencing decision-making of a customer when evaluating a new product. For example, the actual behaviour of consumers in recycling is affected by making them aware the certain process of recycling (Hanyu, Kishino, Yamashita, & Hayashi, 2000). Consumer prefer to adapt the learning experiences and product characteristics once purchasing a product that enhances their problem-solving capabilities. The importance of novelty value also has to do with intellectual enthusiasm as well as an undeniable want for recognition (Sheth et al., 1991).

Candan & Yildirim (2013), in their research between values and consumption of green product buyers, found that novelty value affected green product purchases. Solaiman et al. (2017) also found that epistemic value had a positive relationship with green purchase behaviour. In their research on Malaysian consumers' purchase of hybrid cars, Teoh and Noor Azila (2015), however, found that novelty value did not increase their status or image. In another research, Teoh and Noor Azila (2015b) found no direct or indirect relationship between novelty value and purchase through consumer attitudes. Therefore, the study indicated the following hypothesis:

H1d: Novelty value positively influences the propensity to purchase organic food.

Conditional value exists when the quality of a commodity depending on a given condition or situations under which the goods is purchased (Sheth et al., 1991). As example, In the case of a forthcoming wedding, a wedding dress will be of importance then or cold jacket. Conditional value explores its situational existence, implying that the product perceived value can differ from propensity to purchase to purchasing situation (Gallarza & Gil, 2006). Also within a similar scenario, due to previous experiences, the meaning may be interpreted differently over time. Conditional value has become a benefits gained through specific functional which arise within specific circumstances (Sheth et al., 1991).

Conditional value is of the least effect or the most uncertain value dimension. Since conditional value exists in many situations and circumstances where a decision-maker is confronted with a questionable presence as an element of distinctive value (Williams & Soutar, 2000). This is because a consumer's conditional value definitions cannot be understood until a condition occurs that will alter the actions (Candan & Yildirim, 2013). However, conditional value was has been identified to be the main determinant of customer choices (Lin & Huang, 2012).

Similarly, Solaiman et al. (2017) the conditional value was found to have a positive relationship to green purchasing behaviour. Therefore, the study indicated the following hypothesis:

H1e: Conditional value positively influences the propensity to purchase organic food.

### **2.16.2 Perceived Value**

Perceived value has been found to impact consumer behaviour. Perceived value is a subjective composite. It differs from customer to customer, market to market, culture to culture, and circumstance to circumstance. It covers how a customer measures product experience and purchase experience at the time of purchase, which is pre-purchasing experience, and post-purchase experience. Perceived value is a set of criteria for evaluating the value of a commodity (Chen & Chang, 2012). If a consumer recognizes a product to be of higher value, he or she is more probably to have a stronger intention to purchase the product. Weak perceived value can result in the loss of consumer intention to purchase (Sweeney & Soutar, 2001). Zhang et al. (2015) noted that the perceived value is a general perception of the importance of a good or service to consumers. In other cases, the perceived value of consumers is the value that consumers perceive of a good or service.

However, the value of goods is related to prices and potential consumer income. The perceived value of the consumers is used interactively by marketers and scholars (Chen & Dubinsky, 2003). Therefore, monetary value and environmental concern are the perceived values in this study. Monetary value is a financial value that can be calculated in addition to economic cost and benefit associated with the purchase or use of goods and services (Lee et al., 2007, p. 20). Monetary gain was considered to be the expected monetary savings from the form of financial reductions whenever making purchase, whilst monetary expenses are the costs that consumers must bear when purchase a products (Alsheikh & Bojei, 2012; Gwinner et al., 1998; Matzler et al., 2006; Zeithaml, 1988).

Monetary value means the monetary benefits, such as health benefits, quality, price, or environment concern, when a product is purchased (Omigie et al., 2015). Hong and Tam (2006) finding that perceived monetary interest influenced mobile information services behavioural intentions of consumers. When consumers viewed a green product's price as reasonable, their willingness to purchase green products increased (Kuo, Wu, & Deng, 2009). Lin and Huang (2012) found the consumers were prepared to pay higher prices to purchase green goods when they felt the goods were worth it. Therefore, the study indicated the following hypothesis:

H2a: Monetary value positively influences propensity to purchase organic food.

Environmental concern reflects the degree to which individuals are conscious of environmental issues and endorse attempts to address them, and/or the ability to contribute directly to their solution (Dunlap & Jones, 2002). The food choice is important for consumers, since the environment and nutrition rely on food selection. Baudry et al. (2017) pointed out that well-being, integrity and the environment are three perspectives that encourage consumers to choose their food. The environmental issues contribute to involvement in biophysical system as well as climate-related problems. Suki (2013) found that women are much more environmentally conscious than men. Consumers were also found to express environmental concerns based on product characteristics, the accuracy of green product claims, and information provided on the products and their benefits (Forkink 2010; Luchs et al., 2010).

Barr and Gilg (2006) found that committed individuals or mainstream environmentalists skewed and stress higher importance on environmental issues where they develop a high level of concern and express a personal responsibility and moral obligation to play their role to help the environment. By clearly communicating the benefits of a product on the packaging or in advertising, negative perceptions towards an environmentally-friendly product's effectiveness

can be surmounted (Luchs et al., 2010). Therefore, the study indicated the following hypothesis:

H2b: Environmental concern positively influences the propensity to purchase organic food.

### **2.17 Actual Purchase Behaviour**

Consumer buying behaviour is proposed to occur once beliefs and attitudes are formed (Fishbein & Ajzen, 1975). Individuals with strong feelings that the behaviour will have positive effects for a particular cause appear to display attitudes to benefit the environment. However, consumer concerns about environmental problems may not always be translated into environmentally sustainable behaviour, which includes behaviour, which meets public and individual needs and contributes to environmental conservation (Jackson, 2005). Fishbein and Ajzen (1975) observed the model classification associates to behavioural propensity. Behaviour were believed to be based on a desire to demonstrate these acts (Malhotra & McCort, 2001). Green product purchasing behaviour was characterized by eco-friendly, recyclable, sensitive and environmentally responsive consumption of goods (Mustafe, 2006). The researcher often differentiated interpretations of actions and attitudes. Ideal consumption situation, the consumer establishes and behaviours and attitudes. Nevertheless, propensity without consumer action had little consequences. Ajzen (2005) specified that an individual intends to participate in some behaviours, as this purpose continues a behavioural trend until an effort is made to turn the intention into practice at the appropriate time and opportunity. In other words, people are supposed to do what they wish to do, except for unexpected incidents, and the results of the action reflect the actual purchasing behaviour. Therefore, the study indicated the following hypothesis:

H3: Propensity to purchase organic food positively influences the actual purchase behaviour.

## 2.18 Hypothesis Summary

The following research hypothesis was developed for testing on the basis of the conceptual framework in Figure 2.2:

- H1a: Functional value positively influences propensity to purchase organic food.
- H1b: Social value positively influences propensity to purchase organic food.
- H1c: Emotional value positively influences propensity to purchase organic food.
- H1d: Novelty value positively influences propensity to purchase organic food.
- H1e: Conditional value positively influences propensity to purchase organic food.
- H2a: Monetary value positively influences propensity to purchase organic food.
- H2b: Environmental concern positively influences propensity to purchase organic food.
- H3: Propensity to purchase organic food positively influences actual purchase behaviour.

## 2.19 Chapter Summary

This chapter examines the literature of organic food and consumers' propensity to purchase organic food. It also reviewed the literature related to consumption values and perceived values. The review of the relevant literature was to assist in the development of the research hypothesis. The theory of consumption values and the theory of reasoned action were applied to underpin the study. The next chapter discusses the method applied to carry out the present research.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3 Overview of the Chapter

This chapter discusses the method used in this study. In particular, it talks about the research design, the measurement of variables, the sampling method, the design of questionnaire, the data procedure of collection, and the statistical techniques used for analyze the data. It also includes the pilot study conducted before the final study.

#### 3.1 Research Design

Research design were the outline that researchers use to ensuring that perhaps the data obtained are as reliable as possible in answering research questions. Sekaran (2003) says, the application for correct approach could significantly increase the research findings value. The research design should be designed from the outset according to the research question, research questions, research objectives and hypothesis to draw a powerful and compelling conclusion with the ability to address the research questions.

Three types of research designs are available for researchers to choose based on the study's intent, that is, exploratory, descriptive and causal (Chisnall, 2001; Zikmund, Babin, Carr, & Griffin, 2010). Exploratory research gathers preliminary knowledge, which can help to identify issues and propose hypothesis. Exploratory research is also carried out where there are few or no studies to be referred to while the researcher has found something that requires more comprehension.

Secondly, descriptive research aims to gain more knowledge and explain in depth what ultimately happens. Finally, causal research describes the cause and effect between the variables and tries to understand them. The listed three designs are intricately linked and could be integrated for further than single reason. The goal of this study was to identify and evaluate the antecedents based on the research objectives of propensity to purchase organic products and its consequences. This study, therefore, attempted to determine the cause-and-effect relationship between the variables.

Quantitative methods of study are sometimes related to concise and causal study designs and often correlated with explanatory studies (Hair, Bush, & Ortinau, 2009). According to Zikmund et al. (2010), quantitative research involves the development and testing of a model based on the existing literature. A survey method tends to be applied due to limited time and cost (Malhotra, 2010; Sekaran, 2003; Sekaran & Bougie, 2016). This study therefore utilized the survey approach for collecting data from primary sources. Since the data were collected once throughout the study period, this study was cross-sectional.

### **3.2 Measurements**

All antecedents in this analysis were calculated using several items from previous studies, except the demographic variables. The set things were, however, changed to match the sample and local settings. All items measured on a Likert Scale of five points to ensure consistency. The rating was between “1=strongly disagree” and “5=strongly agree”. For calculating the variables a five-point Likert scale was used because such scale was commonly used in social science and marketing (Burns & Bush, 2002). Also, a higher-point scale do not generally strengthen rating reliability; that is, a scale of five is as good as a seven-point scale (Elmore & Begg, 1975; Joshi, Kale, Chandel, & Pal, 2015).

Below is the description of the measure of key variables used in this study.

### 3.2.1 Propensity to Purchase Organic Food

Six items adapted from Chiew et al. (2014) were used to assess customer propensity to purchase organic food. The instrument was reported to be reliable at 0.903 (Chiew et al, 2014). The items used to measure propensity to purchase organic food are shown in Table 3.1.

Table 3.1  
*Items to Measure Propensity to Purchase Organic Food*

<b>Items</b>	
1.	I would buy organic food in near future.
2.	I plan to buy organic food in regular basis.
3.	I intend to buy organic food for my long term health benefits.
4.	I intend to buy organic food because they are more concern about food safety.
5.	I intend to buy organic food because they are more environmentally friendly.
6.	I intend to buy organic food because I am concerned about animal welfare.

Source: Adapted from Chiew et al. (2014)

### 3.2.2 Actual Purchase Behaviour towards Organic Food

Eight items were used to measure actual purchase behaviour. The items were adapted from Chiew et al. (2014). The instrument was reported to be reliable at 0.918 (Chiew et al., 2014).

The items used to measure propensity to purchase organic food are shown in Table 3.2.

Table 3.2  
*Items to Measure Actual Purchase Behaviour Food*

<b>Items</b>	
1.	I often buy organic food.
2.	I often buy organic food on regular basis.
3.	I prefer buying organic food than buying conventional food.
4.	I often buy organic food because they are more environmentally friendly.
5.	I often buy organic food that are against animal testing.
6.	I often buy organic food that are safe to consume.
7.	I often buy organic food for my health.
8.	I often buy organic food even if they are more expensive than conventional food.

Source: Adapted from Chiew et al. (2014)

### 3.2.3 Functional Value towards Organic Food

Functional value was measured using six Lin and Huang (2012) adaptations, and Suki (2016). Functional value refers to the value of physical performance or attributes of organic food. Functional value was measured by quality, performance, and price of organic food. The reliability of the adapted measurements was 0.780 and 0.746, respectively. The measuring items used for functional value, Table 3.3 shows.

Table 3.3  
*Items to Measure Functional Value*

<b>Items</b>	
<b>Quality</b>	
1.	Organic food have consistent quality.
2.	Organic food are well made/produced.
3.	Organic food have an acceptable standard of quality.
4.	Organic food would perform consistently.
<b>Price</b>	
5.	Organic food are reasonably priced.
6.	Organic food are a good food for the price.

Source: Adapted from Lin & Huang (2012), and Suki (2015)

### 3.2.4 Social Value towards Organic Food

Social value was measured by two dimensions, namely social value, and social influence. Social value was measured by items adapted from Lin and Huang (2012), and social influence was measured by items from Teoh and Nor Azila (2015). The reliability of the adapted measurements was 0.830 and 0.930, respectively. The measuring items used for social value is shown in Table 3.4.

Table 3.4  
*Items to Measure Functional Value*

<b>Items</b>	
<b>Social Value</b>	
1.	Buying organic food would help me to feel acceptable.
2.	Buying organic food would improve the way that I am perceived.
3.	Buying organic food would make a good impression on other people.
4.	Buying organic food would give its owner social approval.
<b>Social Influence</b>	
5.	I will follow the advice of my family or friend that I should buy an organic food.
6.	I learned so much about organic food from my friend and family.

Source: Adapted from Lin & Huang (2012), and Teoh & Nor Azila (2015)

### 3.2.5 Emotional Value towards Organic Food

The emotional value was assessed with five items (Jamrozy & Lawonk, 2017). Emotional value is that, the feeling positive or negative while using a product or service. The feeling can be fear or confidence, safety or danger, excitement or boredom, or happiness or sadness, better or worse, positive or negative. The reliability of the scale was reported to be 0.948 (Jamrozy & Lawonk, 2017). Table 3.5 details that measurement components used for calculating emotional value.

Table 3.5  
*Items to Measure Emotional Value*

<b>Items</b>	
1.	Buying organic food instead of conventional food would make me feel like I am personally contributing to something better.
2.	Buying organic food instead of the conventional food would make me feel ethically right to protect our environment.
3.	Buying organic food instead of the conventional food would make me feel like a better person.
4.	Buying organic food instead of conventional food would give me positive feeling.
5.	The consumption of organic food would increase my desire to know about other people and cultures.

Source: Adapted from Jamrozy lawonk (2017)

### 3.2.6 Novelty Value towards Organic Food

Novelty value refers to information searching and knowledge on a products, as well as effect for utilizing a product or service on the environment. The measure for novelty value the study proposed was derived from Omigie, Zo, Rho, and Ciganek (2017) and Tiong, Suki, and Kim (2014). Four items were used. The reliability of the scale was reported to be between 0.843 and 0.829 (Omigie, Zo, Rho & Ciganek, 2017; Tiong, Suki & Kim, 2014). Table 3.6 shows the items.

Table 3.6  
*Items to Measure Novelty Value*

<b>Items</b>	
1.	I would buy organic food because I always have high curiosity to buy something new.
2.	I like to search for the new and different of organic food.
3.	I would seek out the location that sells organic food to support local organic food industry.
4.	I will acquire information about organic food that could reduce environmental harm.

Source: Adapted from Omigie, Zo, Rho, and Ciganek (2017), and Tiong, Suki, and Kim (2014)

### 3.2.7 Conditional Value towards Organic Food

Conditional value was operationalized as an add-on value or benefit to a product's functional and social values. Specifically, it refers to the value or extra benefits given to consumers when buying a product or service. The benefits, such as availability, convenience, safety, discounts, promotions, free gifts, subsidies or exemptions, are offered by the manufacturers or the government. This measure was adapted from Assarut and Eiamkanchanalai (2015). The reliability of the scale was reported at 0.875 (Assarut & Eiamkanchanalai, 2015). Table 3.7 shows the items.

Table 3.7  
*Items to Measure Conditional Value*

<b>Items</b>	
1.	Organic food is always easily available for purchase.
2.	Shopping at supermarket would increase my chances of finding rare or limited items of organic food.
3.	I feel safe consuming organic food.

Source: Adapted from Assarut and Eiamkanchanalai (2015)

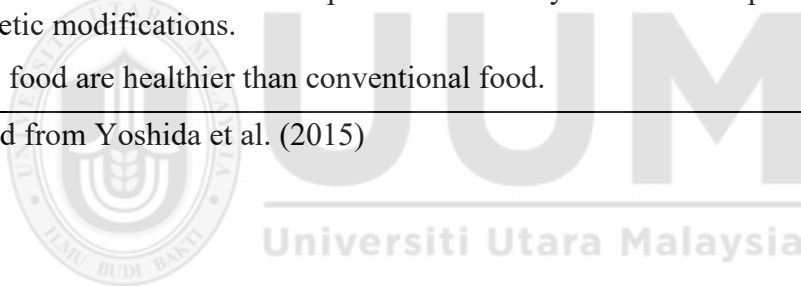
### 3.2.8 Monetary Value towards Organic Food

Monetary Monetary value refers to the monetary benefits of organic food, such as health benefits, nutrition, safety, quality, price, or environmental concern. Five items from Yoshida et al. (2013) were used to measure this variable. The reliability of the scale was reported at 0.900 (Yoshida et al. 2013). Table 3.8 shows the items.

Table 3.8  
*Items to Measure Monetary Value*

<b>Items</b>	
1.	I am consuming organic food to avoid consuming conventional processed food.
2.	Organic food are more nutritious than conventional.
3.	Organic food is better in quality that promotes my health.
4.	Organic food are safe for consumption because they are free from pesticides, fertiliser and genetic modifications.
5.	Organic food are healthier than conventional food.

Source: Adapted from Yoshida et al. (2015)



### 3.2.9 Environmental Concern towards Organic Food

Environmental concern refers to a consumer getting information because of fear that the product will harm the environment. Nine items adapted from Yu et al. (2019) were used to measure this construct. The reliability of the scale was reported to be 0.855 (Yu et al., 2019). Table 3.9, shows environmental concern items.

Table 3.9  
*Items to Measure Environmental Concern*

<b>Items</b>	
1.	I made a special effort to buy an organic product to save the environment.
2.	I have switched to organic product for ecological reasons.
3.	When I have a choice between two equal products, I will buy the one that less harmful to other and the environment.
4.	I will or have voted for a candidate in an election at least in part because he/she in favour of strong environmental protection.
5.	I have avoided buying product that had potentially harmful environmental effects.
6.	I have read newsletter, magazines or other publications written by environmental groups.
7.	I have signed a petition in support of protecting the environment.
8.	I have boycott or avoided from buying the products from a company that is harming the environment.
9.	I have/will recycle the product that I buy to save the environment.

Source: Adapted from Yu et al. (2019)

### **3.3 Demographic Variables**

The demographic information collected comprised of gender, race, age, marital status, education level, occupation, and monthly household income. In addition, participants were also asked about their brand preference (local brand or imported brand), and why they prefer such a brand.

### **3.4 Study Population and Sample Size**

Population refers to a collection of objects or elements associated with the study (Sekaran & Bougie, 2010). In this study, the population consisted of consumers in Kuala Lumpur. According to the Department of Statistics Malaysia (DOSM, 2019), 1,795,200 million people resided in Kuala Lumpur in 2018. Kuala Lumpur was chosen because 65 percent of organic markets are heavily concentrated in Kuala Lumpur as distribution location and then follow by Johor Baharu (15%), and Penang (10%) (Toh, et al., 2018). Table 3.10 presents a summary of people's distribution residing in Kuala Lumpur.

In the context of this study, the unit of research is the individual, that is, the consumers in Kuala Lumpur who are familiar with the idea of organic food. The analysis unit referred to "the extent of aggregation during the corresponding stage of data analysis of the data obtained" (Cavana et al., 2001). In other words, the unit of analysis is individual. This study has been focused on the factors effecting propensity to purchase organic food. The target respondents in the study were consumers who purchase organic food.

Table 3.10  
*Distribution of People Living in Kuala Lumpur*

No.	District	Population
1.	Bandar Tun Razak	277,070
2.	Batu	94,490
3.	Bukit Bintang	107,020
4.	Cheras	162,510
5.	Kepong	13,940
6.	Lembah Pantai	162,940
7.	Segambut	128,500
8.	Seputeh	234,110
9.	Setiawangsa	182,200
10.	Titivangsa	201,890
11.	Wangsa Maju	230,530
<b>Total</b>		<b>1,795,200</b>

Source: <https://www.dosm.gov.my> (2019)

In this study the sample size selection was calculated using G\*Power. G\*Power is a computational power analysis method for calculating for many different test such as t-tests, f-tests, x2-tests, z-test, and some exact test (Faul, Erdfelder, Buchner, & Land, 2009). G\*Power is also used to calculate the effect sizes and to show the power analysis results graphically. According to Faul Erdfelder, Buchner, and Lang (2009), a power analysis is often used to determine sample size. The sample size suggested by G\*Power was 77, as shown in Figure 3.1 below. However, this study decided to use 175 as the sample size because a greater sample size will increase sample power (Faul, Erdfelder, Buchner, & Land, 2009; Kock & Hadaya, 2018) and avoid unreturned and non-usable responses.

Literally, the minimum sample size at which the PLS-SEM test reaches an appropriate level of power (usually .8) depends on the size of the effect associated with the direction coefficient under consideration (Cohen, 1988; 1992; Goodhue et al., 2012; Kock, 2014b). The higher the magnitude of the path coefficient at the population level, the higher its effect size is typically, and the greater the chance that a true effect will be correctly observed with a small sample. Therefore, in this study the level power of .127 were used to have greater power of the sample size and greater path coefficient.

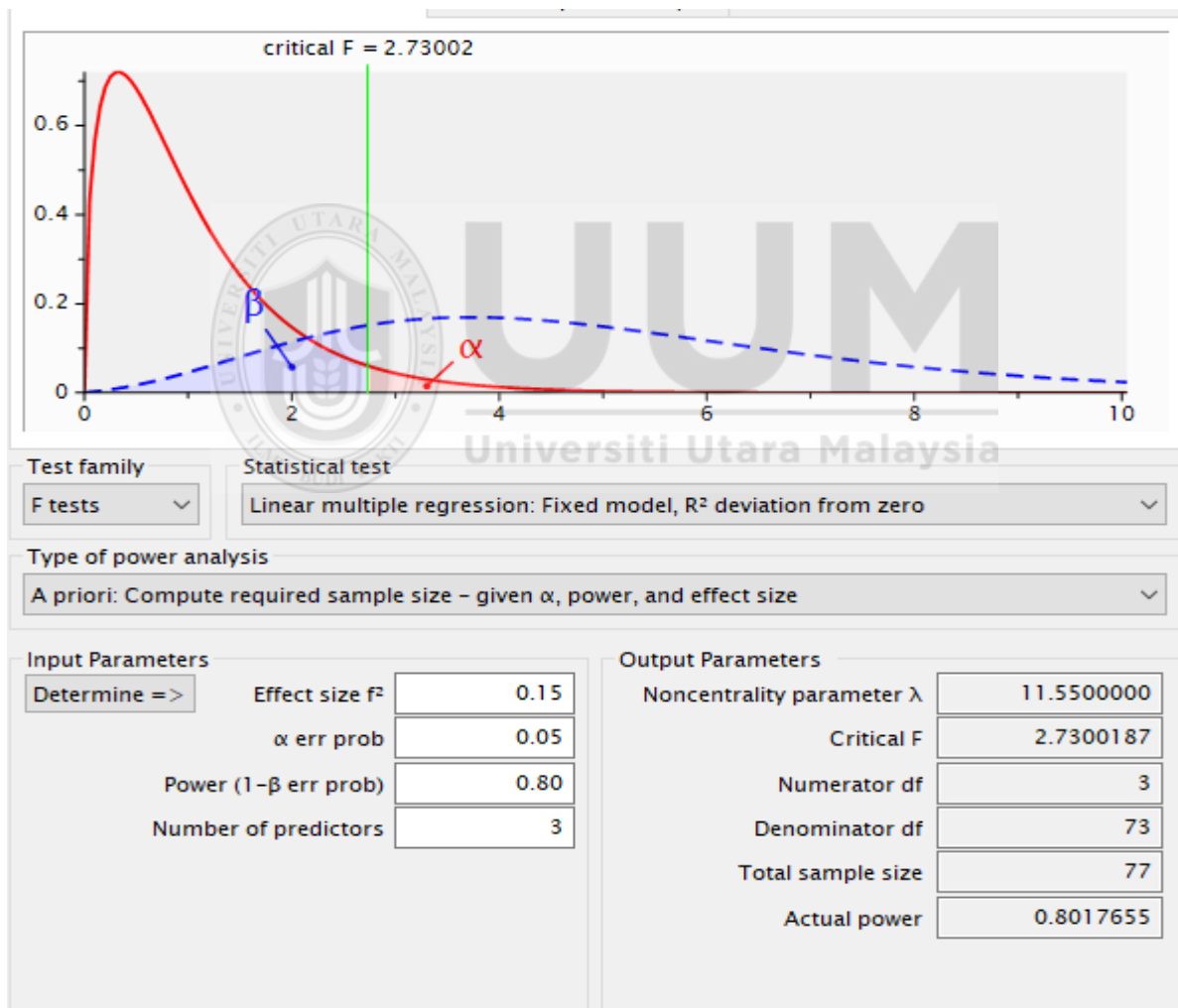


Figure 3.1  
Sample size of the present study  
Source: G\*Power version 3.1.9.4

### 3.5 Sampling Procedure

This study utilized a stratified random sampling method to sample the population. According to Zikmund (2003), Stratified sampling is a probability sampling process by which simple random sub-samples were collected from different strata, which are either equal to other characteristics. Selection of stratified random sampling method was deemed appropriate because of the following explanations. Firstly, stratification also is reliable to reduce errors in random sampling since each group is homogeneous internally and the comparative variations between groups can be ascertained (Malhotra 2010). Secondly, the sample accurately reflects the population according to the stratification criteria used (Zikmund, 2003). Thirdly, it is often administratively realistic for stratifying a sample. Fourthly, the results of each category could be of particular concern, and could be evaluated independently, if necessary (Malhotra, 2010), finally, it guarantees greater population coverage compared with simple random sampling (Malhotra, 2010).

The following describes the procedure of using stratified sampling. First, based on the population above, four districts were selected as the sampling units. These districts were selected because they have the highest concentration of shopping malls and supermarkets (Hassan, Sade, & Rahman, 2013). The districts were Bukit Bintang, Cheras, Lembah Pantai, and Segambut. In these districts, there were approximately 560,970 people in 2019. In determining the size of each stratum, the first step was to calculate the percentage of population in each district (stratum). Table 3.12 shows that the highest number of people was in the Lembah Pantai district with 162,940 people, and the least number of people was in Bukit Bintang with 107,020 people. The second step was to calculate the sample size for each district (stratum), which was done by the percentage of people with target cases is multiplied ( $n=175$ ).

The third step involved choosing eight supermarkets at popular shopping malls in Kuala Lumpur as the sampling unit. These supermarkets were chosen because they were in the popular shopping area where organic food was sold. Finally, the number of supermarkets at shopping malls from the selected districts were identified and selected for sampling. To be more precise in the sample selection, the present researcher drew the sample from one supermarket. Table 3.11 shows the sample distribution.

Table 3.11  
*Distribution of Sample Size in Four Districts*

District selected	Population	Sample size for each District (population / total population) x 175 =	No of supermarket selected for each District	No of questionnaire allocate at each supermarket	Total number of questionnaire distributed
Segambut	128,500	40	2	20	40
Bukit Bintang	107,020	35	2	18	35
Lembah Pantai	162,940	50	2	25	50
Cheras	162,510	50	2	25	50
<b>Total</b>	<b>560,970</b>	<b>175</b>	<b>8</b>		<b>175</b>

Source: <https://www.dosm.gov.my> (2019)

### 3.6 Data Collection Procedure

Data were collected from consumers at eight supermarket in shopping malls in the Kuala Lumpur area by using self-reported questionnaires. The supermarket that has been chosen for the study were Aeon Supermarket (2), Econsave Supermarket (2), Giant Supermarket (2) and Village Grocer Supermarket (2) as these supermarket were selling organic food. According to Omar, Nazri, Osman, and Ahmad (2016), almost 57 percent of consumers purchase organic food at supermarket because it convenient and offers many choices of organic food. Self-administrated questionnaires were used for the following reasons (Sekaran, 2003): (a) they are a relatively inexpensive method that could increase the response rate, (b) there were no critical questions related to the study, (c) the questions have been relatively understandable and straightforward, (d) the measurement used were easy to understand and manage, and (e) written instructions were brief and simple. All participants had ample time to complete the questionnaire to enable them to provide honest answers (Brace, 2008). Accompanying the questionnaire was a cover letter requested a quick response and a research contract guaranteeing full anonymity. The questionnaire is included in Appendix A.

A public intercept method has been used for data collection. The phrase 'intercept' is used for a wide range of short, fast interviews with consumers conducted on-site and frequently carried out in or outside large retail outlets or shopping malls. According to Brown et al. (2016), the method of public intercept surveys are a direct and straightforward method for gathering data on public perceptions or other local information and was widely used for survey data collection, particularly in marketing research. The data collection took three months to complete.

### 3.7 Pilot Test Study

A pilot study is a small-scale research project that collects data from participants with similar characteristics in the actual study (Zikmund et al., 2009). It is performed to correct any deficiencies or weaknesses in the instrument and locate problems in words and interpretations (Cooper & Schindler, 2014; Mohajan, 2017; Sekaran & Bougie, 2010). A pilot study is also to ensure that participants understand and able to answer the questions (Ross, 2012). It also enables the researcher to assess the questions' validity and reliability (Saunders, 2009).

A test was performed using sample of 30 participants, that was a companions, neighbors, or office associates of the researcher. The researcher sat with the participants while they were completing the questionnaire to check the ease of completion, identify difficulties in wording, and answer any queries. Several issues were found during the pilot test, such as the material, the interpretation of the items and the time it took to complete the questionnaire. However, the major issues were that most of the non-Malay participants are reluctant to participate. Hence, the researcher also focused on more non-Malay participants during actual data collection to participate in this study. Each participant spent about 20 minutes replying to the entire questionnaire.

The reliability analysis was conducted to determine the inner accuracy of the scales using reliability coefficient of the cronbach alpha. In general, a reliability coefficient, varying from 0.755 to 0.905, would be enough to suggest that the instrument is reliable (Nunnally, 1978; Hair et al., 1995; Pallant, 2001). Table 3.12 shows the result.

Table 3.12  
*Reliability Coefficients of Measures in Pilot Study*

Variables	Cronbach's Alpha ( Pilot Test )	Cronbach's Alpha ( Previous Research )
Propensity to purchase organic food	.897	.903
Actual purchase behaviour	.936	.952
Functional value	.855	.780
Social value	.953	.830
Emotional value	.848	.948
Novelty value	.947	.918
Conditional value	.713	.896
Monetary value	.879	.888
Environment concern	.741	.855

### 3.8 Statistical Technic Used

Structural equation modeling (SEM) has been mixture for statistical modeling which studies the relationship between the latent structures (Hair, Black, Babin, & Anderson, 2010). In this analysis SEM was used to analyze the data due to the complexity of the model. Furthermore, SEM has also been used to analyze the causal relationships between the latent variables that elucidate variations in exogenous constructs impacting endogenous structures. Also, SEM tends to be used in social and behavioural sciences (Baumgartner & Homburg, 1996). SEM has two major roles. The first is to assess the reliability and validity of the measures used (measurement model). The second role is it examines the causal variable relationships (Structural model) (Hair et al., 2010).

### **3.9 Descriptive Analysis**

Using descriptive and inferential statistics, data is analyzed. SPSS version 23 has been used to perform descriptive analysis to develop profile of the participants and describe the data (Agresti & Finlay, 2009).

SEM was chosen for inferential analysis to make data assumptions for different reasons. First, SEM simultaneously examines all equations and afterwards attempts to determine the variance and direction of relationships among variables. Secondly, it considers measuring errors. Thirdly, it enables the modeling of complex models. Finally, it offers a highest precision to date (Hair et al., 2010). Present analysis performed inferential analysis by use of variance-based SEM using Ringle, Wende, and Will (2005) SmartPLS 3.2.8 software. SmartPLS 3.2.8 could easily evaluate various types of interventions and do not fulfill any expectations.

### **3.10 Structural Equation Modelling (SEM)**

Basic goal of SEM is to simultaneously describe the configuration of interconnected dependency chain relationships between latent or non-observed variables whereby the observed variables measure each interaction (Hair et al., 2010; Schumacker & Lomax, 2010). According to Schumacker and Lomax (2010), SEM uses several kinds of models which explain a relationship between observed variables, with the key aim of quantitatively testing a theoretical model that the researcher hypothesized. Besides that, SEM is regarded as a confirmatory technique instead of an exploratory one. Besides analyzing the latent constructs, SEM also seeks to facilitate other kinds of investigations, which include estimation of variance, covariance, and factor of confirmatory (CFA), linear regression and hypothesis testing analysis (Joreskog, 1996). Hair et al. (2010) and Kline (2005) stated SEM could measure unidimensionality and concurrently measure reliability and validity.

Moreover, SEM provides the general assessment of the fitness model along with testing of the individual parameters. Hence, it is the most suitable model for data obtained in the present study.

Therefore, this study depended on SEM and CFA. SEM has two approaches, namely covariance-based SEM (CBSEM) and variance-based SEM (VBSEM) (Chin, 1998), the differences in approach between the two are presented in Table 3.13. Hence, in this study VBSEM were used as “VBSEM (PLS-SEM) reducing errors and optimizing endogenous construct R2 values” (Hair et al., 2014, p. 14).

Table 3.13  
*Comparison between Covariance-based SEM and Variance-based SEM (PLS)*

<b>Criteria</b>	<b>Covariance-based (e.g. LISREL, AMOS, Mplus)</b>	<b>Variance-based (e.g. SmartPLS, PLS Graph)</b>
Objective	Parameter oriented	Prediction oriented
Distribution Assumptions	Normal distribution (parametric)	Non-parametric
Required sample size	High (Min. 100-800)	Small (min 30-100)
Model complexity	Large models problematic (50+ indicator variables)	Large models: OK
Parameter estimates	Stable, is assumptions met	Potential Bias
Indicators per construct	Typically 3-4 min. to meet identification requirements	One- Two: OK Large number: OK
Statistical tests for parameter estimates	Assumptions must be met	Inference requires Jackknifing or Bootstrapping
Measurement Model	Typically only reflective indicators	Formative and Reflective indicators: OK
Goodness-of-fit measures	Many	None

Source: Roldan & Sanchez-Franco (2012)

### **3.11 The Rationale for Choosing PLS-SEM**

This study had the purpose of analyzing the relationship between the endogenous variables. SEM was therefore the correct tool for evaluating the multiple relations between the dependent and independent variables (Hair et al., 2010). Two of SEM techniques were developed, which is variance-based SEM (VBSEM) and covariance-based SEM (CBSEM). While CBSEM is suitable for the normal distribution of data, VBSEM is meant for the data that were not normally distributed. Hence, in this study VBSEM were used as “VBSEM (PLS-SEM) reducing the discrepancies and optimizing its endogenous construct R2 values” (Hair et al., 2014, p. 14).

### **3.12 Partial Least Squares (PLS) Analysis**

PLS analysis are divided into two stages, i.e., analysis of the measurement model and the structural model. For this study, a measuring model stage involved an assessment of the validity and reliability of items by each element, although this structural model stage involved the assessment to the relationship amongst the latent constructs to test the hypothesis.

SmartPLS cannot utilize the natural excel file or import SPSS data; utilized file in SmartPLS must be in the .csv format. Therefore, after the descriptive analysis was run, the .csv file retrieved from SPSS. In the first stage, the discriminant validity and convergent validity was analyzed, as explained in next paragraph, preceded with a discussion on the model of structural.

### 3.12.1 Convergent Validity

Validity of convergent applies to a proportion in which correlation is greater between the measures in the same constructs over other constructs (Hair et al., 2014). To evaluate this, a composite reliability of the factor loading and the average variance extracted (AVE) (Hair et al., 2014) were examined. First, each item should be loaded that over 0.70 (Fornell & Larcker, 1981). Hair et al. (2014) also indicated the loading items below 0.40 must be removed and items 0.70 are appropriate. Items for loads ranging from 0.40 to 0.70 were deleted if the deletion increased reliability and AVE. Next, the internal consistency of reliability was checked. Composite reliability as indicates by Hair at al., (2010), is to what degree the set of items regularly indicates the latent structure. Based on Hair et al. (2014), the values from 0.60 to 0.70 are appropriate in an exploratory study, whereas those from 0.70 to 0.90 are considered adequate.

The AVE values were examined to establish the convergent validity of the outer model. The AVE calculates the variance that the build absorbs relative to uncertainty due to errors in measurement (Fornell & Larcker, 1981). Values of AVE should higher or equivalent by 0.50, in other words, the construct describes half the average variance in that indicator (Hair et al., 2014). Barclay, Thompson & Higgins (1995) claimed that an AVE value of at least 0.50 has adequate consistency in the calculation of the construct concerned. If the AVE values are below 0.50, the converging validity of the constructs remains doubtful.

### **3.12.2 Discriminant Validity**

Validity of discriminant refers to level of scientific criteria that constructs was entirely different from several constructs (Hair et al., 2014). Thus, to assure the uniqueness from each construct that is not defined in the model by other constructs, discriminating validity is essential. In this analysis, the process and cross-loading used by Fornell-Larcker was used to test validity of discriminant.

The square root of the AVE values and the latent correlations of the variables were contrasted using Fornell-Lacker's method (Hair et al., 2014), i.e., The AVE square root was oriented towards the diagonal elements of matrix of relationship for all constructs. Cross-loading, on the other hand, is another approach in which indicator loadings can load more on their own construct compared with others. The discriminating outer model validity is confirmed when the diagonal items were greater than the other items throughout the row as well as column where they are oriented. It is often believed that the outcomes of the theory testing must be valid and reliable by establishing the validity of the outer model construction.

### **3.12.3 Path Coefficient Estimation**

There are two model in a PLS path, structural or measuring, often known as the external and internal models (Hair et al., 2014). The variables of manifest (MVs) are correlated with their latent variables (LVs), whereas the underlying model links latent of endogenous variables with those variables. In addition, framework of measuring shows relationship among the variables and constructs of indicators, whereas the structural model shows a correlations within a constructs. To test the hypothesized relationship between the constructs, a standardized direction coefficient was used.

#### **3.12.4 Structural Path Significance in Bootstrapping**

Determining the importance of the path coefficient, PLS-SEM relies on a non-parametric bootstrap technique (Hair et al., 2014). In this process, PT-statistics is created to check the significance of both inner and outer models. At bootstrapping, several sub-samples include extracted with replacement from the sample originally taken (Hair et al., 2014) and generate standard bootstrap errors producing estimated t-values of the structural path testing significance. Present study employed a method of bootstrapping to determine statistically significant coefficients of the path. Five-thousand sub-samples were used to run bootstrapping. By the use of the bootstrapping technique, t-values were produced that accompanied each path coefficient, then the P-Value. These P-Value were measured in Microsoft Excel using the TDIST (t-value, df, tails) function.

#### **3.12.5 Prediction Relevance of the Model**

The Q<sub>2</sub>, 1974; Stone, 1974 value of Stone-Geisser has also been tested for predictive precision when determining magnitude of the values R<sup>2</sup> as a predictive element significance (Geisser, as cited in Hair et al., 2014). From literature for multivariate data analysis, R<sup>2</sup> values of endogenous variables are natural, defining the variability of a variable that is enlightened by variables of predictors.

In comparison, the value of Q<sub>2</sub> was also obtained by blindfolding, a dataset reprocess method that eliminates several values points and considers the missing values points throughout model of endogenous measurements, as well as estimates parameter (Hair et al., 2014). The approximate parameters are then used to reconstruct the raw data, which was previously assumed to be missing (Hair et al., 2014). A Q<sup>2</sup> value is determined through two different approaches.

Nonetheless, the cross-validated redundancy method fits perfectly with the PLS-SEM approach (Hair et al., 2014), whereby PLS-SEM calculations are used by cross-validated redundancy for both structural and data prediction measurement models. This study, therefore, employed cross-validated redundancy since  $Q^2$  measures the predictive validity of the model, assuming where  $Q^2$  value were more than 0 (Hair et al., 2014). In comparison as Hair et al. (2014), predictive validity of the model cannot be inferred if the  $Q^2$  values are equal to or below 0. An indicator of how good path model is the value originally observed is predicted by the estimated  $Q^2$  values (Hair et al. 2014).

### **3.13 Chapter Summary**

A quantitative research design applied to this study was elaborated in this chapter. The operationalization and measurement of each variable were also defined in this chapter. Next, it described the proportionate stratified sampling used to select the sample. The intercept process was also elaborated to collect data. Besides that, the chapter also discussed the pilot test. Finally, this chapter addressed the statistical tools used to analyze the data.

## CHAPTER 4

### RESULTS AND DISCUSSION

#### 4.0 Overview of the Chapter

This chapter presents the result analysis of the data. First, this chapter starts with the response rate for surveys. Secondly, it outlines coding of the data, entering, Cleaning and checking. Thirdly, it outlines the participants' profile, followed by the analysis and result of hypothesis testing.

#### 4.1 Response Rate

For the purpose of data collection, 175 sets of questionnaires have been distributed to Kuala Lumpur consumers. 174 sets of 175 questionnaires were returned. As the study focused on organic food, the responses collected were adequate to carry out the analysis using PLS, since the minimum sample size needed was 77 to analyze five arrows pointing to one construct (Roldan & Sanchez-Franco (2012). For present study, the rate of response and available questionnaire are shown in Table 4.1. Rate of response could be compared with previous studies on green consumption, specifically organic food. The response rate of a similar study was 97 percent (Hossain & Lim, 2016).

Table 4.1  
*Summary of Total Questionnaires and Response Rate*

<b>The sample size of the study</b>	<b>175</b>
Returned questionnaires	174
Unreturned questionnaires	1
Useable questionnaires	169
Unusable questionnaires	5
Response rate	97.21%
Usable response rate	96.57%

#### 4.2 Data Coding and Entry

Items used for the questionnaire were identified using alpha numeral codes. Propensity to purchase organic food were codified with PPOF. As such, the first question for intention to purchase organic food were codified with PPOF1. For following question has been codified as PPOF2, and the sequence of the remaining items was followed. Actual purchase behaviour was coded as APB. Similarly, functional, social, emotional, novelty, conditional, and monetary value were encoded with SV, EV, NV, CV, MV. While environmental concern with EC. Once encoding was completed, all responses were entered in SPSS version 23 accordingly. A full list of the items and data coding is presented in Appendix V.

### 4.3 Data Screening and Cleaning

Once data were inserted in version 23 of SPSS, the data was later screened and cleaned. This stage includes detecting errors in the data collected as missing values and values out of range (Pallant, 2005). "Out of range values" implies to the numbers recorded in SPSS version 23 were not within the range included in this analysis. For instance, the study was using a Likert scale points of five, so the values ought to be between one (1) and five (5). Summary of the analysis is reported in the Appendix VI. Table 4.2 displays variables of Cronbach's Alpha. It can be noted that in this study there have been no missing and out range values.

Table 4.2  
*Reliability Coefficient for Multiple Items (n=169)*

<b>Variables</b>	<b>Cronbach Alpha (<math>\alpha</math>)</b>
Propensity to purchase organic food	0.881
Actual purchase behaviour	0.898
Functional value	0.887
Social value	0.885
Emotional value	0.880
Novelty value	0.828
Conditional value	0.704
Monetary value	0.848
Environment concern	0.931

#### 4.4 Demographic Profile of Participants

The sample comprised of 37 male participants (21.9%) and 132 female participants (78.1%). From the ethnic perspective, there were 113 Malay participants (66.9%), 31 Chinese (18.3%), 24 Indian (14.2%), and 1 others (0.6%). The sample consisted of consumers aged 21 years and above. Almost half of the participants were at the age of 21 to 25 years old (42.6%), followed by 26 to 35 years (29%), 36 to 45 years (16.0%), and 46 years and above (12.40%). In terms of academic qualification, 93 participants had a bachelor's degree, 33 participants had a diploma, 23 participants had a master's degree, 18 participants had a secondary certificate, and 2 participants had a doctoral degree.

Participants were also questioned regarding their employment. The majority of respondents worked in the private sector (65.1%) followed by government sector (18.9%). Only a few were self-employed (3.6%), retired or pensioners (1.2%), and students (11.2%). In terms of household income, 76 participants (45.0%) earned less than RM3,000 a month, followed by 51 participants (30.2%), who earned between RM3,001 and RM5,000, 30 (17.80%) earned between RM5,001 and RM10,000, and 12 (7.10%) earned above RM10,001.

The majority preferred a local brand 116 (68.6%), and 53 participants (31.4%) preferred international brands. Those who indicated local brands chose them for a variety of reasons, such as to support the local economy (24.1%), the brands are fresh and widely available (24.1%), they are cheaper (23.2%), they save money (22.4%), and to show nationalism (6.0%). Those who preferred important brands chose so because they have prestige, value, and quality (39.8%), are more trusted (39.6%), are exclusive (13.2%), and they have doubts about buying local products (7.5%). Table 4.3 presents the profile of the participants.

Table 4.3  
*Demographic Profile of Participants (n=169)*

Variable		Category	Frequency	Percentage
Gender		Male	37	21.9
		Female	132	78.1
Race		Malay	113	66.9
		Chinese	31	18.3
		Indian	24	14.2
		Others	1	0.6
Age		21 – 25 years old	72	42.6
		26 – 35 years old	49	29.0
		36 – 45 years old	27	16.0
		46 years old and above	21	12.4
Marital Status		Single	106	62.7
		Married	59	35
		Divorced/Widowed	4	2.4
Education Level		Secondary	18	10.7
		Diploma	33	19.5
		Bachelor's degree	93	55
		Master's degree	23	13.6
		Doctoral / PhD degree	2	1.2
Occupation		Private sector	110	65.1
		Government sector	32	18.9
		Self-Employed	6	3.6
		Retired / Pensioner	2	1.2
		Student	19	11.2
Monthly Household Income		Less than RM3,000	76	45.0
		RM3,001 – RM5,000	51	30.2
		RM5,001 – RM10,000	30	17.8
		Above RM10,001	12	7.1
Brand Prefer		Local Brand	116	68.6
		Imported Brand	53	31.4
Why Choose Local Brand		Nationalistic	7	6.0
		Supporting	28	24.1
		Fresh and Widely Available	28	24.1
		Cheaper	27	23.2
		Saves Money	26	22.4
Why Choose Imported Brand		Prestige, Value and Quality	21	39.8
		Doubt to Buy Local Product	4	7.5
		Trust Imported Brand	21	39.6
		Exclusivity	7	13.2

#### 4.5 Descriptive Statistics Analysis

The Descriptive Analysis gives researchers the responses of the participants to each constructs in the study. A descriptive analysis was carried out to identify and summarize the characteristics of each type, namely the propensity to purchase organic food, the actual purchase behaviour of organic food, the image of a brand, the functional value, the social value, the emotional value, the novelty value, the conditional value, the monetary value and the environmental concern through standard deviation and mean. Table 4.3 illustrates the descriptive statistics including its constructs.

All construct had minimum of 1.00, or maximum of 5.00 of value. Some variables had a mean value of 3,4034 to 3,9396 and a standard deviation value of 0.62548 to 0.84761. A standard deviation values imply variability in the responses. Table 4.4 indicates the minimum and maximum values for each constructs. Mean values of propensity to purchase organic food and actual purchasing behaviour were above average, which means that propensity to purchase and actual purchase behaviour were high.

Table 4.4  
*Descriptive Statistics of the Constructs*

<b>Construct</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Propensity to purchase of organic food	2.00	5.00	3.9329	.70060
Actual purchase behaviour	1.13	5.00	3.4896	.83424
Functional value	1.67	5.00	3.7564	.74558
Social value	1.17	5.00	3.4034	.84761
Emotional value	1.80	5.00	3.5396	.82080

Table 4.4 (Continued)

<b>Construct</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Novelty value	1.25	5.00	3.4837	.83992
Conditional value	1.67	5.00	3.6193	.73400
Monetary value	2.00	5.00	3.9396	.71441
Environmental concern	2.00	5.00	3.8849	.62548

The independent t-test and one-way ANOVA were performed to examine the characteristics of organic food buyers on various demographic variables. The results are shown in Table 4.5 and Table 4.6, respectively. As shown in both tables, the only significant difference in propensity to purchase organic food was the job occupation of the participants. Retirees/pensioners appeared to be the least likely group of consumers to purchase organic food.

#### 4.6 Assumption of Normality

Normality often known to define a symmetric, bell-shaped curve with highest percentage of small and medium frequencies among variations (Pallant, 2005). The assessment of the scores for normal distribution of independent and dependent variables can be obtained through accessing skewness and kurtosis values (Pallant, 2005). The scope or measurements, related to social sciences, could be skewed negatively or positively (Pallant, 2005). Also used for Kurtosis is to measure the distribution of data. It represents the degree to which observations accumulate by main mean.

Kline (1998) proposed that skewness value cutting point would be between the -3 and + 3 ranges. Coakes and Steed (2003) suggested kurtosis value range from -3 and + 3. The skewness value for this study fell in the appropriate range Kline, (1998) has suggested. Unfortunately,

Hair et al. (2010) did not accept the value, who suggested that skewness result has to be between -1 and +1. Table 4.5 shows that some skewness and values of kurtosis deviated after a normal distribution. To address the said issue, PLS-SEM was used for the study because the said analysis did not fully needs normally distributed data.

Table 4.5  
*Results of Skewness and Kurtosis for Normality Test*

Factor	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Propensity to Purchase	-.530	.187	.040	.371
Actual Purchase Behaviour	-.269	.187	-.589	.371
Functional Value	-.546	.187	.126	.371
Social Value	-.522	.187	-.306	.371
Emotional Value	-.423	.187	-.442	.371
Novelty Value	-.319	.187	-.661	.371
Conditional Value	-.535	1.87	.079	.371
Monetary Value	-.662	.187	.372	.371
Environmental Concern	-1.145	.187	1.937	.371

#### 4.7 Model Specification

The research framework comprises of fifty eight predictive measuring variables (MVs or items) with ten latent variables (LVs or constructs) with functional, social, emotional, conditional, monetary value and environmental concern for independent variables. Propensity to purchase organic food as the dependent variable, and actual purchase behaviour as a consequence variable. The research model is shown in figure 4.1.



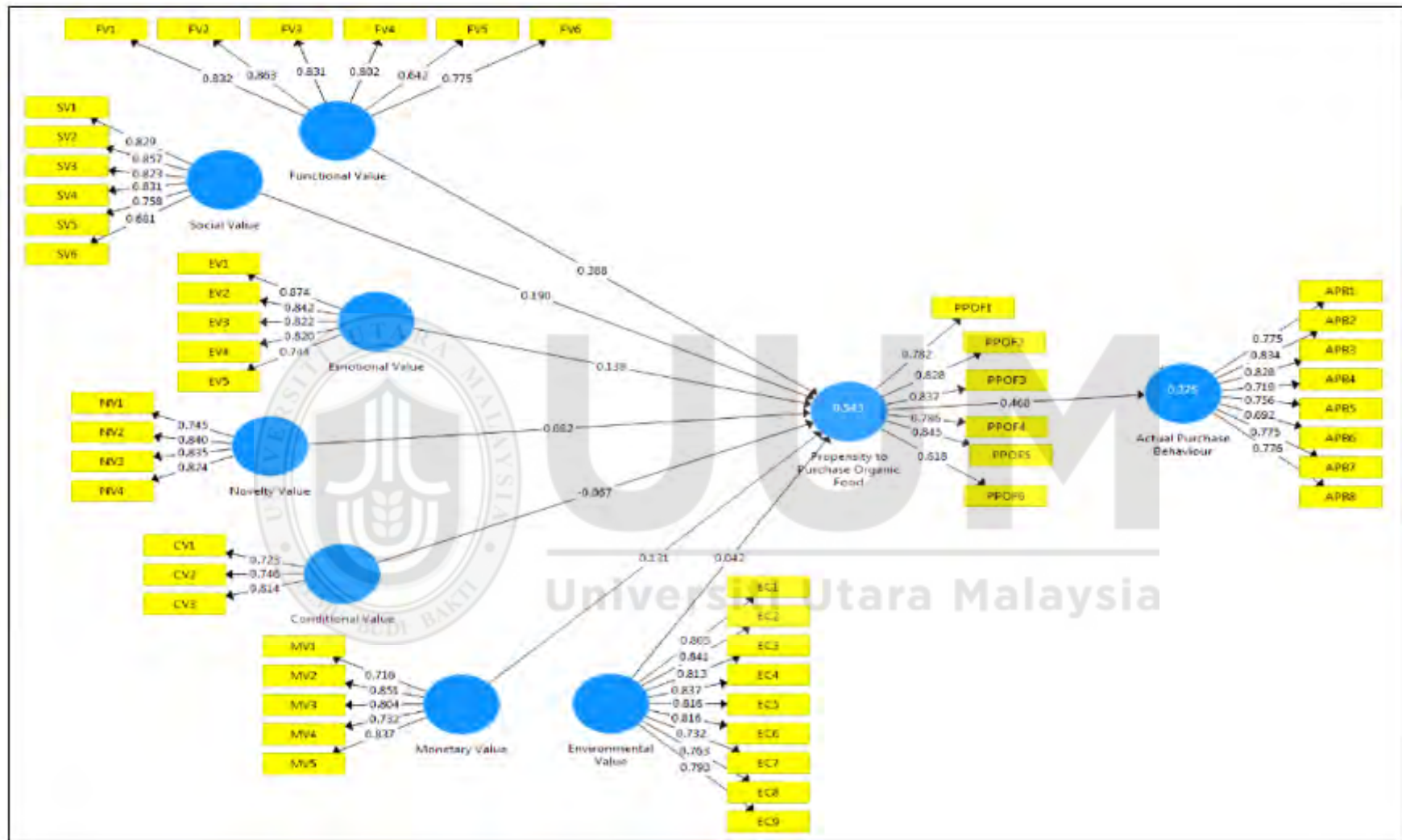


Figure 4.1  
The research model

## **4.8 Measurement Model**

SmartPLS 3.2.8 were used to perform PLS-SEM. Two key assessments were conducted consistent with the analysis: the assessment of the measurement model (outer model) and the structural model (inner model). The measuring model were first tested. The measuring model defines the relationship of the constructs. Two forms of validity are measured under the measuring model according to Hair et al. (2014), i.e. convergent validity and discriminating validity.

### **4.8.1 Convergent Validity and Reliability**

Convergent validity applies to degree that certain variables correlates positively to the other variables of a certain model (Hair et al., 2014). In the model of measurement, convergent validity, as well as reliability were evaluated at the first step. Composite reliability was considered in order to determine convergent validity, factor loading and AVE when evaluating the reliability of the constructs. Reliability indicator applies to the items outer load. Under Hair et al. (2014), loads under 0.4 are been removed whereas those beyond 0.7 were appropriate. Approximately 0.4 and 0.7 of the loadings, removal from the scale should be considered where elimination results in improved composite and AVE reliability. AVE is a test to validate convergent validity of outer model. AVE is known as the mean variance extracted between the items of a special construct through regards to measurement errors shared variance. Literally, AVE values demonstrate that how variable describes the difference between variables. An optimal AVE has to be beyond 0.5, suggesting over fifty percentage of the variance of its measures is clarified by the construct (Hair et al., 2014). Composite Reliability (CR) is the final element of establishing convergent validity. CR applies to the degree which the latent construct is consistently demonstrated by a set of items (Hair et al, 2014). High CR value generate high reliability.

The minimum score of CR is over 0.7 according to Hair et al. (2014). Several items (FV5, SV6, PPOF6, APB6, and BI4) were deleted in their respective constructs based on Table 4.6, due to low loads below 0.7.

Table 4.6  
*Convergent Validity Analysis*

<b>Construct</b>	<b>Item</b>	<b>Loading</b>	<b>CR</b>	<b>AVE</b>
Propensity to Purchase Organic Food	PPOF1	0.8799	0.913	0.677
	PPOF2	0.844		
	PPOF3	0.850		
	PPOF4	0.780		
	PPOF5	0.745		
Actual Purchase Behaviour	APB1	0.800	0.920	0.621
	APB2	0.848		
	APB3	0.835		
	APB4	0.733		
	APB5	0.739		
	APB7	0.778		
	APB8	0.775		
Functional Value	FV1	0.858	0.918	0.691
	FV2	0.882		
	FV3	0.859		
	FV4	0.823		
	FV6	0.725		
Social Value	SV1	0.830	0.916	0.686
	SV2	0.882		
	SV3	0.831		
	SV4	0.843		
	SV5	0.748		
Emotional Value	EV1	0.875	0.912	0.675
	EV2	0.841		
	EV3	0.821		
	EV4	0.820		
	EV5	0.745		
Novelty Value	NV1	0.747	0.885	0.659
	NV2	0.843		
	NV3	0.834		
	NV4	0.821		

Table 4.6 (Continued)  
*Convergent Validity Analysis*

Conditional Value	CV1	0.730	0.808	0.584
	CV2	0.754		
	CV3	0.807		
Monetary Value	MV1	0.712	0.892	0.625
	MV2	0.854		
	MV3	0.809		
	MV4	0.730		
	MV5	0.837		
Environmental Concern	EC1	0.806	0.942	0.644
	EC2	0.842		
	EC3	0.815		
	EC4	0.836		
	EC5	0.815		
	EC6	0.815		
	EC7	0.732		
	EC8	0.762		
	EC9	0.793		

The loadings of every items for the construct after deletion were beyond 0.7. All CR ranged from .808 to .942, which was more than the acceptable value of 0.7. While, AVE values were from .584 to .691, beyond suggested value, suggesting strong degree of validity of the measurement used (Barclay et al., 1995). Therefore, this findings confirmed the convergent validity of this study's measuring model or outer model.

#### 4.8.2 Discriminant Validity

Next, discriminant validity were assessed. Validity of discriminant refer to degree to a construct is somehow different of other constructs. Consequently, discriminating validity must be established to ensuring uniqueness for every structure and avoidance of conflicting construct whereby phenomenon was not described throughout the model (Hair et al., 2014).

In addition, items for each construct shall be loaded mostly of the model itself because a mean variance distributed in every construct must be stronger towards a average differential within the construct or the other construct (Fornell & Larcker, 1981; Compeau, Higgins & Huff, 1999). Hair et al. (2014) proposed two measures of validity of discriminant. The first is by examining discriminant validity through cross-loading of the indicators. Fornell-Lacker's criterion is the second measure of discriminant validity.

To determine its discriminating validity through cross-loading variables and loads for all weights, a specific need to be significantly greater for their models. Table 4.7 indicates that all element loadings for a specific constructs were greater than those of other construct.



Table 4.7  
*Cross-Loadings*

Items	Propensity to Purchase Organic Food	Actual Purchase Behaviour	Functional Value	Social Value	Emotional Value	Novelty Value	Conditional Value	Monetary Value	Environmental Concern
PPOF1	0.799	0.461	0.592	0.423	0.457	0.503	0.401	0.440	0.372
PPOF2	0.844	0.520	0.543	0.558	0.524	0.476	0.463	0.416	0.395
PPOF3	0.850	0.465	0.520	0.500	0.515	0.422	0.478	0.473	0.442
PPOF4	0.780	0.366	0.501	0.418	0.411	0.365	0.327	0.401	0.294
PPOF5	0.841	0.471	0.549	0.391	0.480	0.379	0.345	0.466	0.358
APB1	0.423	0.800	0.379	0.377	0.361	0.454	0.377	0.226	0.269
APB2	0.476	0.848	0.404	0.413	0.414	0.453	0.400	0.336	0.366
APB3	0.419	0.835	0.366	0.313	0.358	0.377	0.351	0.285	0.357
APB4	0.368	0.733	0.325	0.220	0.365	0.313	0.373	0.277	0.350
APB5	0.418	0.739	0.352	0.233	0.396	0.302	0.374	0.314	0.380
APB7	0.460	0.778	0.359	0.430	0.485	0.478	0.427	0.413	0.358
APB8	0.498	0.775	0.372	0.380	0.471	0.489	0.432	0.360	0.391

Table 4.7 (Continued)

Items	Propensity to Purchase Organic Food	Actual Purchase Behaviour	Functional Value	Social Value	Emotional Value	Novelty Value	Conditional Value	Monetary Value	Environmental Concern
FV1	0.575	0.387	0.858	0.393	0.427	0.477	0.375	0.489	0.407
FV2	0.574	0.371	0.882	0.369	0.436	0.477	0.471	0.473	0.448
FV3	0.517	0.344	0.859	0.356	0.489	0.482	0.444	0.511	0.429
FV4	0.565	0.400	0.823	0.383	0.361	0.488	0.343	0.439	0.326
FV6	0.495	0.438	0.725	0.448	0.492	0.398	0.480	0.368	0.366
SV1	0.475	0.485	0.444	0.830	0.615	0.492	0.485	0.308	0.291
SV2	0.535	0.406	0.429	0.822	0.586	0.372	0.507	0.410	0.378
SV3	0.360	0.330	0.328	0.31	0.586	0.370	0.580	0.296	0.330
SV4	0.422	0.268	0.364	0.843	0.543	0.345	0.529	0.378	0.343
SV5	0.481	0.286	0.347	0.748	0.512	0.432	0.512	0.413	0.290
NV1	0.346	0.350	0.366	0.436	0.485	0.747	0.383	0.285	0.213
NV2	0.423	0.399	0.435	0.336	0.461	0.843	0.325	0.368	0.295
NV3	0.450	0.489	0.512	0.425	0.459	0.834	0.360	0.419	0.273
NV4	0.469	0.450	0.488	0.400	0.532	0.821	0.444	0.404	0.302

Table 4.7 (Continued)

Items	Propensity to Purchase Organic Food	Actual Purchase Behaviour	Functional Value	Social Value	Emotional Value	Novelty Value	Conditional Value	Monetary Value	Environmental Concern
EV1	0.511	0.441	0.483	0.556	0.875	0.575	0.580	0.472	0.419
EV2	0.554	0.428	0.490	0.449	0.841	0.535	0.563	0.531	0.448
EV3	0.403	0.437	0.352	0.656	0.821	0.398	0.632	0.426	0.391
EV4	0.506	0.485	0.374	0.661	0.820	0.434	0.807	0.462	0.459
EV5	0.380	0.337	0.461	0.533	0.745	0.491	0.511	0.375	0.314
CV1	0.196	0.258	0.368	0.262	0.324	0.242	0.730	0.201	0.286
CV2	0.293	0.304	0.441	0.336	0.355	0.315	0.754	0.278	0.280
CV3	0.506	0.485	0.374	0.661	0.826	0.434	0.807	0.462	0.459
MV1	0.370	0.372	0.367	0.441	0.480	0.392	0.407	0.712	0.449
MV2	0.418	0.341	0.455	0.429	0.516	0.394	0.418	0.854	0.459
MV3	0.383	0.286	0.403	0.352	0.476	0.314	0.401	0.809	0.506
MV4	0.443	0.269	0.401	0.219	0.311	0.345	0.268	0.730	0.443
MV5	0.477	0.339	0.527	0.326	0.437	0.370	0.338	0.837	0.529

Table 4.7 (Continued)

Items	Propensity to Purchase Organic Food	Actual Purchase Behaviour	Functional Value	Social Value	Emotional Value	Novelty Value	Conditional Value	Monetary Value	Environmental Concern
EC1	0.399	0.392	0.406	0.351	0.404	0.263	0.399	0.437	0.806
EC2	0.311	0.400	0.420	0.362	0.432	0.225	0.477	0.420	0.842
EC3	0.381	0.378	0.423	0.350	0.405	0.361	0.394	0.528	0.815
EC4	0.315	0.280	0.339	0.298	0.430	0.203	0.399	0.480	0.836
EC5	0.400	0.413	0.360	0.250	0.404	0.288	0.360	0.514	0.815
EC6	0.374	0.354	0.416	0.326	0.429	0.312	0.387	0.536	0.815
EC7	0.288	0.324	0.320	0.316	0.346	0.262	0.368	0.411	0.732
EC8	0.359	0.285	0.319	0.239	0.330	0.181	0.332	0.419	0.762
EC9	0.402	0.398	0.410	0.360	0.423	0.311	0.380	0.593	0.793

Further, the test used by Fornell-Larcker was to calculate discriminant validity. This approach is the most conservative. This contrasts the AVE square root with the associations of the latent variable (Hair et al., 2014). The values throughout the diagonal were, as seen in Table 4.8, is larger than other values in a same column and row, indicating the validity of the measurements is discriminating.

#### **4.9 Structural Model**

After confirming that the constructs' measures were reliable and valid, the second step was to assess the structural model. In other words, the hypothesized relationships were tested, including the measures of predictive capability.

##### **4.9.1 Multicollinearity Test**

The first step in testing the structural model was to look at multicollinearity. This testing is significant prior to model test (Hair et al., 2010) to check if certain independent variables remain significantly interrelated by each other. As per Hadi, Abdullah, and Ilham (2016) and Wong (2013), the collinearity issue can be identified by using SPSS. A correlation value below 0.9, a tolerance value higher than 0.2, and a VIF value lower than 5 mean that multicollinearity is not an issue. According to Hair et al. (2014), VIF statistics are important for the inner model and formative outer (measurement) models. If a model has only reflective measures, then assessing the VIFs of the inner model is sufficient. But with formative measures, the VIFs of the indicators of the formative measures should be measured as well (Hair et al., (2014). Table 4.9 provides two models showing the details of the collinearity for all independent variables. With regards to VIF values, they ranged between 1.325 and 3.404 and below than 5 (Hair et al., (2014). The result showed that multicollinearity was not a threat.

Table 4.8

*Discriminant Validity Analysis: Fornell-Larcker's Criterion*

Construct	Actual Purchase Behaviour	Conditional Value	Emotional Value	Environmental Value	Functional Value	Monetary Value	Novelty Value	Propensity to Purchase Organic food	Social Value
Actual Purchase Behaviour	<b>0.788</b>								
Conditional Value	0.498	<b>0.764</b>							
Emotional Value	0.521	0.754	<b>0.822</b>						
Environmental Concern	0.450	0.479	0.500	<b>0.802</b>					
Functional Value	0.466	0.506	0.527	0.476	<b>0.831</b>				
Monetary Value	0.406	0.459	0.558	0.605	0.550	<b>0.790</b>			
Novelty Value	0.525	0.466	0.596	0.337	0.560	0.460	<b>0.812</b>		
Propensity to Purchase Organic Food	0.559	0.493	0.582	0.455	0.658	0.534	0.524	<b>0.823</b>	
Social Value	0.434	0.627	0.687	0.395	0.467	0.441	0.489	0.559	<b>0.828</b>

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations

Table 4.9  
*Multicollinearity Test*

<b>Model</b>	<b>Variables</b>	<b>Collinearity Statistics (VIF)</b>
Conditional Value	<b>Propensity to Purchase Organic Food &amp; Actual Purchase Behaviour</b>	2.573
Emotional Value		3.404
Environmental Concern		1.766
Functional Value		1.886
Monetary Value		2.002
Novelty Value		1.802
Social Value		2.052

#### 4.9.2 Structural Model Path Coefficient

Second step in the structural system evaluation is examining the path coefficients. A path coefficient (see Figure 4.2) is a hypothesized construct relationship, whereby the standardized value is within -1 and +1 (Hair et al., 2014). An average coefficient of route close to +1 means a strong constructive relationships and inversely. Standard error was used to define the coefficient consequence. The bootstrapping approach used to get the values of standard error (refer to Figure 4.3). 5,000 samples of 169 cases were used to initiate bootstrapping. Bootstrapping was used to generate the t-values that accompany each path coefficient (see Table 4.10). If the t-value in a certain probability of error is greater than the critical value, then the coefficient is deemed significant. The critical values for two-tailed tests are 1.96 at a significant level of 0.05 or five per cent, whereas 2.57 at a significant level of 0.01 or one per cent (Hair et al., 2014).

Researchers usually refer to a five-percent significance level in marketing research and a one-percent significance level in consumer research studies (Hair et al., 2014). Of eight hypothesis tested, three hypothesis were affirmed (as indicated in Table 4.10).

Table 4.10  
*Path Coefficients and Hypotheses Testing*

Hypothesis	Relationship	Path Coefficients	Std. Error	t-value	P Values	Decision
H1a	Functional Value -> Propensity to Purchase Organic Food	0.383	0.377	0.081*	<b>0.000</b>	<b>Supported</b>
H1b	Social Value -> Propensity to Purchase Organic Food	0.206	0.077	2.672*	<b>0.000</b>	<b>Supported</b>
H1c	Emotional Value -> Propensity to Purchase Organic Food	0.143	0.092	1.553	<b>0.120</b>	Not Supported
H1d	Novelty Value -> Propensity to Purchase Organic Food	0.081	0.085	0.945	<b>0.345</b>	Not Supported
H1e	Conditional Value -> Propensity to Purchase Organic Food	-0.049	0.080	0.612	<b>0.541</b>	Not Supported
H2a	Monetary Value -> Propensity to Purchase Organic Food	0.107	0.080	0.945	<b>0.182</b>	Not Supported
H2b	Environmental Concern -> Propensity to Purchase Organic Food	0.052	0.080	0.615	<b>0.539</b>	Not Supported
H3	Propensity to Purchase Organic Food -> Actual Purchase Behaviour	0.451	0.088	5.142**	<b>0.008</b>	<b>Supported</b>

Note: \* $p < 0.01$ , \*\* $p < 0.05$

From the above table, propensity to purchase organic food had a positive and significant impact on actual purchase behaviour of organic food ( $\beta=0.451$ ,  $t=5.142$ ,  $p < 0.05$ ); thus, H<sub>3</sub> were supported. Functional value ( $\beta= 0.383$ ,  $t=0.081$ ,  $p < 0.01$ ) had a positively significant effect on propensity to purchase organic food; thus, H<sub>1a</sub> was supported. Social value ( $\beta= 0.206$ ,  $t=2.672$ ,  $p > 0.01$ ) also had a positively significant effect on propensity to purchase organic food; thus, H<sub>1b</sub> was supported.

However, emotional value ( $\beta= 0.143$ ,  $t=1.553$ ,  $p>0.01$ ), novelty value ( $\beta= 0.078$ ,  $t=0.945$ ,  $p>0.01$ ), conditional value ( $\beta= -0.049$ ,  $t=0.612$ ,  $p>0.01$ ), monetary value ( $\beta= 0.107$ ,  $t=0.945$ ,  $p>0.01$ ), and environmental concern ( $\beta= 0.052$ ,  $t=0.615$ ,  $p>0.01$ ) has no positive influence on propensity to purchase organic food. Therefore,  $H_{1c}$ ,  $H_{1d}$ ,  $H_{1e}$ ,  $H_{2a}$  and  $H_{2b}$  were rejected.

#### **4.9.3 Coefficient of Determination**

The R<sup>2</sup> coefficient or value of determination is the most popular indicator used to test the structural model. R<sup>2</sup> value is a measure of the predictive accuracy of the model and indicates the amount of variance explained by all exogenous variables connected to the endogenous variable in the endogenous variable (Hair et al., 2014). The R<sup>2</sup> value range is between 0 and 1, where a value of 0.75 or higher are considered significant, while 0.5 or 0.25 is defined low or moderate (Hair et al., 2014). The endogenous R<sup>2</sup> variables, based on the effects of a path model in Figure 4.2, i.e. propensity to purchase organic food and the actual purchase behaviour, were 0.540 and 0.355, respectively. This indicates that functional value and emotional value accounted constituted 54.0 percent of the variation in propensity to purchase organic food, which was moderate. Actual purchase behaviour accounted for 35.5 percent for the variance by propensity to purchase organic food, which was also moderate. It can be concluded that consumption value explained propensity to purchase organic food more than actual purchase behaviour. This is because propensity to purchase is formed before actual purchase behaviour. Therefore, propensity to purchase plays a role in the consumption values theory.

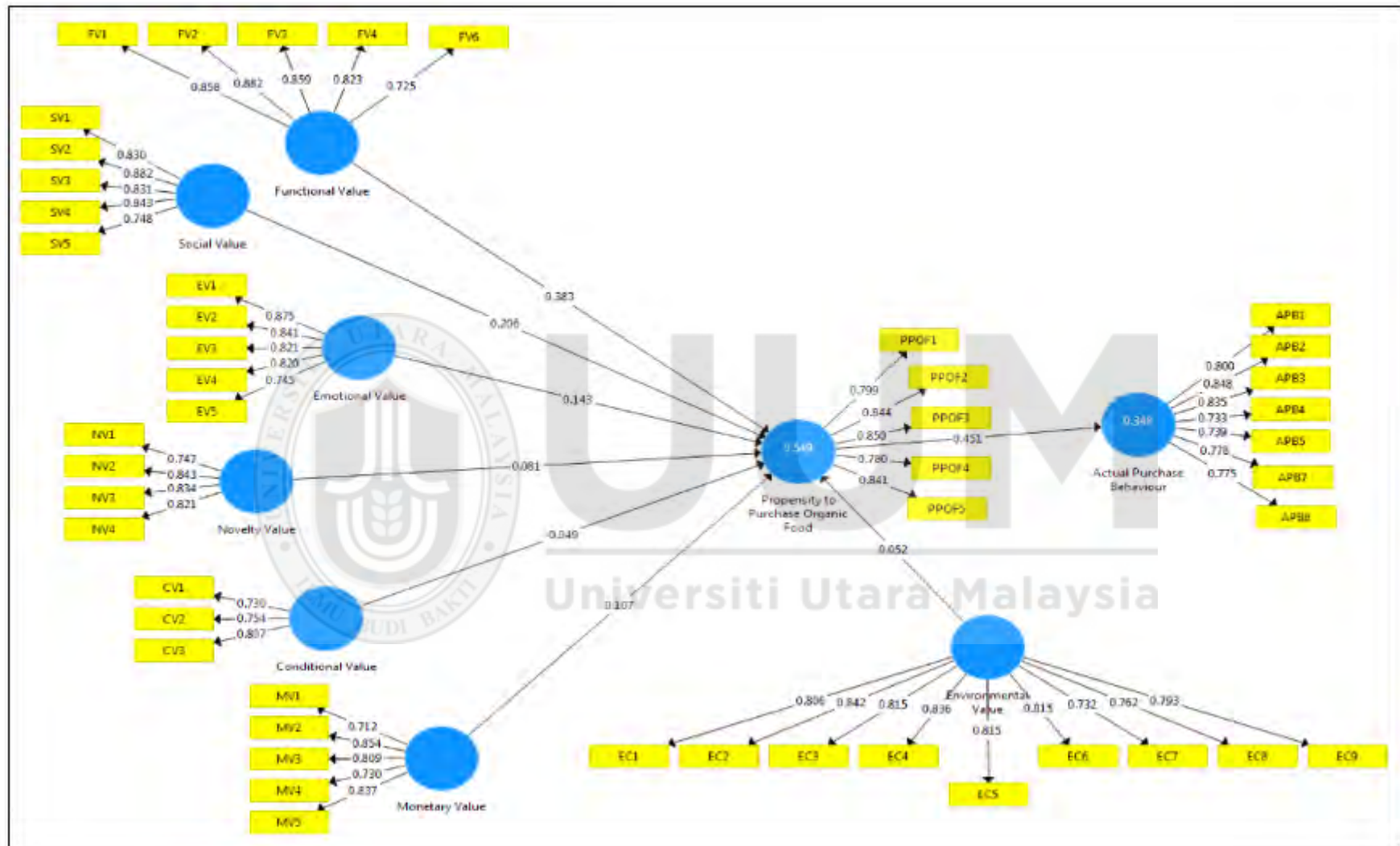


Figure 4.2  
Items loadings, path coefficient, and  $r^2$  values

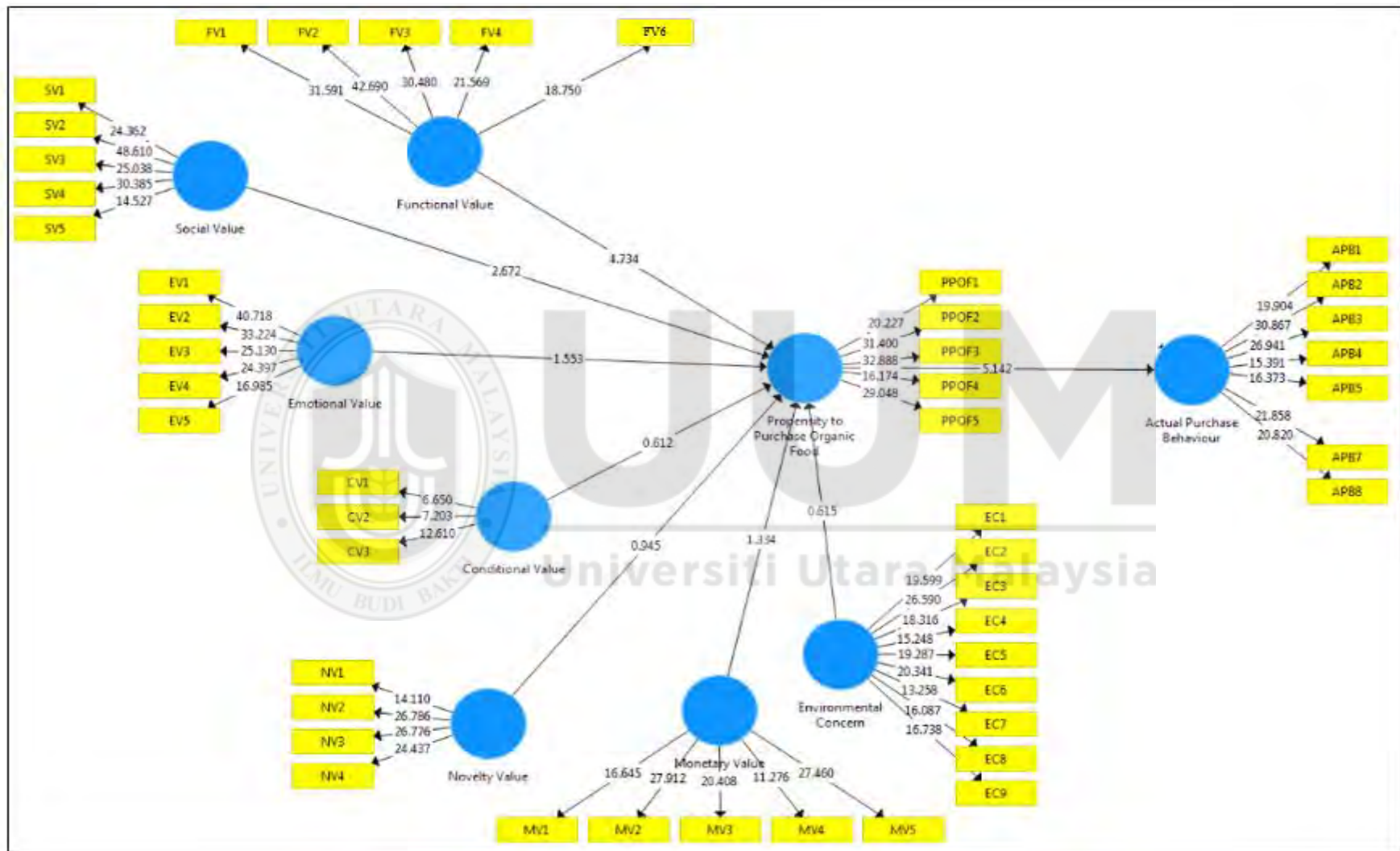


Figure 4.3  
Path model significance results (bootstrapping)

#### 4.9.4 Effect Size

Besides evaluation of the determination coefficient ( $R^2$ ), a measure called size of effect ( $f^2$ ) was examined. The effects size ( $f^2$ ) is a switch in the value of  $R^2$  when a common exogenous construct is removed from the model (Hair et al., 2014). This is to evaluate whether the deleted construct has a substantive impact on the endogenous construct (Hair et al., 2014). According to Cohen (1988), the  $f^2$  values of 0.10 represent a small effect, 0.30 represents a medium effect, and 0.50 represents a large effect. As shown in Table 4.11, social value ( $f^2=0.046$ ), emotional value ( $f^2=0.013$ ), novelty value ( $f^2=0.008$ ), conditional value ( $f^2=0.002$ ), monetary value ( $f^2=0.013$ ), and environmental concern ( $f^2=0.003$ ) the impact was small. In comparison, propensity to purchase organic food ( $f^2=0.235$ ), as well as functional value ( $f^2=0.173$ ) had a medium effects.

Table 4.11  
*Effect Size of Latent Variables*

Construct	$R^2$	Effect Size ( $f^2$ )	Effect Size rating
<b>Propensity to Purchase Organic Food</b>			
Functional Value	0.549	0.173	Medium effect
Social Value	0.549	0.046	Small effect
Emotional Value	0.549	0.013	Small effect
Novelty Value	0.549	0.008	Small effect
Conditional Value	0.549	0.002	Small effect
Monetary Value	0.549	0.013	Small effect
Environmental Concern	0.549	0.003	Small effect
<b>Actual Purchase Behaviour</b>			
Propensity to purchase organic food	0.348	0.235	Medium effect

#### 4.9.5 Predictive Relevance of the Model

Lastly, a measure for predictive capability required for prediction purposes. To examine the accuracy of predictive, the  $Q^2$  value for Stone-Geisser has been investigated (Hair et al., 2014). A blindfolding technique is a suggested method for evaluation relevance on predictions. Blindfolding is the sample-reuse technique which systematically deletes points of data and provides a forecast of the original values. For this reason an omission distance ( $D$ ) is required for the procedure. In literature, a value for the omission distance ( $D$ ) is recommended between 5 and 12 (Hair et al., 2014). Consequently,  $Q^2$  is developed as a general cross-validation metric. A  $Q^2$  value refers to path model capability in value prediction initially observed (Hair et al., 2014).

A Two different ways of calculating the  $Q^2$  value: cross-validated redundancy and cross-validated communality. The cross-validated redundancy is the prediction of data for both the structural model and the measuring model and thus suits well with the PLS-SEM. Accordingly, the cross-validated community uses only estimated endogenous goal build scores to predict deletion of data points. Consequently, this study applied cross-validated redundancy as a measure of  $Q^2$ . According to Fornell and Cha (1994), the cross-validated redundancy score greater than 0 implies predictive significance, whereas a score below 0 represents that the model lacks significance. As illustrated in Table 4.12, the cross-validated redundancy values of propensity to purchase organic food and actual purchase behaviour were 0.335 and 0.196, accordingly. Although the  $Q^2$  values exceed 0, the model had predictive relevance. In conclusion, the model is predictable, and propensity to purchase organic food is an importance indicator in consumption value theory rather than actual purchase behaviour.

Table 4.12  
*Predictive Quality Indicators of the Model (Q<sup>2</sup>)*

<b>Variable</b>	<b>Cross-Validated Communality</b>	<b>Cross-Validated Redundancy</b>
Propensity to Purchase Organic Food	0.493	0.335
Actual Purchase Behaviour	0.480	0.196

#### 4.10 Summary of the Findings

Table 4.13 provides a summary of the findings.

Table 4.13  
*Summary of the Findings*

<b>Hypothesis</b>	<b>Relationship</b>	<b>Decision</b>
H1a	Functional value is positively associated with consumers' propensity to purchase organic food in Malaysia	<b>Supported</b>
H1b	Social value is positively associated with consumers' propensity to purchase organic food in Malaysia	<b>Supported</b>
H1c	Emotional value is positively associated with consumers' propensity to purchase organic food in Malaysia	Not Supported
H1d	Novelty value is positively associated with consumers' propensity to purchase organic food in Malaysia	Not Supported
H1e	Conditional value is positively associated with consumers' propensity to purchase organic food in Malaysia	Not Supported
H2a	Monetary value is positively associated with consumers' propensity to purchase organic food in Malaysia	Not Supported
H2b	Environmental concern is positively associated with consumers' propensity to purchase organic food in Malaysia	Not Supported
H3	Propensity to purchase organic food is positively associated with actual purchase behaviour of organic food in Malaysia	<b>Supported</b>

#### 4.11 Chapter Summary

Present study used PLS-SEM as the key technique of testing, since SEM seems to be an effective analysis and has become the first choice to analyze complex models. Based on the analysis, only three hypothesis were supported. Of consumption values, only functional values and social values were significant antecedents of propensity to purchase. Propensity to purchase also predicted significantly actual purchase behaviour. The next chapter discusses the findings further by linking them to the literature and theories. Also, the implications of the findings are discussed.



## CHAPTER 5

### CONCLUSION AND RECOMMENDATION

#### 5.0 Overview of the Chapter

This chapter addresses the results discussed in previous chapter. Next, study contributions both theoretical and practical are discussed. Final part of the chapter concludes the study after the study limitations are identified, as well as suggestions for future research are presented.

#### 5.1 Recapitulation of the findings

In response to first and second research question, only two antecedents showed a significant relationship with propensity to purchase organic food. They were functional value and social value. While the other antecedents that is emotional value, novelty value, conditional value, monetary value and environment concern were shown not having significant relationship towards propensity to purchase organic food. In addition, propensity to purchase organic food was significantly related to actual purchase behavior. The finding indicated that 54.9 percent of propensity to purchase organic food was highly positive, which explained 34.8 percent consumer making a purchase of the consequences in actual purchase behavior. It also indicated that 68.6 percent of the Malaysian consumers preferred local organic food compare to imported organic food, as 24.1 percent of the consumers supporting the local organic industry. Furthermore, local organic food were fresh and widely available (24.1%), cheaper (23.2%) and saves money (22.4%).

## 5.2 Discussion

The sub-sections below are structured to address five research questions for discussion of the empirical findings.

On the level of propensity to purchase organic food among Malaysian consumers, propensity has been discovered to be a strong predictor for actual purchase behaviour. The actual purchase behaviour of organic food were also identified to be strong, based on mean behaviour of the actual purchase. The result is consistent with previous studies (Song, 2017; Toh, Dominic, & Shanmugam, 2018). The high level of actual purchase behaviour indicates that consumers are ready and willing to purchase organic food in the future. This also shows that the organic food market in Malaysia has the potential to grow.

The finding also showed that 68.6 percentage Malaysian consumers prefer local organic food rather than imported organic food. This result contradicted with Somasundram, Razali, and Santhirasegaran (2016) as they noted that the Malaysia's organic food industry remains small scale, whereby 60 percent of organic food were imported. However, despite the small scale, consumers still prefer local organic food because they were fresh and widely available, cheaper and saves money cheaper than imported products. Furthermore, Malaysian consumer still support local organic food than imported organic food.

In general, producers, distributors and customers lack knowledge of the broader scope for standards of processing and organic production on local markets. In Malaysia, the industry of organic food encounters several challenges. While in Malaysia organic food demand is rising, local organic producers cannot meet the increasing demand.

In addition to the incoherent availability, the selection of local organic food is also limited. Another concern facing local consumers of organic food is the disparity in prices between conventional and organic food. A 2010 study by the Malaysian Agricultural Research and Development Institute (MARDI) found that more than 90 percent of consumers in Malaysia knew about organic products and associated these products with free chemicals and good health. Thus, to accommodate the recent increase in demand, Since 2014 MARDI has actively established the organic agriculture sector through several programs and activities. Among these programs are research and development on organic farming, increasing public awareness of organic products, the Malaysia Agriculture, Horticulture & Agrotourism (MAHA) agricultural event, introducing five new technologies to ensure animal feed health and production, and the Free Market Environment program (Suhaimie, Ibrahim, & Abd Wahab, 2016). Under the Eight Malaysia Plan (8MP), MARDI developed 207 technologies, 7.5 percent of them successfully commercialized. Government targeted organic farming through the Ninth Malaysia Plan (2006–2010) because of the potential worth from more than UDS200 million for five years (Somasundram, Razali, & Santhirasegara, 2016). The Department of Agriculture registered over 251 farms, resulting in the increase of organic production from 1,900 tons in 2016 to 6,700 tons in 2019. The private sector has also played its role in promoting organic products by organizing the Malaysian organic conference to upgrade the eco-friendly agricultural value chain scheduled for December 2020 at the Asia Pacific University Technology Park Malaysia.

In summary, regardless of whether Malaysian consumers prefer local or imported food, there is potential for the organic food industry to expand as they are now searching for healthy food are concerned about the quality of the food they eat and the environment. Recently, a study by Ahmed et al. (2019) showed that 58 percent of Malaysian consumers purchased organic food.

Propensity to purchase organic food can be explained by health concern, affordability, lower price, brand, and convenience, which could impact actual purchase.

### **5.3 Influence of Consumption Values**

#### **5.3.1 Functional Value**

This study indicated that the functional value is positively and significantly related to the propensity to purchase organic food. The finding is consistent with prior studies (Afzaal & Israr, 2012; Alesia et al., 2014; Danish et al., 2019; Hong et al., 2013; Lung, 2010; Teoh & Nor Azila, 2015; Vazifehdoust et al., 2013; Wang et al., 2013; Zailani et al., 2019). The functional value of organic food is related to quality and price. Of the two dimensions (i.e., quality and price), price was given more consideration than quality. The participants of this study were likely to buy organic food because of the promotion and discounts given by imported organic food producers. The result indicated that most of the participants agreed with the statement that organic food has a premium price but better in quality. Based on these results, functional value should also consider the product itself and not just price and quality. Overall, this finding is consistent with the Lung (2010) market survey as functional value were most salient consumption value that influenced consumer propensity to purchase.

#### **5.3.2 Social Value**

The present study revealed a significant correlation between social value with propensity to purchase organic food. That is, consumers will purchase organic food because of the influence of their family, friends, or social groups. By purchasing organic food, consumers are likely to feel that they belong to a social group and, thus, enhance their social self-concept (Weerakkody, 2012). Furthermore, consumers would be motivated if their environmental contributions are acknowledged and recognized by others (Kumar & Ghodeswar, 2015).

Consumers realize the importance of a product when they interact with others and gather related information. Lamater and Myers (2010) argued that social influence is the changes in a person's attitude and behaviour as a result of the influence of another person's action, such as persuasion and threat. The result indicated that most of the participants agreed with the statement that social values influence their propensity to purchase organic food. Study's results are consistent with previous studies (Baddeley, 2010; Chen et al., 2018; Danish et al., 2019; Griskevicius et al., 2010; Klobas & Clyde, 2001; Kumar & Ghodeswar, 2015; Ohman, 2011; Solaiman et al., 2017; Weerakkody, 2012).

As a practical standpoint, businesses or organizations must integrate consumer values and perceived values into their business practices, like development of insightful and attractive advertisements aimed at boosting consumer willingness to purchase organic food while addressing environmental concerns. This would make their transactions more effective and interactive (Suki & Suki, 2016). They also should not overlook the importance of creating positive awareness among consumers of purchasing organic food (especially local organic food) by offering discounts or promotions since social influence could have a substantial impact on sales growth.

### **5.3.3 Emotional Value**

Unexpectedly, there was no significant connection between emotional value and the intention to purchase organic food. The finding suggests that emotional values, such as personal contribution, feelings as a better person, positive feelings, and desire to know other people's culture do not affect propensity to purchase organic food. Finding is, therefore, not in line with previous studies (Danish et al. 2019; Lin & Huang, 2012; Lin et al., 2010; Solaiman et al. 2017; Wang et al., 2013; William & Soutar, 2009; Zailani et al. 2019).

The finding of the study suggests that consumers who intend to purchase organic food are not directly affected by their emotions. Consumers regard buying an organic product as an act that helps preserve the environment. So, when they purchase organic food, they could develop positive experiences and feelings of doing well to the environment. Thus, the government, policymakers, and marketers could develop a positive attitude of consumers by highlighting their contribution to the environment by purchasing organic food.

#### **5.3.4 Novelty Value**

Novelty value was also found not to be insignificantly related to propensity to purchase organic food. The result does not match past findings (Alesia et al., 2014; Lin et al., 2010; Lin & Huang, 2012; Omigie et al., 2017; Wang et al., 2013; William & Soutar, 2009; Zailani et al., 2019), but supports the study of Solaiman et al. (2017). The possible reason for the non-significant relationship could be because consumers were unaware of the organic food in the market and did not have the knowledge and information about it.

Consumers nowadays can access a variety of resources through the internet. So, Businesses should also update their website details because consumers continue to visit the website to know about the product before purchasing it. Once they know about it, they will seek advice from the salespeople in the supermarket or shopping mall. Therefore, consumers who enter a supermarket or shopping mall are either looking for a better explanation or are attempting to do an actual purchase. Knowledge and information are also relevant in the organic industry through marketing perspective since product knowledge and attributes can have a significant influence on purchase behaviour (Qasim, Yan, Guo, Saeed & Ashraf, 2019), especially when it comes to local and foreign organic food. Insufficient information on essential products could lead to an action-value gap (Popovic, Bossink, & van der Sijde (2019).

In the case of organic food, organic certification can also provide significant information to meet consumers' need for product knowledge, i.e., whether the product is locally made or imported. Hence, the epistemic / novelty value could be improved by the effective use of conventional and social media approaches to inspire and educate organic food consumers to purchase local organic food.

### **5.3.5 Conditional Value**

Conditional value has also been identified to also be insignificantly associated with the propensity to purchase organic food. The finding is not consistent with most preceding studies (Alesia et al., 2014; Lin et al., 2010; Lin & Huang, 2012; Teoh & Nor Azila, 2015; Omigie et al., 2017; Solaiman et al., 2017; Wang et al., 2013; William & Soutar, 2009; Zailani et al., 2019). The possible reason for the non-significant relationship could be because consumers did not depend on a particular situation or circumstance to buy organic food. Therefore, businesses should promote organic food as something that should be regularly consumed because of functional and social values.

## **5.4 Influence of Perceived Values**

### **5.4.1 Monetary Value**

Monetary value was found to be insignificantly related to propensity to purchase organic food. The finding does not support previous studies (Chen et al., 2018; Omigie et al., 2017). Extra benefits from organic products, such as health benefits, nutrition, safety, and free of pesticides, did not seem to influence consumers to purchase organic food. Consumers nowadays do not bother concerning an extra benefits as long as the product is good to them. Hence, producers should always promote the extra benefits associated with their products so that consumers will buy organic food products.

### **5.4.2 Environmental Concern**

Environmental concern was found to be insignificantly related to propensity to purchase organic food. The finding is not consistent with previous studies (Chen et al., 2018; Song & Liew, 2019; Zuraidah, Nor Hashima, Wan Kalthom, & Siti Aishah, 2012). Environmental concern refers to consumer's getting information because of fear of harming the environment.

Hence, consumers purchase an organic product to preserve the environment, which, in turn, generates a positive experience and feeling of doing good for the environment and themselves. Thus, the government, policymakers, and marketers could develop a positive attitude of consumers by highlighting their contribution to the environment by purchasing organic food. Successful marketing strategies can be designed in the sense of consumers' environmental concerns. These campaigns would not only sell goods to consumers but also allow them to play their part in helping to protect the environment.

## **5.6 Contributions of the Study**

### **5.6.1 Theoretical Contributions**

As mentioned earlier, most studies on organic purchase behaviour adopted either the TPB framework (Afzaal & Ahmad, 2012; Chan, 2013; Hong, Nasreen, & Madi, 2013; Iman Khalid & Yuserrie, 2011; Kim & Chung, 2011; Tan, 2013) or TRA (Nabsiah, Rahbar, & Tan, 2011; Ooi, Kwek, & Tan, 2012; Punitha & Azmawani, 2011; Ramayah, Lee, & Mohamad, 2010; Vazifehdoust, Taleghani, Esmailpour, Nazari, & Khadang, 2013). However, studies that applied the theory of consumption values in Malaysia to explain the consumption of organic products are limited (Ahmad & Omar, 2018; Alesia et al., 2014; Suki, 2016; Teoh & Nor Azila, 2015).

Through using the consumer value theory, the study adds to the literature on organic food consumption by adding monetary value to the theory. Most studies used consumption values theory focused on environmental concern (Alesia et al., 2014; Lin & Huang, 2012), attitude (Alesia et al., 2014; Teoh & Nor Azila, 2015), and satisfaction (William & Soutar, 2009) rather than monetary value to predict consumer choice of organic food.

A theoretical contributions for this study as following: (i) identifying level for actual purchase behaviour of organic food, (ii) identifying whether consumers prefer local or imported organic food, (iii) identifying influence for consumption values and perceived values on propensity to purchase organic food, and (iv) the consequences between propensity to purchase and actual purchase behaviour. Also, the study contributes to the literature by investigating the above relationships within Malaysian.

Present research assists in examining theory of consumption values regarding consumers' propensity to purchase organic food in the future. To the researcher's knowledge, a few studies have applied the theory of consumption values to examine propensity to purchase in the automotive, smartphones, and tourism contexts. Researchers have examined the theory why consumers chose to purchase a particular product or not, why they prefer one form of product over another and why they choose one brand over the other. (Sheth et al., 1991). This study answered these three questions based on the theory in that consumers choose organic food because of its functional and social value; they choose organic food over conventional food because of quality, price, and social influence; and consumers prefer purchase imported organic food.

Theoretically focused, the study examined consumers' perceived functional, social, emotional, novelty, and conditional values that could influence their propensity to purchase organic food, hence, actual purchase behaviour. The study was able to show a link between certain consumption values and propensity to purchase organic food. Hence, the study supports the view that certain consumption values could create favorable behaviour and increase the level of actual to purchase an organic food in the long-run.

However, additional measurements of perceived value, i.e., monetary value and environmental concern, haven't added to the theory. Each measurements of the product under review should be adequate and important. As mentioned by Sheth et al. (1991), the decision to purchase organic food might be because of quality, price, and social influence. The dimension tested must be consistent with the product. Therefore, quality and price are appropriate dimensions to predict the functional value of organic food in addition to social value.

In conclusion, the new dimension of consumption values, i.e., perceived values that have two dimensions (monetary value and environmental value), can be studied further. The new dimensions for perceived value (i.e., monetary value and environmental concern) should be considered because they have been found to be most significant in predicting propensity to purchase. Therefore, this study contributes to the literature by validating the measurement in a different context.

### **5.6.2 Managerial Implications**

This study also has several managerial implications, especially for the organic food industry, to improve its marketing plans to influence consumers to buy organic food. Firstly, managers or marketers should create more functional and social values associated with organic products to influence consumers to buy the products. For example, they should consider affordable pricing for locally produced organic food and promoting the products as having high quality with healthy ingredients. By creating better functional values to consumers, they are likely to cultivate a positive outlook towards local organic food and then cultivate and desire to purchase the product and show actual purchasing behaviour.

Finding also showed that government subsidy and manufacturers' promotions or discounts could create a positive attitude and propensity to purchase organic food among Malaysian consumers. Therefore, the government should consider promoting or giving tax exemption or developing any policy that could boost the sales of local organic food and achieve the objectives to become regional hub of green products. Also, local brand manufacturers should introduce, produce, and advertise their own brand of organic food as soon as possible to the market because the consumption of organic food is still low in Malaysia.

Therefore, there is an opportunity for local brand manufacturers to enter the market by offering better functional and social values to consumers to capture the market. Producers or marketers should improve their marketing strategy of organic food. A marketing strategy is one of the functional strategies of the organization, which collectively make up the overall business strategy. A marketing strategy is very crucial to support other functions, namely the delivery of the goods to the market and sales. Furthermore, a marketing strategy and implementation are key to help accomplish the goals of the organization. Marketers of organic food should consider the four marketing mix elements of product, price, distribution, and promotion in developing the marketing strategy. They also have to continually analyze the business environment and evaluate the strategies employed by competitors. In the case of local organic food, companies need to know the products consumers want, the price they are willing to pay, the channel of distribution that is the most optimal for them, and other support measures can give the best results.

The finding shows the insignificance of environmental concern in influencing propensity to purchase organic food. Based on this finding, marketers and companies selling environmentally friendly goods would be in a stronger place if they used common market attributes and behaviours to forecast consumer purchasing behaviour. Organizations must reassure customers whether their behaviour in purchase and use of environmentally friendly products, especially organic food, will make a significant difference in environmental improvements and in the protection against further degradation. In Malaysia in particular, ongoing initiatives by government and private sector organizations to encourage green activities and produce more environmentally friendly products will have a significant impact on environmental behaviour of Malaysian consumers.

It is critical that customers are aware and persuaded that their contribution matters. Only then would they be able to devote themselves to environmental behaviour. Finally, although most consumers in Malaysia support government policies on the environment, their support is often not translated into behaviour. In this scenario, the government plays an important role in establishing the right economic and social environment for prosperity. In today's world of world markets, environmental and social issues need governments to be involved in promoting people's environmental interests, which can be done by collaborations in different initiatives with organizations. For instance, Organic Food for Health program exemplifies a constructive government and private sector call for action. Additionally, government and private sector organizations may coordinate activities to raise awareness about the environment and promote environmentally-friendly working cultures or lifestyles, such as in business to business marketing.



### **5.7 Limitation and Future Research Directions**

More studies should be performed within the organic industry and other industries to generalize the results of the study. This study used consumption values theory as a fundamental theory and centered on the propensity to purchase organic food. Future studies could examine different product categories by using the theory of consumption values instead of extending TPB or TRA because the consumption values theory is capable of describing 54.9 percent for propensity behaviour. In comparison, the TPB and TPA could only explain 40 percent for intention of behavioural. Hence, the theory of consumption values could predict purchase intention better than the TPB or the TRA (Teoh & Nor Azila, 2015).

The study found that 54.9 percent of intention was explained by seven predictors, which means other factors could also influence consumers' propensity to purchase. Future study should take other predictors into account to analyze customer propensity to purchase organic food. Also, a cross-cultural study can be carried out to compare purchase behaviour among consumers on the west and east coast of Malaysia. This is because culture may also affect value structures and purchase behaviour. By doing so, the generalizability of the study could be enhanced.

Future researchers may also want to consider a longitudinal research design to understand consumers' purchasing behaviour. Because behaviour may change over time, such a design could capture the changes in purchasing behaviour. Besides, it could help ascertain whether propensity to purchase is translated into actual purchase behaviour. Interviews can also be used to understand consumers' motives to purchase organic food since the organic food market is still in its infant stage in Malaysia. Therefore, by interviewing existing organic food and conventional food consumers, meaningful comparison between two groups can be made to provide more insight into consumers' purchasing behaviour.

Occupation is the only demographic variable showing a substantial difference in propensity to purchase organic food. Therefore, for forthcoming study into relationship between consumption values and propensity to purchase, occupation can be viewed or perceived as a moderating variable. It would be very useful for marketers to plan and target the product to the right consumers. Furthermore, future research can consider mixing quantitative and qualitative methods to understand the link between propensity to purchase and actual purchase better.

## 5.8 Conclusion

The study were conducted to examining the antecedents for propensity to purchase and actual purchase for organic food among Malaysian consumers. This study found the propensity to purchase organic food level was high, contributing further to the literature in consumers' behavioural propensity. The study also showed that functional and social values were significant factors that influenced the propensity to purchase organic food. The finding is insightful for marketers to develop appropriate strategies to promote and market organic food products by enhancing these values.

The central aim of encouraging people to purchase organic food is to bring less harm to the environment. Understanding consumer's behaviour will help producers, marketers, and policymakers to promote consumer habits that are less harmful to the environment. The study finding may support businesses learn and recognise consumers' organic food purchasing behaviour and perceptions, which could enable them to develop appropriate strategies and practical marketing plans to sustain long-term business success. It is also hoped that the results will not only help the government and the organic product industry in the world to understand consumers' organic food purchase behaviour but also provide some constructive suggestions to them.

The study also brings benefits to society in understanding the current and future trends of consumer's organic food purchase behaviour. Organizations or businesses can plays a significant responsibility in the country's overall economic growth, by understanding consumers' purchasing behaviour in organic food as the key for playing their productive role in society.

## REFERENCES

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the value of a brand name*. New York: The Free Press.
- Abdul Latiff, Z. A., Othman, I. Z. & Muhamad, N. (2018). A longitudinal study of factors explaining attitude of organic foods. *International Journal of Community Development & Management Studies*, 2, 121-129.
- Aertsens, J., Verbeke, W., Mondelaers, K. & Van Huylenbroeck, G. (2009). Personal determinants of organic food consumption: a review. *British Food Journal*, 111(10), 1140-1167.
- Afzaal, A. & Ahmad, I. (2012). Environment friendly products: Factors that influence the green purchase intentions of Pakistani consumers. *Pakistani Journal Engineering Technology Science*, 2(1), 84-177.
- Ahmad, F. (2001). Sustainable agriculture system in Malaysia. In Regional Workshop on Integrated Plant Nutrition System (IPNS), *Development in Rural Poverty Alleviation, United Nations Conference Complex, Bangkok, Thailand* (pp. 18-20). Retrieved from <http://www.banktani.tripod.com/faridah.pdf>.
- Ahmad, S. N. B. & Omar, A. (2018). Influence of perceived value and personal values on consumers repurchase intention of natural beauty product. *International Journal of Supply Chain Management*, 7(2), 116-125.
- Ahmed, S., Siwar, C., Ferdous Alam, A. S. A., Abdul Talib, B., Chamhuri, N., & Idris, N. D. M. (2019). Determinants of willingness to pay towards Malaysian organic food. *International Journal of Recent Technology and Engineering*, 7(6), 1086-1090.
- Aigner, A., Wilken, R. & Geisendorf, S. (2019). The effectiveness of promotional cues for organic products in the German retail market. *Sustainability*, 11, 3-15.
- Ajzen, I. & Fishbein, M. (1975). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin; Psychological Bulletin*, 84(5), 888-918.
- Ajzen, I. & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.
- Ajzen, I. (2005). *Attitudes, Personality and Behavior*. Maidenhead: Open University Press.
- Akbar, A., Ali, S., Ahmad, M. A., Akbar, M & Danish, M. (2019). Understanding the antecedents or organic food consumption in Pakistan: Moderating role of food neophobia. *International Journal of Environmental Research and Public Health*, 16, 2-20.

- Alan A. & Finlay, B. (2009). *Statistical methods for the social sciences* (4<sup>th</sup> Ed.). Upper Saddle River, N.J.: Pearson Prentice Hall.
- Al-Ekam, J. M. E. (2013). Actual Purchase Behavior of Local Brand Antecedents in Yemen: The Mediating Effect of Purchase Intention. Universiti Utara Malaysia.
- Alesia, S. G., Stephen, L. S., & Geoffrey, H. T. (2014). Consumption values, environmental concern, attitude and purchase intention in the context of organic products food. *In: 2014 International Conference of the Association of Global Management Studies*, May 20-21, 2014. Said Business School, University of Oxford, UK.
- Alsheikh, L., & Bojei, J. (2012). Customer's perceived value to use mobile banking services. *Paper presented at the Penang, Malaysia in International Conference on Management, Behavioral Sciences and Economics Issues (ICMBSE'2012)*.
- Amyx, D. A., DeJong, P F, Lin, X., Chakraborty, G. & Wiener, J. L. (1994). Influencers of purchase intentions for ecologically safe products: An exploratory study. *In marketing theory and applications: The proceeding of the 1994 American Marketing Associations Winter Educator's Conference*, 5, 341-347.
- Andreu, L., Kozak, M., Avci, N. & Cifter, N. (2006). Market segmentation by motivations to travel. *Journal of Travel & Tourism Marketing*, 19(1), 1-14.
- Ang, E., Yee, L. H., & Seong, L. K. (2009). Gen Y - technically savvy, *The Star*. Retrieved from <https://www.thestar.com.my/news/education/2015/06/07/managing-gen-y>.
- Ary, D., Jacobs L.C., Sorensen, C. & Razavieh, A. (2010). *Introduction to research in education* (8<sup>th</sup> Ed.). USA, Wadsworth: Cengage Learning.
- Aschemann-Witzel, J. & Niebuhr, A.E.M. (2014). Elaborating on the attitude-behaviour gap regarding organic food: Young Danish consumers and in-store food choice. *International Journal Consumer Studies*, 38, 550-558.
- Asgarnezhad, N. B. & Farideh S. N. (2018). Factors affecting intention to purchase organic food products among Iranian consumers. *Academy of Marketing Studies Journal*, 22(3).
- Aslam, W. & Chen, H. (2019). Study on Consumer Behaviour and Food Safety of Organic Products in Pakistan. *Web of Conferences*, 78, 02021 (FSEE 2018).
- Assarut, R. & Eiamkanchanalai, S. (2015). Consumption values, personal characteristics and behavioural intentions in mobile shopping adoption. *Original Scientific Paper*, 27(1), 21-41.
- Asshidin, N. H. & Abidin, N. & Borhan, H. (2016). Perceived quality and emotional value that influence consumer's purchase intention towards American and local products. *Procedia Economics and Finance*, 35, 639-643.

- Aurier, P. & Lanauze, S-D. G. (2011). Impacts of in-store manufacturer brand expression on perceived value, relationship quality and attitudinal loyalty. *International Journal of Retail & Distribution Management*, 39(11). 810-835.
- Baddeley, M. (2011). Social influence and household decision-making: A behavioural analysis of housing demand. *Cambridge Working Papers in Economics*. Retrieved from [https://www.researchgate.net/publication/254396611\\_Social\\_Influence\\_and\\_Household\\_Decision-Making\\_A\\_Behavioural\\_Analysis\\_of\\_Housing\\_Demand](https://www.researchgate.net/publication/254396611_Social_Influence_and_Household_Decision-Making_A_Behavioural_Analysis_of_Housing_Demand).
- Bai, X., & Liu, D. (2008). Car Purchasing Behavior in Beijing: An Empirical Investigation. Retrieved from <https://www.researchgate.net/publication/>.
- Baker, J. (2007). Marketing of organic products: Industry scenario and market potential. Paper presented at the seminar of marketing organic products, 21 May 2007, Zaragoza, Spain. *Mediterranean Institute of Agriculture*.
- Baker, J. P., & Ozaki, R., (2008). Pro-environmental products food; Marketing influence on consumer purchase decision. *Journal of Consumer Marketing*, 25, 281-293.
- Ballester, E. & Fernandez, S. E. (2016). Brand experiential value versus brand functional value: which matters more for the brand? *European Journal of Marketing*. doi: 10.1108/EJM-02-2014-0129.
- Bamberg, S. 2003. How does environmental concern influence specific environmentally related behaviour? A new answer to an old question. *Journal of Environmental Psychology*, 23, 21- 32.
- Barclay, D., Higgins, C., & Thompson, R. 1995. The Partial Least Squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Study*, 2(2), 285-309.
- Baron, R. M. and Kenny, D. A. (1986). The moderator-mediator distinction in social psychological research: conceptual, strategic and statistical consideration. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barr, S. & Gilg, A. (2006). Sustainable lifestyles: Framing environmental action in and around the home. *Geoforum*, 37, 906–920.
- Barry, M. (2002). What does “organic” meant to today’s consumer. *Natural Sensibility* 3.
- Baudry, J., Peneau, S., Allès, B., Touvier, M., Hercberg, S., Galan, P., Amiot, A. M., Lairon, D., Mejean, C. & Kesse-Guyot, E. (2017). Food choice motives when purchasing in organic and conventional consumer clusters: Focus on sustainable concerns. *Nutritious*, 9(2), 88-104.
- Baumgartner, H. & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, 13(2), 139-161.

- Behrarel, B. & Macfie, J. H. (1991). Consumer attitude to organic food. *British Food Journal*, 93, 25-30.
- Bei, L. & Simpsons, E. (1995). The determinants of consumers' purchase decisions for recycled products: An application of acquisition-transaction utility theory. *Advances in Consumer Research*, 22, 257-261.
- Bekele, G. E., Zhou, D., Kidane, A. A. & Haimanot, A. B. (2017). Analysis of organic and green food production and consumption trends in China. *American Journal of Theoretical and Applied Business*, 3(4), 64-70.
- Benjamin, M. O., William, K. H. & Anne, C. B. (2007). Purchasing organic food in US food system: A study of attitudes and practice. *British Food Journal*, 109(5), 400-403.
- Bharathi, B., Ananthnag, K. & Nagaraja, G. N. (2014). Buying Behaviour of urban residents towards organically produced food products. *International Journal of Research in Applied, Natural & Social Sciences*, 2(2), 33-38.
- Bhaskaran, S., Polonsky, M., Cary, J & Shadwell, F. (2006). *British Food Journal*, 108(8), 677-690.
- Bhattarai, K. (2019). Consumers' willingness to pay for organic vegetables: Empirical evidence from Nepal. *Economics and Sociology*, 12(3), 132-146.
- Bhattarai, K. (2019). Consumers' willingness to pay for organic vegetables: Empirical evidence from Nepal. *Economics and Sociology*, 12(3), 132-146.
- Biswas, A., & Roy, M., (2015). Organic products food: An exploratory study on the consumer behaviour in emerging economics of the east. *Journal of Cleaner Production*, 87, 463-468.
- Blackwell, R. D., Miniard, P. W. Engel, J. F., (2001). Consumer Behavior (9<sup>th</sup> Ed.). *Harcourt College Publishers: Ft. Worth, Tex. London*.
- Bodker, M., Gimpel, G. & Hedman, J. (2009). The user experience of smartphones: A consumption values approach. In proceedings of the global mobility roundtable conference. Cairo, November 1.-3. 2009.
- Bongani, M. (2016). Consumer purchase intentions towards organic food: Insights from South Africa. *Business & Social Sciences Journal*, 1(1), 1-32.
- Borin, N., Lindsey-Mullikin, J. and Krishnan, R. (2013). An analysis of consumer reactions to green strategies, *Journal of Product & Brand Management*, 22(2), 118-128.
- Bostan, I., Onofrei, M., Gavriluta, A. F., Toderascu, C. & Lazar, C. M. (2019). An integrated approach to current trends in organic food in the EU. *Food*, 8, 144-161.
- Brace, I. (2008). Questionnaire Design: How to Plan, Structure and Write Survey Material for Effective Market Research. (2<sup>nd</sup> Ed.). *Kogan Page: USA*.

- Briz, T. & Ward, R.W., 2009. Consumer awareness of organic products in Spain: An application of multi-nominal logit models. *Food Policy*, 34(3), 295-304.
- Brown, A., Cannon, Q., Flint, C., Mascher C., Oldroyd, Z., Unger, B., Valle, P.A. & Wynn, E. (2016). Public intercept interviews and surveys for gathering place-based perceptions: Observations from community water research in Utah. *Journal of Rural Social Sciences*, 31(3), 105-125.
- Bui, M. H. (2005). Environmental marketing: a model of consumer behavior. *Proceedings of the Annual Meeting of the Association of Collegiate Marketing Educator*, 20–28.
- Buns, A. C., Bush, R. F. (2002). Marketing research: Online research applications (4<sup>th</sup> ed). New Jersey: Prentice Hall.
- Burns, A., & Bush, R. F (2002). Marketing Research: Online Research Applications (4<sup>th</sup> Ed.). *Prentice Hall*: New Jersey.
- Burton, J. & Easingwood, C. (2006). A positioning typology of consumers' perceptions of the benefits offered by successful service brands. *Journal of Retailing and Consumer Services*, 13(5). 301-316.
- Butcher, K. (2005). Differential impact of social influence in the hospitality encounter. *International Journal of Contemporary Hospitality Management*, 17(2), 125-135.
- Candan, B., & Yildirim, S. (2013). Investigating the relationship between consumption values and personal values of green product buyers. *International Journal of Economics and Management Sciences*, 2(12), 29-40.
- Candan, B., Unal, S. & Ercis, A. (2013). Analysing the relationship between consumption values and brand loyalty of young people: A study on personal care product. *European Journal of Research on Education*, 29-46.
- Carmi, N., Arnon, S. & Orion, N. (2015). Transforming environmental knowledge into behavior: The mediating role of environmental emotions. *Journal Environment Education*. 2015, 46, 183–201.
- Cavana, R. Y., Delahaye, B. L. & Sekaran, U. (2001). *Applied Business Research: Qualitative and Quantitative Methods*. *John Wiley & Sons Inc.*, Milton, Queensland.
- Chamie, B. & Ikeda, A. (2015). The value for the consumer in retail. *Brazilian Business Review*, 12(2), 46-65.
- Chan, Y. L. (2013). Consumers' purchase intention of green products. An investigation of the drivers and moderating variable. *International Journal Marketing Management*, 57(A), 14503-14509.
- Chandrashekar, H. M. (2014). Consumers perception towards organic products: A study in Mysore City. *International Journal of Research in Business Studies and Management*, 1(1), 52-67.

- Chattopadhyay, A. & Khanzode, P. (2019). An empirical study on awareness and consumption pattern of organic food in Bengaluru city, the capital of India: An analysis with respect to different demographic factors and availability of organic food products in Bengaluru. *International Journal of Research*, 7(1), 276-296.
- Cheah, I., Phau, I., Chong, C. & Shimul, A. (2015). Antecedents and outcomes of brand prominence on willingness to buy luxury brands. *Journal of Fashion Marketing and Management*, 19, 402-415.
- Chen, C-H., Chen, C-W. & Tung, Y-C. (2018). Exploring the consumer behaviour or intention to purchase green products in Belt and Road Countries: An empirical analysis. *Sustainability*, 10, 854-872.
- Chen, Y. S., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502-520.
- Chen, Z. & Dubinsky, A. (2003). A conceptual model of perceived customer value in e-commerce: A preliminary investigation. *Psychology & Marketing*, 20(4), 323-347.
- Cheung, S. F., & Chan, D. K. S. (2000). The role of perceived behavioral control in predicting human behavior: A meta-analytic review of studies on the theory of planned behavior. Unpublished manuscript, Chinese University of Hong Kong.
- Chiciudean, G. O., Harun, R., Ilea, M., Chiciudean, D. I., Arion, F. H., Ilies, G. & Muresan, J. C. (2019). Organic food consumers and purchase intention: A case study in Romania. *Agronomy*, 9(145), 1-13.
- Chiew, S. W., Ismail, K., & Ishak, N., (2014). Consumer perception, purchase intention and actual behaviour of organic product products. *Review of Integrative Business & Economics Research*, 3(2), 378-397. ISSN: 2304-1013.
- Chiew, S. W., Md. Ariff, M. S., Zakuan, N. & Mohd Tajudin, M. N. (2014). Consumers perception, purchase intention and actual purchase behaviour of organic food products. *Reversion Integration Business Economic Research*, 3(2), 378-397.
- Chin, W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*. (8 Ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chinnici, G., D'Amico, M. & Pecorino, B. (2002). A multivariate statistical analysis on the consumers of organic products. *British Food Journal*, 104(3/4/5), 187-199.
- Chiou, J-S. (2004). The antecedents of consumers' loyalty toward internet service providers. *Information & Management*, 41(6), 685-695.
- Chisnall, P. M. (2001). *Marketing Research* (6<sup>th</sup> Ed.). McGraw-Hill: Maidenhead.
- Choo, H., Moon, H., Kim, H. & Yoon, N. (2012). Luxury customer value. *Journal of Fashion Marketing and Management*, 16(1). 81-101.

- Christopher, D. S., Senthilkumar, C. B. & Nallusamy, S (2019). Dimensions of preference towards organic products: An empirical study on consumer's perspective. *International Journal of Mechanical Engineering and Technology (IJMET)*, 10(1), 1331-1338.
- Clifton, R. & Simmons, J. (2003). Brand and Branding. *The Economist*, London: Hatton Garden, Profile Books Ltd.
- Coakes, S. J. & Steed, L. G. (2003). SPSS analysis without anguish: Version 11.0 for windows (1<sup>st</sup> Ed.). Milton, Australia: John Wiley and Sons.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2<sup>nd</sup> Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Compeau, D., Higgins, C. & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS Quarterly*, 23(2), 145-158.
- Conner, M. & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429-1464.
- Cooper, D. R., & Schindler, P. S. (2014). Business Research Methods (12<sup>th</sup> Ed). *McGraw-Hill*: New York.
- Creswell, J. W. (2012). Education Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research (4<sup>th</sup> Ed.). *Pearson*: Boston.
- Dacina, C. P. & Ruxandra, M. P. (2015). Organic food perception: Fad or healthy and environmentally friendly? A case on Romanian consumers. *Sustainability*, 7, 12017-12031.
- Damalas, C. A., Eleftherohorinos, I. G. (2011). Pesticide exposure, safety issues, and risk assessment indicators. *International Journal Environment Research Public Health*, 8, 1402–1419.
- Danish, M., Ali, A., Ahmad, M. A. & Zahid, H. (2019). The influencing factors on choice behavior regarding green electronic products: Based on the green perceived value model. *Economies*, 7(99), 1-18.
- Dardak, R. A., Abidin, A. Z. Z. & Ali, A. K. (2009). Consumers' perception, consumption, and preference on organic product: Malaysian perspective. *Economic and Technology Management Review*. 4, 95–107.
- Davies, A., Titterington, A. & Cochrane, C. (1995). Who buys organic products: A profile of the purchasers of organic food in Northern Ireland. *British Food Journal*, 97(10), 17-23.
- Deng, Z., Lu, Y., Wei, K. K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. *International Journal of Information Management*, 30(4), 289–300.

- Denys, V., & Mendes, J. C. (2014). Consumption Values and Destination Evaluation in Destination Decision Making. *Journal of Spatial and Organizational Dynamics*, 2(1), 4-22.
- Department of Agriculture, Malaysia (DOA). Statistic on organic production. Retrieved from <http://www.doa.gov.my/>.
- Department of Statistic Malaysia (DOSM) (2019). Press release, current population estimates, Malaysia, 2017-2018. Retrieved on January from <https://www.dosm.gov.my>.
- Dettmann, R. & Dimitri, C. (2010). Who's buying organic vegetables? *Journal of Food Products Marketing*, 16(1), 79-91.
- Dickson, M. (2001). Utility of no sweat labels for apparel consumers: Profiling label users and predicting their purchases. *The Journal of Consumer Affairs*, 35(1): 96–119.
- Dobni, D. & Zinkhan, G. M. (1990). In search of brand image: A foundation analysis. *Advances in Consumer Research*, 17, 110-119.
- Doyle, P. (2002). *Marketing Management and Strategy*, (3<sup>rd</sup> Ed.), Harlow: Pearson Education.
- Dumea, A-C. (2012). Factors influencing consumption of organic food in Romania. *The USV Annals of Economics and Public Administration*, 12(15), 107-113.
- Dunlap, R. & Jones, R. (2002). Environmental concern: Conceptual and measurement issues. *Handbook of Environmental Sociology*. Greenwood: Eds. London.
- Eagly, A. H. & Chaiken, S. (1993). The psychology of attitudes. *Harcourt Brace Jovanovich College Publishers*: San Diego, CA, USA.
- Edward, M., & Sahadev, S. (2011). Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327-345.
- Effendi, I, Ginting, P., Lubis, A. & Fachruddin, K. (2015). Analysis of consumer behavior of organic food in North Sumatra province, Indonesia. *Journal of Business and Management*, 4(1). 44-58.
- Elmore, P. E. & Beggs, D. L (1975). Saliency of concepts and commitment to extreme judgements in response pattern of teachers. *Education*, 95(4), 325-334.
- Erdil, T. (2015). Effects of Customer Brand Perceptions on Store Image and Purchase Intention: An Application in Apparel Clothing. *Social and Behavioral Sciences*, 207. 196-205.
- Erdil, T. S., Uzun, Y., (2010), MarkaOlmak, Beta Publishing, (2<sup>nd</sup> ed). In Istanbul. Foster, J., McLelland, M.A. (2015). Retail atmospherics: The impact of a brand dictated theme. *Journal of Retailing and Consumer Services*, 27, 195-205.

- Euromonitor (2018). Organic Packaged Food in Malaysia. Retrieved from, <http://www.portal.euromonitor.com.ezproxy.taylors.edu.my/portal/analysis/tab>.
- Farah Ayuni, S. & Rennie, D. (2012). Consumer perceptions towards organic food. *Procedia-Social and Behavioral Sciences*, 49(2012), 360-367.
- Faul, F., Erdfelder, E., Buchner, A. & Lang, A-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*. 41(4). 1149-1160.
- Fishbein, M. & Ajzen, I. (1980). Understanding Attitudes and Predicting Social Behavior. *Prentice-Hall: Upper Saddle River, NJ, USA*.
- Fishbein, M. & Ajzen, Icek. (1975). Belief, attitude, intention and behaviour: An introduction to theory and research. Retrieved from <https://www.researchgate.net/publication/233897090>.
- Fisher, J. & Fisher, W. (1992). Changing AIDS-risk behaviour. *Psychological bulletin*, 111. 455-474.
- Follows, S. B. & Jobber, D. (2000). Environmentally responsible purchase behaviour: a test of a consumer model. *European Journal of Marketing*, 34(5/6), 723-746.
- Forkink, A. (2010). Perception, Awareness, and Acceptance of Green Kitchen Cleaners: Go Green Market Research. Retrieved from <https://www.greenbook.org/marketing-research/green-kitchen-cleaners>.
- Fornell, C. & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Fornell, C. and J. Cha, (1994). Partial least squares: In advanced methods of marketing research, Bagozzi, R.P. (Ed.). Blackwell, Cambridge.
- Foster, J. & McLelland, M. (2015). Retail atmospherics: The impact of a brand dictated theme. *Journal of Retailing and Consumer Services*, 22(1), 195-205.
- Fotopoulos, C. & Krystallis, A. (2002). Organic product avoidance: Reasons for rejection and potential buyers' identification in a countrywide survey. *British Food Journal*, 104(3/4/5), 233-260.
- Francis, J., Johnston, M., Eccles, M., Walker, A., Grimshaw, J. M., Foy, R., Bonetti, D. (2004). Constructing questionnaires based on the theory of planned behaviour: A manual for Health Services Researchers. *Quality of life and management of living resources; Centre for Health Services Research*.
- Franzen, A. and Meyer, R. (2010). Environmental attitudes in cross-national perspective: A multi-level analysis of the ISSP 1993 and 2000. *European Sociological Review*, 26(2), 219 – 234.

- Gallarza, M. G. & Gil, I. (2006). Value dimensions, perceived value, satisfaction and loyalty: An investigation of university students' travel behaviour. *Tourism Management*, 27, 437-452.
- Gallarza, M. G. & Gil, I. (2008). The concept of value and its dimensions: a tool for analysing tourism experiences. *Tourism Review*, 63(3), 4-20.
- Ghali, Z. & Hamdi, R. (2015), The Purchase and Consumption Motivations of an Organic Product by the Tunisian Consumer: an application on the Prickly Pear Seed Oil (PPS). *Journal of North African Research in Business*, Article. ID 220428.
- Gifford, R. & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour: A review. *International Journal Psychological*. 49, 141–157.
- Giovanni, L-A, & Nucifora, A. (2002). The determinants of the price mark-up for organic fruit and the vegetable product in the European Union. *British Food Journal*, 104(3/4/5), 334-335.
- Giuseppina, R., G., Borrello, M. Guccione, G. D., Schifani, G. & Cembalo, L. (2020). Organic food consumption: The relevance of the health attribute. *Sustainability*, 12(595), 2-12.
- Go Green Market Research (2012). *Green Cleaners*. Retrieved from [http://www.greenbook.org/Content/GoGreen/Green\\_Cleaners\\_report.pdf](http://www.greenbook.org/Content/GoGreen/Green_Cleaners_report.pdf).
- Goel, A. & Yang, N. (2015). An assessment of service quality and resulting customer satisfaction in Pakistan International Airlines: Findings from foreigners and overseas Pakistani customers. *International Journal of Quality and Reliability Management*, 32(5), 486–502.
- Goldman, M. C. & Hylton, W. (1972). *The basic book of organically grown food*. Rodale Press: Erasmus, PA, USA
- Gollwitzer, P.M. (1993). Implementation intentions: Strong effects of simple plans. *American Psychologist*, 54, 493-503.
- Gomiero, T. (2013). Alternative land management strategies and their impact on soil conservation. *Agriculture*, 3, 464–483.
- Gonçalves, H. M., Lourenço, T. F & Silva, G. M. (2016). Green buying behavior and the theory of consumption values: A fuzzy-set approach. *Journal of Business Research*, 69, 1484–1491.
- Goodhue, D. L., Lewis, W., & Thompson, R. (2012). Does PLS have advantages for small sample size or non-normal data? *MIS Quarterly*, 36(3), 981-1001.
- Gopalakrishnan, R. (2019). Advantages and nutritional value of organic food on human health. *International Journal of Trend in Scientific Research and Development*, 3(4).

- Gosling, E. & Williams, K. J. (2010). Connectedness to nature, place attachment and conservation behaviour: Testing connectedness theory among farmers. *Journal Environment Psychological*, 30, 298–304.
- Granot, E., Greene, H. & Brashear, T.G. (2010). Female consumers decision-making in brand-driven retail. *Journal of Business Research*, 63: 801-808.
- Grewal, D., Krishnan, R., Baker, J. & Borin, N. (1998). The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions. *Journal of Retailing*, 74(3), 331-352.
- Griskevicius, V., Shiota, M. & Neufeld, S. (2010). Influence of different positive emotions on persuasion processing: A functional evolutionary approach. *Emotion*, 10(2), 190-206.
- Groening, C., Sarkis, J. & Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Clean Production*, 172, 1848-1866.
- Grunert, S. C. & Juhl, H. J. (1995). Values, environmental attitudes, and purchase of organic food. *Journal of Economic Psychology*, 16, 39-62.
- Gwinner, K. P., Gremler, D. D., & Bitner, M. J. (1998). Relational benefits in services industries: The customer's perspective. *Journal of the Academy of Marketing Science*, 26(2), 101-114.
- Hair, J. F., Black, W., Babin, B. & Anderson, R. (2010). *Multivariate Data Analysis: A Global Perspective* (7<sup>th</sup> Ed.). *Edinburgh Gate, Harlow: Pearson*.
- Hair, J. F., Bush, R. & Ortinau, D. (2009). *Marketing Research: In a Digital Information Environment* (4<sup>th</sup> Ed.). Boston: McGraw-Hill Irwin.
- Hair, J. F., Bush, R. P. & Ortinau, D. J. (2009). *Marketing Research: In a Digital Information Environment* (4<sup>th</sup> Ed.). *McGraw-Hill: New York, NY*.
- Hair, J. F., Hult, G. T., Ringle, C. M. & Sarstedt, M. (2014). *A primer on partial least squares structural equation modelling (PLS-SEM)*. *Sage Publications: Thousand Oaks, CA*.
- Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modelling (PLS-SEM)*, 60-78.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1995). *Multivariate data analysis with readings* (4<sup>th</sup> Ed.). *Englewood Cliffs: Prentice-Hall International*.
- Hale, J., Householder, B. & Greene, K. (2002). The theory of reasoned action, in the persuasion handbook: Developments in theory and practice. 259-288.
- Hanyu, K., Kishino, H., Yamashita, H. & Hayashi, C. (2000). Linkage between recycling and consumption: A case of toilet paper in Japan. *Resources, Conservation and Recycling*, 30(3), 177-199.

- Harland, P., Staats, H. & Wilke, H. A. (1999). Explaining pro-environmental intention and behavior by personal norms and the Theory of Planned Behavior. *Journal Applied Social Psychology*, 29, 2505–2528.
- Hassan, H., Sade, A. B. & Rahman, M. S. (2013). Malaysian hypermarket retailing development and expansion. *International Journal of Retail and Distribution Management*, 41(8), 584-595.
- Hassan, S. H., Loi, W. Y. & Kok, J. R. (2015). Purchasing intention towards organic food among generation Y in Malaysia. *Journal of Agribusiness Marketing*, 7, 16-32.
- Hassan, Z. (2017). Impact of social, epistemic and conditional values on customer satisfaction and loyalty in automobile industry: A structural equation modelling. *Journal of Marketing and Consumer Behaviour in Emerging Markets*, 1, 29-44.
- Hay, J. (1989). The consumer's perspective on organic food. *Canadian Institute of Food Science Technology Journal*. 22(2): 95-99.
- Haynes, A., Lackman, C. & Guskey, A. (1999). Comprehensive brand presentation: ensuring consistent brand image. *Journal of Product & Brand Management*, 8(4), 286-300.
- Heinze, K. (2018). Global data show resilient growth. Organic-Market.Info. Retrieved from <http://organic-market.info/news-in-brief-and-reports-article/global-organic-data-show-resilient-growth.html>.
- Herlina, D.S. (2012). Identifying Key Factors Affecting Consumer Decision Making Behavior in Cinema Context: A Qualitative Approach. International Conference on Business, Economics, Management and Behavioral Sciences (ICBEMBS' 2012) Jan. 7-8, 2012 Dubai.
- Hessami, H.Z., & Yousefi, P. (2013.). Investigation of major factors influencing green purchasing behavior: Interactive approach. *European Online Journal of Natural and Social Sciences*, 2(4), 584-596.
- Hickie, J., Konar, E. & Tomlinson, S. (2005). Aligning CSR with power: Two pragmatic strategies for transformational change, working paper series, center for responsible business, Retrieved from <http://repositories.cdlib.org/crb/wps/26>.
- Hirschman, E. C. (1980). Innovativeness, novelty seeking, and consumer creativity, *Journal of Consumer Research*, 7(3), 283-295.
- Hirschmann, R. (2019). Respondents who only consume organic food Malaysia 2018. Retrieved from <https://www.statista.com/statistics/983691/malaysia-frequency-organic-food-consumption/>.
- Hogstrom, C., Gustafsson, A. & Tronvol, B. (2015). Strategic brand management: Archetypes for managing brands. *Journal of Business Research*, 68(2), 391-404.
- Holbrook, M. B. & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feeling and fun. *Journal Consumer Research*, 9(2), 132-140.

- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology*, 65, 599-610.
- Holst, A. & Iversen, J. M. (2011). An Application of a revised theory of planned behavior: Predicting the intention to use personal care products without endocrine disrupting chemicals. *American Journal of Kidney Diseases*, 34(2), 51-62.
- Homer, P. M. and Kahle, L. R. (1988). A structural equation test of the value attitude-behaviour hierarchy. *Journal of Personality and Social Psychology*, 54(4), 638-646.
- Hong, S. & Tam, K. (2006). Understanding the adoption of multipurpose information appliances: The case of mobile data services. *Information System Research*, 17, 162-179.
- Hong, Y. H., Nasreen, K. & Madi, M. A. (2013). The determinants of hybrid vehicle adoption: Malaysia perspective. *Australian Journal of Basic and Applied Science*. 7(8), 447-454.
- Hossain, M. T. & Lim P. X. (2016). Consumers' buying behavior towards organic food: Evidence from the emerging market. *Malaysian Institute of Management*, 51(2), 7-25.
- Hsieh, A-T. & Li, C-K. (2008). The moderating effect of brand image on public relations perception and customer loyalty. *Marketing Intelligences & Planning*. 26(1), 26-42.
- Huang, N. L., An, S. L. & Yo, W. L. (2019). An empirical analysis of brand as symbol, perceived transaction value, perceived acquisition value and customer loyalty using structural equation modeling. *Sustainability*, 11, 1-11.
- Huber, F., Herrmann, A. & Morgan, R. E (2001). Gaining competitive advantage through customer value oriented management. *Journal of Consumer Marketing*, 18(1), 41-53.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J. & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6, 94-110.
- Hui, W. C., Marimuthu, M. & Ramayah, T. (2014). The effect of perceived value on the loyalty of generation Y mobile internet subscribers: A proposed conceptual framework. *Procedia - Social and Behavioral Sciences*, 130, 532 – 541.
- Hung, K-P., Chen, A. H., Peng, N., Hackley, C., Tiwsakul, R. A. & Chou, C-L. (2011). Antecedents of luxury brand purchase intention, *Journal of Product & Brand Management*, 20(6), 457-467.
- Ikeda, A. A., De Oliveira, T. M. V. & Campomar, M. C. (2005). Organizational Conflicts Perceived by Marketing Executives. *Electronic Journal of Business Ethics and Organization Studies*, 10(1), 22-28.
- Iman Khalid, A. Q. & Yuserrie, Z. (2011). The impact of media exposure to intention to purchase green electronic products food amongst lecturers. *International Journal of Business and Management*, 6(3), 240-248.

- Isaacs, S. M (2015). Consumer perceptions of eco-friendly products. *Walden University Dissertation and Doctoral Studies*. Retrieved from <https://www.semanticscholar.org/paper/Consumer-Perceptions-of-Eco-Friendly-Products-Isaacs/>.
- Ishan, A., Ginting, P., Raham, Nurbaity, A. L. & Fachruddin, K. A. (2015). Analysis of consumer behavior of organic food in North Sumatra province, Indonesia. *Journal of Business and Management*, 4(1), 44-58.
- Ishaque, A. & Tufail, M. (2014). Influence of children on family purchase decision: Empirical evidence from Pakistan. *International Review of Management and Business Research*, 3(1), 162-173.
- Jager, W. (2006). Stimulating the diffusion of photovoltaic systems: A behavioural perspective. *Energy Policy*, 34(14), 1935–1943.
- Jamrozy, U. & Lawonk, K. (2017). The multiple dimensions of consumption values in ecotourism. *International Journal of Culture Tourism Hospitality Research*, 11, 18–34.
- Jang, S. & Cai, L. (2002). Travel motivations and destination choice: A study of British outbound market. *Journal of Travel & Tourism Marketing*, 13(3). 111-133.
- Jasur, H. & Haliyana, K. (2015). The impact of website quality on online purchase intention of organic food in Malaysia: A webqual model approach. *Procedia Computer Science*, 72(2015), 382 – 389.
- Jonas, A. & Roosen, J (2005). Private labels for premium products: the example of organic food. *International Journal of Retail and Distribution Management*, 33(8). 636-653.
- Joreskog, K. (1996). Modeling development: Using covariance structure models in longitudinal research. *European child & adolescent psychiatry*. 5 Suppl 1, 8-10.
- Joshi, A. Kale, S. Chandel, S. & Pal, D. K. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, 7(4), 396-403.
- Joshi, Y. & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, 3(2015), 128-143.
- Kanchanapibul, M., Ewelina L., Wang, X. & Chan, H. (2014). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66, 528-536.
- Karjaluoto, H., Jayawardhena, C., Leppäniemi, M., & Pihlström, M. (2012). How value and trust influence loyalty in wireless telecommunications industry *Telecommunications Policy*, 36(8), 636–649.
- Karunanayake, R. K. T., & Wanninayake, W. M. C. B. (2015). Impact of Key Purchasing Determinants on Purchase Intention of Hybrid Vehicle Brands in Sri Lanka, an Empirical Study. *Journal of Marketing Management*, 3(1), 40-52.

- Kashdan, A.G. (2013). Environmental Attitudes and Behaviors: A Cross-Cultural Analysis in France and the United States. Retrieved from <https://www.semanticscholar.org/paper/Environmental-Attitudes-and-Behaviors%3A-A-Analysis-Kashdan>
- Kashifl, U., Chen, H., Naseem, S., Khan, W.A. & Akram, M.W. (2020). Consumer preferences toward organic food and the moderating role of knowledge: A case of Pakistan and Malaysia. *Food Technology*, 50(5).
- Kekec P., Thongpapanl N., Auh S. (2015). Unveiling the Influence of the consumer wine appreciation dimension on purchasing behavior. In: Kubacki K. (eds) *Ideas in Marketing: Finding the New and Polishing the Old. Developments in Marketing Science: Proceedings of the Academy of Marketing Science*. Springer, Cham.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Kennedy, H. E. & Krahn, H. (2014). Green consumption behavior antecedents: Environmental concern, knowledge, and beliefs. *Psychology Marketing*, 31, 335–348.
- Kennedy, H. E., Krahn, H. & Krogman, N. T. (2015). Are we counting what counts? A closer look at environmental concern, pro-environmental behaviour, and carbon footprint. *The International Journal of Justice and Sustainability*, 20(2), 220–236.
- Khan, M. R. T., Chamhuri, S. & Farah, H. S. (2015). Green food consumption in Malaysia: A review of consumers' purchase motives. *International Food Research Journal*, 22(1), 131-138.
- Kilbourne, W. & Pickett, G. (2008). How Materialism affects environmental beliefs, concern, and environmentally responsible behavior. *Journal of Business Research*, 61(9), 885-893.
- Kim, C., Jin, M-H., Kim, J. & Shin, N. (2012). User perception of the quality, value, and utility of user-generated content. *Journal of Electronic Commerce Research*, 13(4), 305-319.
- Kim, G. & Kim, J. (2009). The Investigation of Chinese consumer values, consumption values, life satisfaction, and consumption behaviors. *Psychology & Marketing*, 26(7), 610–624.
- Kim, H.Y. & Chung, J. E. (2011). Consumer purchase intention for organic personal care products food. *Journal of Consumer Marketing*, 28(1), 40-47.
- Kim, J-O., Forsythe, S., Gu, Q. & Moon, S. (2002). Cross-cultural consumer values, needs and purchase behavior. *Journal of Consumer Marketing*, 19, 481-502.
- Kim, K., Noh, J. & Jogaratnam, G. (2007). Multi-destination segmentation based on push and pull motives. *Journal of Travel & Tourism Marketing*, 21(2-3). 19-32.
- Kim, W. & Mauborgne, R. (2000). Knowing a winning business idea when you see one. *Harvard Business Review*. 78(5). 129-38, 200.

- Kim, Y. (2011). Understanding green purchase: The influence of collectivism, personal values and environmental attitudes, and the moderating effect of perceived consumer effectiveness. *Seoul Journal of Business*, 17(1), 65-92.
- Kim, Y. and Choi, S. M. (2005). Antecedents of green purchase behaviour: an examination of collectivism, environmental concern, and PCE. *Advances in consumer Research*, 32, 592-599.
- King, L. (2002). Gain without pain? Expressive writing and self-regulation. The writing cure: How expressive writing promotes health and emotional well-being (pp. 119-134). Washington, DC: American Psychological Association.
- Kline, R. (1998). Principles and practice of structural equation modeling. New York: Guilford Press.
- Kline, R. B. (2005), Principles and practice of structural equation modeling (2<sup>nd</sup> Ed.). New York: The Guilford Press.
- Klobas, J. & Clyde, L. (2000). Adults learning to use the internet: A longitudinal study of attitudes and other factors associated with intended internet use. *Library & Information Science Research*. 22(1), 5-34.
- Klonsky, K. & Tourte, L. (1998). Organic agricultural production in the United States: Debates and directions. *American Journal Agricultural Economics*, 80, 1119.
- Knight, K. W. and Messer, B. L. (2012). Environmental concern in cross-national perspective: the effects of affluence, environmental degradation, and world society. *Social Science Quarterly*, 93(2), 521-537.
- Kock, N. & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods: Sample size in PLS-based SEM. *Information Systems Journal*. 28(4), 1-37.
- Kock, N. (2014b). Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *International Journal of e-Collaboration*, 10(3), 1- 13.
- Kontogeorgos, A. & Semos, A. (2008). Marketing aspects of quality assurance systems: The organic food sector case. *British Food Journal*, 110(8), 829-839.
- Koshkaki, E. (2014). The role of product and brand emotion in purchase behavior, a study in Iranian home appliance context. *Journal of Asia Business Studies*, 8(3), 233-248.
- Kotler P. & Armstrong G. (2012). Principle of Marketing 14th Edition. Pearson Education Inc. Prentice Hall.
- Kotler P., Wong V., Saunder J., Armstrong G., (2005). Principle of Marketing, 4th European Ed. Pearson Education Inc. Prentice Hall.

- Kumar, A., & Lim, H. (2008). Age differences in mobile service perceptions: Comparison of Generation Y and Baby Boomers. *Journal of Services Marketing*, 22(7), 568-577.
- Kumar, P. & Ghodeswar, B. M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence Planning*, 33, 330-347.
- Kuo, Y. F., Wu, M. C. & Deng, W. J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computer Human Behaviour*, 25, 887-896.
- La Via, G., Nucifora, A. M. D. (2002). The determinants of the mark-up for organic fruit and vegetable product in the European Union. *British Food Journal*, 101(3/4/5), 334-335.
- Lai A. W. (1995). Consumer value, product benefits and customer value: A consumption behavior approach. *Advances in Consumer Research*, 22, 381-388.
- Lamater, D.J.D. & Myers, (2010). *Social Psychology*. Boston, Massachusetts, USA: Cengage Learning.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products food. *Journal Consumer Marketing*, 18(6), 503-520.
- Laux, M. (2013). Flax Profile. *Agricultural Marketing Resource Center*. Iowa State University. Retrieved from <https://www.agmrc.org/commodities-products/grains-oilseeds/flax-profile>.
- Lea, E. & Worsley, T. (2005). Australian organic food beliefs, demographics and values. *British Food Journal*, 107(11), 855-869.
- Lee, I., Choi, B., Kim, J., & Hong, S. J. (2007). Culture-technology fit: Effects of cultural characteristics on the post-adoption beliefs of mobile internet users. *International Journal of Electronic Commerce*, 11(4), 11-51.
- Lee, K. (2009). Gender Differences in Hong Kong Adolescent Consumers' Green Purchasing Behavior. *Journal of Consumer Marketing*, 26(2). 87-96.
- Lee, N., Choi, Y. J., Youn, C. & Lee, Y. (2012). Does green fashion retailing make consumers more eco-friendly? The influence of green fashion products and campaigns on green consciousness and behavior. *Clothing and Textile Research Journal*, 30, 67-82.
- Leong, G. Y, & Ng, Y. L. (2014). The factors influence consumer behaviour on the purchase of organic products food. *University Tunku Abdul Rahman*, Kampar, Perak, Malaysia.
- Levy, M., & Weitz, B.A. (2001). *Retailing Management* (4th edition). Boston; Megrant-Hill Irwin.
- Li, B., Wang, M. & Gong, S. (2019). Understanding the antecedents of organic food purchases: The important roles of beliefs, subjective norms, and identity expressiveness. *Sustainability*, 11, 3045 3064.

- Li, N. & Zhang, P. (2002). Consumer Online Shopping Attitudes and Behavior: An Assessment of Research. Eighth Americas Conference on Information System (AMCIS). Proceedings. 74.
- Li, Y., Lv, W. & Bai, J. (2008). Measuring and evaluating hedonic and utilitarian of consumer attitudes toward two different shopping environments. *Journal of Management Sciences*, 21, 58–64.
- Lim, W. M., Yong, J. L. S. & Suryadi, K. (2014). Consumers' Perceived Value and Willingness to Purchase Organic Food. *Journal of Global Marketing*, 27(5), 298-307.
- Lin, C.-H., Peter, S. J. & Shih, H.-Y. (2005). Past progress and future directions in conceptualizing customer perceived value. *International Journal of Service Industry Management*, 16(4), 318-33.
- Lin, L., Zhou, D. & Ma, C. (2009). Green food industry in China: development, problems and policies. *Renewable Agriculture and Food Systems*, 25(1), 69– 80.
- Lin, P. C., & Huang, Y. H., (2012). The influence factors on choice behaviour regarding organic products food based on the theory of consumption values. *Journal Clean Production*, 22, 11-18.
- Lin, P., Huang, Y., & Wang, J. (2010). Applying the theory of consumption values to choice behavior toward green products. *Management of Innovation and Technology (ICMIT), 2010 IEEE International Conference on IEEE*, 348-353.
- Liu, L. J. (2003). Enhancing sustainable development through developing green food: China's option. *Mission of China to the United Nation in Geneva*, Bangkok, 30 July.
- Lockie, S., Lyons, K., Lawrence, G. & Grice, J. (2004). Choosing organics: A path analysis of factors underlying the selection of organic food among Australian consumer. *Appetite*, 43(2), 135-146.
- Long, M. M, & Schiffman, L. G. (2000). Consumption values and relationships: segmenting the market for frequency programs. *Journal of Consumer Marketing*, 17(3), 214-232.
- Low, G. S., & Lamb, C. W. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management*, 9(6), 350-368.
- Luchs, M. G. et al. (2010). The sustainability liability: Potential negative effects of ethicality on product preference. *Journal of Marketing*, 74, 18–31.
- Lung, S. (2010). Green consumerism – the way to effectively differentiate your products food in Asia-Pacific Market. Retrieved from <http://www.ezinearticles.com/?Green-Consumerism-The-Way-to-Effectively-Differentiate-Your-ProductsFoodFood-in-Asia-Pacific-Market&id=4875312>.
- Ma, Y. & Yang, Y. (2018). An Empirical Study of Female E-shopper's Satisfaction with Cosmetic Products in China. *International Journal of Business and Management*, 13(3), 211-219.

- Magnusson, M. K., Arvola, A., Koivisto Hursti, U.-K., Aberg, L. & Sjoden, P.-O. (2001). Attitudes towards organic food among Swedish consumers. *British Food Journal*, 103(3), 209-227.
- Maharum, S. M., Md Isa, N., Salahuddin, A. & Saad, S. (2017). The relationship between dimension of consumption value and intention to purchase of green products. *International Journal of Business and Management*, 5, 215-221.
- Mainieri, T., Barnett, E. G., Valdero, T. R., Unipan, J. B. and Osamp, S. (1997). Green buying: The influence of environmental concern on consumer. *Environmental Psychology*, 23, 21- 32.
- Makatouni, A. (2002). What motivates consumers to buy organic food in the UK? Results from a qualitative study. *British Food Journal*, 104(3/4/5), 345-346, 351.
- Malaysia Department of Agricultural, *Strategic Plan 2016-2020*. Retrieved from [http://www.doa.gov.my/index/resources/aktiviti\\_sumber/sumber\\_awam/penerbitan/pe lan\\_strategik\\_doa\\_2016\\_2020.pdf](http://www.doa.gov.my/index/resources/aktiviti_sumber/sumber_awam/penerbitan/pe lan_strategik_doa_2016_2020.pdf).
- Malaysian Department of Agriculture (DOA). Retrieved from <http://www.doa.gov.my/>.
- Malhotra, N. & McCort, J. (2001). A cross-cultural comparison of behavioral intention models - Theoretical consideration and an empirical investigation. *International Marketing Review*. 18(3). 235-269.
- Malhotra, N. K. (2010) *Marketing Research: An Applied Orientation* (6<sup>th</sup> Ed.). Upper Saddle River, NJ: Prentice Hall, Inc.
- Malik, M. E., Ghafoor, M. M. & Iqbal H. K. (2012). Impact of brand image, service quality and price on customer satisfaction in Pakistan telecommunication sector. *International Journal of Business and Social Science*, 3(23), 123-129.
- Malik, M. E., Naeem, B. & Munawar, M. (2012). Brand image: Past, present and future. *Journal of Basic and Applied Scientific Research*, 2(12), 13069-13075.
- Market Research Consulting Statistics (2016). Retrieved from <https://www.marketresearch.com/Statistics-Market-Research-Consulting-v4058/>.
- Massey, M., O'Cass, A. & Otahal, P. (2018). A meta-analytic study of the factors driving the purchase of organic food. *Appetite*, 1, 418-427.
- Matthews, B. & Ross, L. (2010). *Research Methods a Practical Guide for the Social Sciences*. Pearson Education Limited: Edinburgh Gate.
- Matzler, K., Würtele, A., & Renzl, B. (2006). Dimensions of price satisfaction: A study in the retail banking industry. *International Journal of Bank Marketing*, 24(4), 216-231.
- McCarthy, Breda L., Liu and Chen, T. (2015). Trends in Organic and Green Food Consumption in China: Opportunities and Challenges for Regional Australian Exporters. *Journal of Economic and Social Policy*, 17(1).

- Miller, K. (2005). *Communications theories: perspectives, processes, and contexts*. McGraw-Hill: New York.
- Millock, K., Hansen, L.G., Wire, M. & Anderson, L.M. (2007). Willingness to pay for organic food: A comparison between survey data and panel data from Denmark. CIRED, France. Retrieved from <https://www.semanticscholar.org/paper/Willingness-to-Pay-for-Organic-Food%3A-A-Comparison-Millock-Hansen/>.
- Mishra, P. & Sharma, P. (2010). Green marketing in India: Emerging opportunities and challenges. *Journal of Engineering, Science and Management Education*, 3, 9-14.
- Mohajan, H. K. (2017). Two criteria for good measurements in research: validity and reliability. MPRA paper no. 83458. Retrieved from [https://mpa.ub.uni\\_muenchen.de/83458/](https://mpa.ub.uni_muenchen.de/83458/).
- Mohamad, S. S., Rusdi, S. D. & Hashim, N. H. (2014). Organic Food Consumption among Urban Consumers: Preliminary Results. *Procedia-Social and Behavioral Sciences*, 130, 509- 514.
- Mohd Nazri, M. N., Jayashree, S. & Hishamuddin, I. (2013). Malaysian consumer's attitude toward mobile advertising, the role of permission and its impact on purchase intention: A structural equation modelling approach. *Asian Social Science*, 9(5), 135-153.
- Moosa, M. Y & Hassan, Z (2015). Customer perceived values associated with automobile and brand loyalty. *International Journal of Accounting, Business and Management*, 3(1), 99-115.
- Morgan, M. (2010). The experience economy 10 years on: Where next for experience management? In: M. Morgan, P. Lugosi, & J. R. B. Ritchie (Eds.), *The tourism and leisure experience: Consumer and managerial perspectives*. (pp. 218–230). Bristol: Channel View.
- Morrison, D. G. (1979). Purchase Intentions and Purchase Behavior. *Journal of Marketing*, 43 (Spring), 65–74.
- Mudambi, S., Doyle, P. & Wong, V. (1997). Exploration of branding in industrial markets. *Industrial Marketing Management*, 26(5), 433-446.
- Mukherjee, A. & Lal, R. (2013). Biochar impacts on soil physical properties and greenhouse gas emissions. *Agronomy*, 3, 313–339.
- Mustafe, M. (2007). Gender differences in Egyptian consumers' green purchase behavior: The effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*. 31(3). 220 - 229.
- Nabsiah, A. W., Rahbar, E. & Tan, S. S. (2011). Factors influencing the green purchase behaviour of Penang environmental volunteers. *International Business Management*, 5(1), 38-49.

- Newsom, J. T, Rook, K. S, Nishishiba, M., Sorkin, D. H & Mahan, T. L. (2005). Understanding the and appraisals. *The Journals of Gerontology*, 60(6), 304-312.
- Nezakati, H., Hosseinpour, M.m & Hassan, M., (2014). Government concerns of consumers' intention to purchase organic products food (Preliminary Study-Malaysia Evidence). *Journal of Applied Sciences*, 14(15): 1757-1762.
- Nielson, C. C. (1996). An empirical examination of switching cost investments in business-to-business marketing relationships. *The Journal of Business and Industrial Marketing*, 11, 38–60.
- Niessen, J. & Hamm, U. (2008) Identifying the gap between stated and actual buying behaviour on organic products based on consumer panel data. Paper at: Cultivating the Future Based on Science: 2nd Conference of the International Society of Organic Agriculture Research ISO FAR, Modena, Italy, June 18-20, 2008.
- Nik Ramli, N. A. R. (2009). Awareness of eco-label in Malaysia's green marketing initiative. *International Journal of Business and Management*, 4(8), 132-141.
- Nor Azila, M. N., Hayatul Safrah, S.S., Noratisah, M.N. & Azli, M. (2014). Functional food product consumption among Malaysian consumers: The relationship between intention and actual behaviour. *Proceeding of the Australian Academy of Business and Social Sciences Conference 2014*, Kuala Lumpur.
- Noypayak, W. (2009). Value dimensions of Thailand as perceived by U.K. tourists, RU. *International Journal*, 3(1), 141-154.
- Nunnally J. C. (1978). *Psychometric theory*. New York: McGraw Hill.
- Ohman, N. (2011). Buying or lying-the role of social pressure and temporal disjunction of intention assess mental and behavior on the predictive ability of good intentions. *Journal of Retailing and Consumer Service*, 18, 194 – 199.
- Ohtomo, S. and Hirose, Y. (2007). The dual-process of reactive and intentional decision-making involved in eco-friendly behaviour. *Journal of Environmental Psychology* 27(2): 117-125.
- Omar, N. A., Nazri, M.A., Osman, L. H. & Ahmad, M. S. (2016). The effect of demographic factors on consu mer intention to purchase organic products in the Klang Valley: An empirical study. *Malaysian Journal of Society and Space*, 12(2), 68- 82.
- Omigie, N. O., Zo, H., & Rho, J. J., (2015). User acceptance of mobile broadband in Nigeria. *Information and Knowledge Management*, 5(7), 62-78.
- Omigie, N. O., Zo, H., Rho, J. J. & Ciganek, A. O. (2017). Customer pre-adoption choice behaviour for M-PESA mobile financial services: Extending the theory of consumption values. *Industrial Management & Data Systems*, 117(5), 910-926.

- Ooi, J. M., Kwek, C. L. & Keoy, K. H. (2012). The antecedents of organic purchase intention among Malaysian consumers, *2012 International Conference on Economics, Business Innovation IPEDR*, 38(2012), IACSIT Press, Singapore.
- Ooi, J.M., Kwek, C.L. & Tan H. P. (2012). The antecedents of green purchase intention among Malaysian consumers. *Asian Social Science*, 8(13), 248-263.
- Organic Food Standards and Labels: The Facts. Retrieved from <http://www.ams.usda.gov>.
- Organic Trade Association (OTA) (2018). Retrieved from <https://www.ota.com/>.
- Organic World (2019). Organic Agriculture in Asia: Data 2017. *Global Organic Farming Statistic and News*. Retrieved from <https://www.organic-world.net/country-info/asia.html>.
- Padel, S. & Foster, C. (2005). Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food. *British Food Journal*, 107 (8), 606-625.
- Padgett, D & Allen, D. (1997). Communicating Experiences: A Narrative Approach to Creating Service Brand Image. *Journal of Advertising*, 26(4) 49-62.
- Padgett, D. & Allen, D. (2013). Communicating experiences: A narrative approach to creating service brand image. *Journal of Advertising*, 26(4). 49-62.
- Pallant, J. (2005) SPSS survival guide: A step by step guide to data analysis using SPSS for windows (3<sup>rd</sup> Ed.). New York: Open University Press.
- Pallant, J. F. (2001). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows. *Buckingham*: Open University Press.
- Park, C., Jaworski, B. & Macinnis, D. (1986). Strategic Brand Concept-Image Management. *Journal of Marketing*, 50(4), 135-145.
- Pearson, D., Henryks, J. & Jones, H. (2011). Organic food: What we know (and do not know) about consumers. *Renewable Agriculture Food Systems*, 26, 171–177.
- Peattie, K. & Crane, A. (2005). Green marketing: Legend, myth, farce or prophesy? *Qualitative-Market Research: An International Journal*, 8(4), 357-380.
- Perrine, T. (2019). Feldman on the epistemic value of truth. *Acta Analytica*, 34.
- Phau, I, Quintal, V. & Shanka, T. (2014). Examining a consumption values theory approach of young tourists toward destination choice intentions. *International Journal of Culture, Tourism and Hospitality Research*, 8(2), 125-139.
- Pimentel, D. & Burgess, M. (2013). Soil Erosion Threatens Food Production. *Agriculture*, 3, 443–463.

- Pomsanam, P. Napompeh, K. & Suwanmaneepong, S. (2014). Factors Driving Thai Consumers' Intention to Purchase Organic Food. *Asian Journal of Scientific Research*, 7(7), 434-446.
- Popovic, I., Bossink, B. A. G. & Van der Sijde, P. C. (2019). Factors Influencing Consumers' Decision to Purchase Food in Environmentally Friendly Packaging: What Do We Know and Where Do We Go from Here? *Sustainability*, 11(7197), 1-22.
- Priest, J., Carter, S., & Stat, D. (2013). *Consumer Behavior*. Edinburgh Business School Press, United Kingdom.
- Punitha, S. & Azmawani, A. R. (2011). Antecedents of green purchasing behaviour among Malaysian consumers. *International Business Management*, 5(3), 129-139.
- Qasim, H., Yan, L., Guo, R., Saeed, A. & Ashraf, B. N. (2019). The defining role of environmental self-identity among consumption values and behavioral intention to consume organic food. *International Journal of Environmental Research and Public Health*, 16, 1106-1128.
- Raab, C. & Grobe, D (2005). Consumer knowledge and perceptions about organic food. *Journal of Extension*, 43(4), 286-293.
- Radman, M. (2005). Consumer consumption and perception of organic products in Croatia. *British Food Journal*, 107(4), 263-273.
- Rahim, N., Lapanjuuri, K., Day, F., Piggott, H., Hudson, R. & Lubian, K. (2017). *Research on the Sharing Economy*. HM Revenue and Customs: London, UK.
- Rahman, M. S., Osmangani, A. M., Hassan, H., Anwar, M. A. & Fattah, F. A. M. A. (2016). Consumption values, destination cues and nostalgia on the attitude in the selection of destination for educational tourism: The mediating role of destination image. *International Journal of Tourism Cities*. 2(3), 257-272.
- Ramayah, T., Lee, J. W. C. & Mohamad, O. (2010). Green product purchase intention: Some insight from a developing country. *Resources, Conservation and Recycling*, 54(12), 1419-1427.
- Rana, J. & Paul, J. (2017) Consumer behaviour and purchase intention for organic food: A review and research agenda. *Journal of Retailing Consumer Services*, 38, 157–165.
- Reed, A., Forehand M.R., Puntoni, S. & Warlop, L. (2012). Identity-based consumer behavior. *International Journal of Research in Marketing*, 29, 310–321.
- Rex, E. & Baumann, H. (2007). Beyond ecolabels: what green marketing can learn from conventional marketing. *Journal of Cleaner Production*, 15(6). 567-576.
- Richa, H. & Vadera, S. (2019). Determinants of online shopping behaviour in India. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(3), 3947-3950.

- Richter, N. F., Cepeda, G., Roldan, J. L. & Ringle, C. M. (2016). European management research using partial least squares structural equation modelling (PLS-SEM). *European Management Journal*, 34(6), 589-597.
- Ringle, C., Wende, S., & Will, A. (2005). SmartPLS 2.0 (Beta). Hamburg. Retrieved from <https://www.smartpls.com/>.
- Robles, R. R., Vannini, L., De La Puente, T. & Fernandez-Revuelta, J. J. (2005). Consumer attitudes behind organic food perception: An illustration in a Spanish area. *Paper presented at the 11<sup>th</sup> European Association of Agricultural Economists (EAAE) Congress, Copenhagen, Denmark, August 24-27, 2005.*
- Rodiger, M. & Hamm, U. (2015). How are organic food prices affecting consumer behaviour? A review. *Food Quality and Preference*, 43, 10-20.
- Roitner-Schobesberber, B., Darnhofer, I., Somsook, S. & Vogl, C. R. (2007). Consumer perceptions of organic food in Bangkok, Thailand, *Food Policy*, 33, 112-121.
- Roldan, J. L. & Sanchez- Franco, M. J. (2012). Variance-Based Structural Equation Modeling: Guidelines for Using Partial Least Squares in Information Systems Research. In M. Mora, O. Gelman, A. Steenkamp, & M. Raisinghani (Eds.), *Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems* (pp. 193-221).
- Ross, K. N. (2012). Sample design for educational survey research. *UNESCO: International Institute for Educational Planning*. Retrieved from <http://www.iiep.unesco.org/en/sample-design-educational-survey-research>.
- Saad, S., Fadli, M., Isa, N., Salahuddin, N. & Annual, A. (2017). An Empirical Study on Brand Image Factors that Influence Students Behaviour. *International Journal of Economic Research*, 14(19), 43-59.
- Sagari, U., Kumar, T. V. & Rao, G. S (2019). Consumer perception on organic food products: A study on Visakhapatnam city. *Indian Journal of Economics and Development*, 7(4), 1-9.
- Saleki, Z. S. & Sayeds, S. M. S. (2012). The main factors influencing purchase behaviour of organic products in Malaysia. *Interdisciplinary Journal Contemporary Research in Business*. 4, 98–116.
- Samik, M. N, Nordin, S. M. (2012). A new beginning for organic food industry. Retrieved form <http://www.asean.org/communities>.
- Sanchez, J. M. & Lafuente, R. (2010). Defining and measuring environmental consciousness. *Revista Internacional de Sociologia*. 68(3), 731-755.
- Sanchez-Fernandez, R. & Iniesta-Bonillo, M. A. (2007). The concept of perceived value: A systematic review of the research. *Marketing Theory*, 7(4), 427-451.
- Saunders, M., Lewis, P., & Thornhill, A. (2009) Research methods for business students (5<sup>th</sup> Ed.). *Pearson Education Limited: Italy*.

- Savithri, N & Lavanya, B. (2019). Organic food products: A study on perception of Indian consumers. *International Journal of Research and Analytical Reviews*, 6(1), 212-215.
- Schifferstein, H. N. J. & Oude Ophuis, P. A. M. (1998). Health related determinants of organic food consumption in the Netherlands. *Food Quality and Preference*, 9(3), 119-133.
- Schiffman, L. G. & Kanuk, L. L. (1997). *Consumer Behaviour* (6th Ed.). Prentice-Hall: NJ.
- Schiffman, L. G. & Kanuk, L. L. (2010). *Consumer Behavior, Global* (10<sup>th</sup> Ed.). Pearson Education, Inc: United State of America
- Schmitt, B. (2012). The psychology of brands. *Journal of Consumer Psychology*, 22(1), 7-17.
- Schumacker, R. E & Lomax, R. G. (2010). *A Beginner's Guide to Structural Equation Modeling*, (2<sup>nd</sup> Ed.). Mahwah, NJ: Lawrence Erlbaum and Associates.
- Schweizer, S. (2006). The psychology of novelty-seeking, creativity and innovation: neurocognitive aspects within a work-psychological perspective. *Creativity and Innovation Management*. 15(2), 164 - 172.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach* (4<sup>th</sup> Ed.). John Wiley & Sons, Inc.: New York, NY.
- Sekaran, U., & Bougie, R. (2010). In *Research Methods for Business: A Skill Building Approach*. Wiley: UK.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: a skill-building approach* (7<sup>th</sup> Ed.). Haddington: John Wiley & Sons.
- Shafiq, R., Raza, I. & Zia-ur-Rehman, M. (2011). Analysis of the factors affecting customers' purchase intention: The mediating role of perceived value. *African Journal of Business Management*, 5(20), 8041-8049.
- Shaharudin, M. R., Pani, J. J., Mansor, S. W. & Elias, S. J. (2010). Factors affecting purchase intention of organic food in Malaysia' Kedah. *Cross-cultural Communication*, 6(2), 105-116.
- Shahnaei, S. (2012). The impact of individual differences on green purchasing of Malaysian consumers. *International Journal of Business and Social Science*, 16(3), 132-14.
- Shaizatulaqma, K. A., Nur Najihah, D. & Nabsiah, A. W. (2019). Investigating the factors affecting consumer purchase intention towards halal organic food. *Journal of Entrepreneurship, Business and Economics*, 7(2), 162-188.
- Shamsudin, M.F. (2012). Determinants of customer loyalty towards prepaid mobile cellular services in Malaysia. *Universiti Utara Malaysia*, Sintok, Kedah, Malaysia.
- Shanka, T. & Phau, I. (2008). Tourism destination attributes: What the non-visitors say higher education students' perceptions. *Asia Pacific Journal of Tourism Research*, 13(1), 81-94.

- Sharma, P. (2011). Country of origin effects in developed and emerging markets: Exploring the contrasting roles of materialism and value consciousness. *Journal of International Business Studies*, 42, 285–306.
- Shepherd, R., Magnusson, M. & Sjoden, P-O. (2005). Determinants of Consumer Behaviour Related to Organic Food. *Journal of the Human Environment*, 34(4), 352-359.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159-170.
- Shiau, P. N, Yu, S & Hui, C. T. (2015). The study of consumers' buying behaviour and consumer satisfaction in beverages industry in Tainan, Taiwan. *Journal of Economics, Business and Management*, 3(3), 391-394.
- Siti Nor Bayaah, A & Nurita, J. (2007). Consumer's perception and purchase intentions towards organic food product: exploring the attitude among Malaysian consumers. *Universiti Tun Abdul Razak, Malaysia*.
- Skim Organic Malaysia (SOM) (2015). *Skim Pensijilan Organik Malaysia (myORGANIC)*. Retrieved from <http://www.doa.gov.my/index.php/pages/view/377>.
- Snyder, C. & Spaner, D. (2010). The sustainability of organic grain production on the Canadian prairies: A review. *Sustainability*, 2, 1016–1034.
- Solaiman, M., Halim, M. S. A., Manaf, A.H.A., Nor Azila, M.N., Noor, I.M. & Rana, S-M.S. (2017). Consumption values and green purchase behaviour: An empirical study. *International Business Management*, 11(6), 1223-1233.
- Solomon, M., Bamossy, G. J., Askegaard, S., & Hogg, M. K. (2006). *Consumer Behaviour: A European Perspective (3rd Edition)*. Edinburgh Gate, Harlow, Pearson Education Limited: Prentice Hall.
- Somasundram, C., Razali, Z. & Santhirasegaram, V. (2016). A review on organic food production in Malaysia. *Horticulturae*, 2, 12. Retrieved from [www.mdpi.com/journal/horticulturae](http://www.mdpi.com/journal/horticulturae).
- Song, B. L. & Liew, C. L. (2019). Assessing the young consumers' motives and purchase behaviour for organic food: An empirical evidence from a developing nation. *International Journal of Academic Research in Business & Social Sciences*, 9(1), 69-81.
- Song, B. L. (2017). What motivates consumers to purchase organic food in Malaysia? *Asian Social Science*, 13(9), 100-109.
- Southey, G. 2011. The theories of reasoned action and planned behaviour applied to business decisions: A selective annotated bibliography. *Journal of New Business Ideas & Trends*, 9(1), 43–50.
- Stanton, E. S. (2011). Malaysia's Markets for functional food, nutraceuticals and organic food: An introduction for Canadian producers and exporters. In the Counsellor and Regional Agri-Food Trade Commissioner, Southeast Asia, and the High Commission of Canada in Malaysia. *Agriculture and Agri-Food Canada*. Ottawa, ON, Canada.

- Statista. Retrieved from <https://www.statista.com/statistics/983691/malaysia-frequency-organic-food-consumption/>
- Stedman, R., Beckley, T. & Wallace, S. (2004). Ambard, M. A picture and 1000 words: Using resident-employed photography to understand attachment to high amenity places. *Journal Leisure Research*, 36, 580–606.
- Stefanic, I., Stefanic, E. & Haas, R. (2001). What the consumer really wants: Organic food market in Croatia. *Die Bodenkultur*, 52(4), 323-328.
- Stephan Zielke (2010). How price image dimensions influence shopping intentions for different store formats. *European Journal of Marketing*, 44(6), 748-770.
- Stoleru, V., Munteanu, N. & Istrate, A. (2019). Perception towards organic vs. conventional products in Romania. *Sustainability*, 11, 2394-2409.
- Sudarsan, J. & Urchenna, C. E. (2012). Consumers' adoption of mobile coupons in Malaysia. In Lee, I. (Eds.) Strategy, adoption and competitive advantage of mobile services in the global economy. *Information Science Reference*, 90-111.
- Suh, B. W., Eves, A. & Lumbers, M. (2012). Consumer's attitudes and understanding of organic food: The case of South Korea. *Journal of Foodservice Business Research*, 15(1), 49-63.
- Suhaimee, S., Ibrahim, I. Z. & Abd Wahab, M. A. M. (2016). Organic agricultural in Malaysia. *FFTC Agricultural Policy Platform (FFTC-AP)*, 01, 30. Retrieved from [http://www.ap.ffc.agnet.org/ap\\_db.php?](http://www.ap.ffc.agnet.org/ap_db.php?)
- Suki, N. M & Suki, N. M. (2019). Correlations between awareness of green marketing, corporate social responsibility, product Image, corporate reputation, and consumer purchase intention. *Corporate Social Responsibility: Concepts, Methodologies, Tools, and Applications*: IGI Global.
- Suki, N. M. (2013). Young consumer ecological behaviour: The effects of environmental knowledge, healthy food and healthy way of life with the moderation of gender and age. *Management Environment Quality International Journal*, 24, 726-737.
- Suki, N. M. (2016). Consumer environmental concern and green product purchase in Malaysia: structural effects of consumption values. *Journal of Cleaner Production*, 132, 204-214.
- Suki, N. M. (2018). Determinants of consumers' purchase intentions of organic vegetables: Some insights from Malaysia. *Journal of Food Products Marketing*, 24(4), 392-412.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203- 220.
- Switala, M., Gamrot, W., Reformat, B. & Bilinska-Reformat, K. (2018). The influence of brand awareness and brand image on brand equity: An empirical study of logistics service providers. *Journal of Economics and Management*, 33(3), 96-119.

- Syrjala, H., Leipamaa-Leskinen, H. & Laaksonen, P. (2015), Social needs in Finnish young adults' mundane consumption. *Young Consumers*, 16(3), 301-315.
- Szabo, R. & Kratki, N. (2018). Social value creation and impact measurement. *Theory, Methodology, Practice*, 14, 15-25.
- Tan, T. H. (2013). Use of structural equation modelling to predict intention to purchase green and sustainable homes in Malaysia. *Asian Social Science*, 9(10), 181-191.
- Tanner, C. & Kast, S. (2003). Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychology and Marketing*, 20(10). 883-902.
- Tarkiainen, A. & Sundqvist, S., (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107(11) 808-822.
- Teoh, C. W. (2015). Determinants of Malaysian consumers' purchase intention on hybrid car: A study of theory of consumption value. (pp 74-75). *Universiti Utara Malaysia*, Sintok, Kedah, Malaysia.
- Teoh, W. C. & Nor Azila, M. N. (2015). The importance of consumers' attitudes towards purchase intention of hybrid car in Malaysia. *Academic Research International*, 6(4), 111-122.
- Teoh, W. C. & Nor Azila, M. N. (2015b). What Affects Malaysian Consumers' Intention to Purchase Hybrid Car? *Asian Social Science*, 11(26), 52-63.
- The Sunday Daily (2018). Retrieved on January 2019 from <https://www.thesundaily.my/archive/more-women-voters-men-ge14>.
- Thogersen, J., Pedersen, S., Paternoga, M., Schwendel, E., Aschemann-Witzel, J. (2017). How important is country-of-origin for organic food consumers? A review of the literature and suggestions for future research. *British Food Journal*. 119(3), 542-557.
- Ting, D. H., Lim, S. F., Patanmacia, T. S., Low, C. G. & Ker. G. C. (2011). Dependency on smartphone and the impact on purchase behaviour. *Young Consumers*, 12(3), 193-203.
- Tiong T. G., Suki, N. M & Kim F. (2014). Exploring a consumption value model for Islamic mobile banking adoption. *Journal of Islamic Marketing*, 5(3), 344-365.
- Tiraieyari, N., Hamzah, A. & Abu Samah, B. (2014). Organic Farming and Sustainable Agriculture in Malaysia: Organic Farmers' Challenges towards Adoption. *Asian Social Science*, 10(4).
- Toh, P. L., Dominic, F. L. & Shanmugam, A. (2018). The purchase intention of organic food, among working adults in Penang, Malaysia. *IOSR Journal of Business and Management*, 20(3), 48-59.
- Tregear, A. Dent, J. B. & McGregor, M. J. (1994). The demand for organically grown produce. *British Food Journal*. 96(4), 21-25.

- Triandis, H. C. (1977). *Interpersonal Behaviour*. Monterey, C.A: Brook/Cole.
- Triandis, H. C. (1980). Values, attitudes, and interpersonal behavior. In Howe, H. & Page, M. (Eds.), *Nebraska symposium on motivation 1979*, 195–295. Lincoln, NE: University of Nebraska Press.
- Tuner, J. C., Oakes, P. J., Haslam, S. A. & McGarty, C. A. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20, 454-463.
- Turner, J. C. (1991). Social influence. In Brooks/Cole Mapping Social Psychology Series. Maidenhead: Open University Press.
- Van der Vorst, J. & Beulens, A. (2002). Identifying sources of uncertainty to generate supply chain redesign strategies. *International Journal of Physical Distribution & Logistics Management*, 32. 409-430.
- Vazifehdoust, H, Teleghani, M., Esmailpour, F., Nazari, K. & Khadang, M. (2013). Purchasing green to become greener: Factors influence consumers' green purchasing behaviour. *Management Science Letters*, 3, 2489-2500.
- Velten, S., Leventon, J., Jager, N. & Newig, J. (2015). What is sustainable agriculture? A systematic review. *Sustainability*, 7, 7833–7865.
- Verhoef, P. C. (2005). Explaining purchases of organic meat by Dutch consumers. *European Review of Agricultural Economics*, 32(2), 245–267.
- Vindigni, G., Janssen, M. A. & Jager, W. (2002). Organic food consumption: A multi-theoretical demframework of consumer decision making. *British Food Journal*, 104, 624–642.
- Wang, C. L., Li, D., Barnes, B. R. & Ahn, J. (2012). Country image, product image and consumer purchase intention: Evidence from an emerging economy. *International Business Review*. 21, 1041–1051.
- Wang, H-Y., Liao, C. & Yang, L-H. (2013). What affects mobile application use? The roles of consumption values. *International Journal of Marketing Studies*, 5(2), 11-22.
- Weerakkody, V. & Choudrie, J. (2005). Exploring e-government in the UK: Challenges, issues and complexities. *Journal of Information Science and Technology*, 2(2), 26-44.
- Wells, V. K. (2014). Behavioural psychology, marketing and consumer behaviour: a literature review and future research agenda. *Journal of Marketing Management*, 30(11-12), 1119-1158.
- Werner, P. (2004). Reasoned action and planned behaviour. In Peterson, S.J. & Bredow, T.S. (Eds.), *Middle range theories: Application to nursing research*, (pp. 125-147). *Lippincott, Williams & Wilkins*: Philadelphia, PA.
- Wier, M. & Calverley, C. (2002). Market potential for organic food in Europe, *British Food Journal*, 104(1), 27-35.

- Willer, H. & Lernoud, J. (2015). The world of organic agriculture: Statistics and Emerging Trends 2015. Research Institute of Organic Agriculture (FiBL): Frick, Switzerland.
- Williams, P. & Soutar, G. N. (2000). Dimensions of customer value and the tourism experience: An exploratory study. Paper presented at Australian and New Zealand Marketing Academy Conference 2000, Queensland, 28, 1415-1421.
- Williams, P. & Soutar, G. N. (2009). Value, satisfaction and behavioural intentions in an adventure tourism context. *Annals of Tourism Research*, 36(3), 413-438.
- Williams, P. R. D. & Hammit, J. K. (2001). Perceived risk of conventional and organic produce: Pesticides, pathogens and natural toxins. *Risk Analysis*, 21(2), 319-330.
- Wong, K. K-K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24, Technical Note 1. Retrieved from <http://marketing-bulletin.massey.ac.nz/>.
- Woodruff, R.B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139-153.
- World of Organic Agriculture 2019 report (IFOAM). Retrieved from <https://www.ifoam.bio/en/news/2019/02/13/world-organic-agriculture-2019>.
- Xia, Y., Ahmed, Z. U., Ghingold, M., Hwa, N.K., Li, T.W. & Ying, W.T.C. (2006). Spousal influence in Singaporean family purchase decision-making process: A cross-cultural comparison. *Asia Pacific Journal of Marketing and Logistics*, 18(3), 201–222. Retrieved from <http://www.emeraldinsight.com/doi/abs/10.1108/13555850610675661>.
- Xiao, G. & Kim, J-O. (2009). The investigation of Chinese consumer values, consumption values, life satisfaction, and consumption behaviors. *Psychology & Marketing*, New York, NY : Wiley.
- Yin, S. Linhai, W. Lili, D. and Chena M. (2010). Consumers' purchase intention of organic food in China. *Journal of the Science of Food and Agriculture*, 90, 1361–1367.
- Yip, L., Janssen M. (2015). How do consumers perceive organic food from different geographic origins? Evidence from Hong Kong and Shanghai. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 116(1), 71–84.
- Yogananda, A. P. Y. & Nair, P. B. (2019). Green food product purchase intention: Factors influencing Malaysian consumers. *Pertanika Journal of Social Science and Humanities*. 27(2), 1131-1144.
- Yoshida, M., James, J.D. & Cronin J.J.J. (2013). Value creation: assessing the relationships between quality, consumption value and behavioural intentions at sporting events. *International Journal of Sports Marketing & Sponsorship*, 14(2), 126-148.

- Young, W., Hwang, K., McDonald, S. & Oates, C.J. (2010). Sustainable consumption: Green consumer behaviour when purchasing products. *Sustainable Development*, 18(1), 20-31.
- Yu, T-K., Lin, F-Y., Kao, K-Y. & Yu, T-Y. (2019). Encouraging environmental commitment to sustainability: An empirical study of environmental connectedness theory to undergraduate students. *Sustainability*, 11, 342.
- Zahra, Z. & Mirza, A. A. (2017). Role of image value and functional value in developing the purchase intentions and WOM marketing. *European Journal of Business and Management*, 9(7).
- Zailani, S., Iranmanesh, M., Hyun, S. S. & Ali, M. H. (2019). Applying the theory of consumption values to explain drivers' willingness to pay for biofuels. *Sustainability*, 11, 668-681.
- Zakowska-Biemans, S. (2007). Consumers and consumption of organic food in Central and Eastern European new member states of the European Union. *3th QLIF Congress: Improving Sustainability in Organic and Low Input Food Production Systems*, 20-23 March, University of Hohenheim, Germany. Retrieved from <https://orgprints.org/9806/>.
- Zanoli, R. & Naspetti, S. (2002). Consumer motivations in the purchase of organic food. *British Food Journal*, 104(8/9), 37-39.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A Means-End model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.
- Zhang, Y. Y., Zhang, M. J. & Wang, Q. (2015). The Research on purchasing intention of fresh agricultural products under O2O mode based on the framework of perceived benefits-perceived risk. *China Soft Science*, 24(6), 128-138.
- Zhou, M. (2013). A Multidimensional Analysis of Public Environmental Concern in Canada. *Canadian Preview of Sociology*, 50(4), 453-481.
- Zia-ur-Rehman, Muhammad Khyzer Bin Dost (2013). Conceptualizing Green Purchase Intention in Emerging Markets: An Empirical Analysis on Pakistan. The 2013 WEI International Academic Conference Proceedings, Istanbul, Turkey.
- Zikmund, W. G. (2003). *Business Research Methods*. Mason, Ohio: Thomson/South-Western.
- Zikmund, W.G., Babin, B.J., Carr, J.C., & Griffin, M. (2009). *Business Research Methods* (8th Ed.). *Cengage Learning*: New York.
- Zikmund, W.G., Babin, B.J., Carr, J.C., dan Griffin, M. (2010). *Business Research Methods* (8th Ed.). *Cengage Learning*: Australia, South-Western.
- Zuraidah, R., Nor Hashima, H., Wan Kalthom, Y. & Siti Aishah, M. (2012). Environmentally conscious behaviour among Malaysian consumers: An empirical analysis. *Jurnal Pengurusan*, 35, 111-121.

Zylstra, M. J., Knight, A. T., Esler, K. J. & Le Grange, L. L. (2014). Connectedness as a core conservation concern: An interdisciplinary review of theory and a call for practice. *Springer Science Reversion*. 2014, 2, 119–143.



**APPENDIX A**  
**QUESTIONNAIRE**



**Survey Questionnaires**

Dear Sir/Madam,

**DETERMINANTS OF MALAYSIAN CONSUMERS' PROPENSITY TO PURCHASE ORGANIC FOOD**

---

I refer to the above.

I am conducting a study on above topic. This study is undertaken to fulfil the partial requirement of the academic program leading to a Doctor of Business Administration (DBA) at Universiti Utara Malaysia (UUM). By taking about twenty minutes of your valuable time, you are providing information that is pertinent to this research.

The general purpose of this study is to understand consumers' propensity to purchase organic food in Malaysia. Strict confidentiality is assured. The identity related to the code reflected on the instrument is known only to the researcher and will not be communicated in any form time.

Thank you very much for your time and cooperation. I greatly appreciate your contributions.

Yours sincerely  
**Khairul Nizam Mahmud**  
**99234**  
**Universiti Utara Malaysia**  
**011-3229 2847**

**Organic food definition:**

**Organic food** is fresh or processed food produced by organic farming methods. Organic food is grown without the use of synthetic chemicals, such as human-made pesticides and fertilizers, and does not contain genetically modified organisms (GMOs). Organic food include fresh produce, meats, and dairy products as well as processed food such as crackers, drinks, and frozen meals.

**Part 1: Demographic Profile**

**Please answer/tick (√) only the box applicable.**

1. Gender:  Male  
 Female
2. Race:  Malay  
 Chinese  
 Indian  
 Others
3. Age:  21 - 25 years old  
 26 - 35 years old  
 36 - 45 years old  
 46 years old and above
4. Marital Status:  Single  
 Married  
 Divorced / Widowed
5. Education Level:  Secondary  
 Diploma  
 Bachelor's degree  
 Master's degree  
 Doctoral / PhD degree
6. Occupation Position:  Private Sector  
 Government Sector  
 Self-Employed  
 Retired / Pensioner

Other \_\_\_\_\_

7. Monthly Household Income:
- Less than RM 3,000
  - RM 3,001 to RM 5,000
  - RM 5,001 to RM 10,000
  - Above RM 10,000

8. Which Brand do you prefer for organic food?

- Local Brand** (Please answer question 9)
- Imported Brand** (Please answer question 10)

9. Why do you choose **Local Brand**?

- I am more nationalistic thus I buy local brand.
- I am supporting local organic food industry.
- Local brand is fresh and widely available in the country.
- Local brand cheaper than the imported brand.
- Local brand saves money and help local economy.
- Other \_\_\_\_\_

10. Why do you choose **Imported Brand**?

- Imported brand more prestige, value and quality.
- I doubt to buy locally-made products.
- I trust imported brand than local brand because of the quality.
- The exclusivity of certain products.
- Other \_\_\_\_\_

## Part 2: Propensity to Purchase Organic Food

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

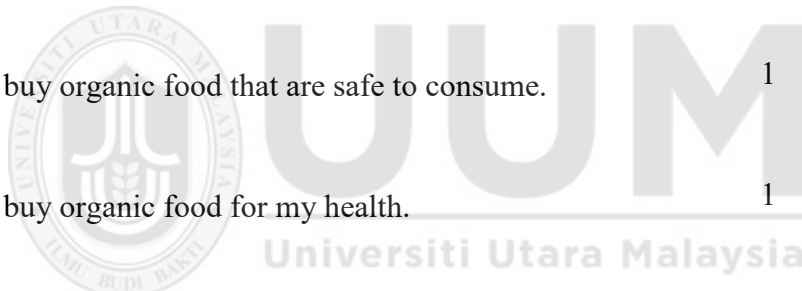
1. I would buy organic food in near future. 1 2 3 4 5
2. I plan to buy organic food in regular basis. 1 2 3 4 5
3. I intend to buy organic food for my long term health benefits. 1 2 3 4 5
4. I intend to buy organic food because they are more concern about food safety. 1 2 3 4 5
5. I intend to buy organic food because they are more environmentally friendly. 1 2 3 4 5
6. I intend to buy organic food because I am concerned about animal welfare. 1 2 3 4 5

### Part 3: Actual Purchase Behaviour

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

1. I often buy organic food. 1 2 3 4 5
2. I often buy organic food on regular basis. 1 2 3 4 5
3. I often buy organic food because they are more environmentally friendly. 1 2 3 4 5
4. I often buy organic food that are against animal testing. 1 2 3 4 5
5. I often buy organic food that are safe to consume. 1 2 3 4 5
6. I often buy organic food for my health. 1 2 3 4 5
7. I often buy organic food even if they are more expensive than conventional food. 1 2 3 4 5
8. I prefer buying organic food than buying conventional food. 1 2 3 4 5

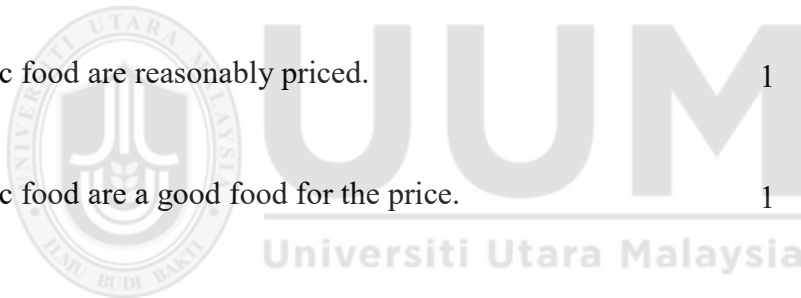


#### Part 4: Functional Value

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

1. Organic food have consistent quality. 1 2 3 4 5
2. Organic food are well made/produced. 1 2 3 4 5
3. Organic food have an acceptable standard of quality. 1 2 3 4 5
4. Organic food would perform consistently. 1 2 3 4 5
5. Organic food are reasonably priced. 1 2 3 4 5
6. Organic food are a good food for the price. 1 2 3 4 5

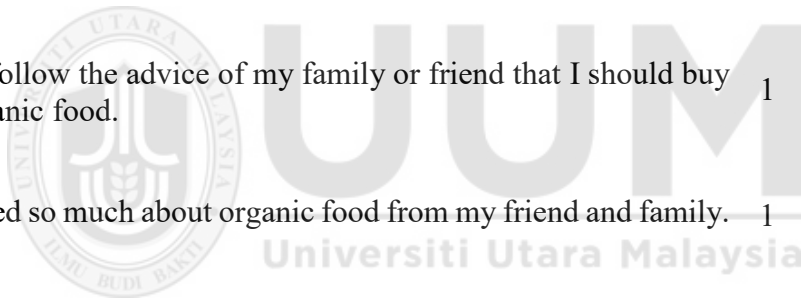


**Part 5: Social Value**

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

1. Buying organic food would help me to feel acceptable. 1 2 3 4 5
2. Buying organic food would improve the way that I am perceived. 1 2 3 4 5
3. Buying organic food would make a good impression on other people. 1 2 3 4 5
4. Buying organic food would give its owner social approval. 1 2 3 4 5
5. I will follow the advice of my family or friend that I should buy an organic food. 1 2 3 4 5
6. I learned so much about organic food from my friend and family. 1 2 3 4 5

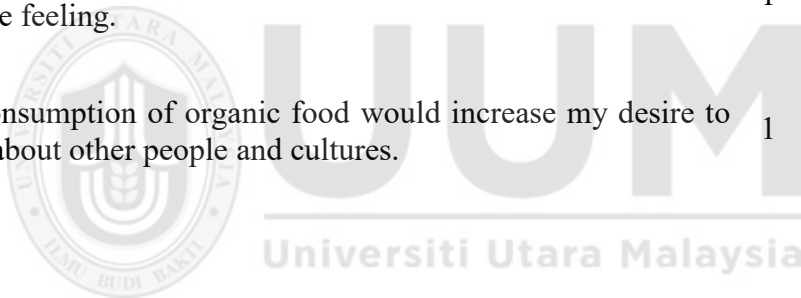


## Part 6: Emotional Value

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

1. Buying organic food instead of conventional food would make me feel like I am personally contributing to something better. 1 2 3 4 5
2. Buying organic food instead of the conventional food would make me feel ethically right to protect our environment. 1 2 3 4 5
3. Buying organic food instead of the conventional food would make me feel like a better person. 1 2 3 4 5
4. Buying organic food instead of conventional food would give me positive feeling. 1 2 3 4 5
5. The consumption of organic food would increase my desire to know about other people and cultures. 1 2 3 4 5



## Part 7: Novelty Value

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

1. I would buy organic food because I always have high curiosity to buy something new. 1 2 3 4 5
2. I like to search for the new and different of organic food. 1 2 3 4 5
3. I would seek out the location that sells organic food to support local organic food industry. 1 2 3 4 5
4. I will acquire information about organic food that could reduce environmental harm. 1 2 3 4 5



**UUM**  
Universiti Utara Malaysia

**Part 8: Conditional Value**

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

1. Organic food is always easily available for purchase. 1 2 3 4 5
  
2. Shopping at supermarket would increase my chances of finding rare or limited items of organic food. 1 2 3 4 5
  
3. I feel safe consuming organic food. 1 2 3 4 5

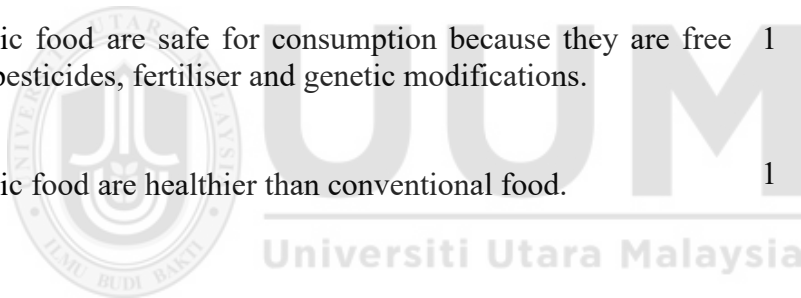


**Part 9: Monetary Value**

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

1. I am consuming organic food to avoid consuming conventional processed food. 1 2 3 4 5
2. Organic food are more nutritious than conventional. 1 2 3 4 5
3. Organic food is better in quality that promotes my health 1 2 3 4 5
4. Organic food are safe for consumption because they are free from pesticides, fertiliser and genetic modifications. 1 2 3 4 5
5. Organic food are healthier than conventional food. 1 2 3 4 5



## Part 10: Environmental Concern

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

1. I made a special effort to buy an organic product to save the environment. 1 2 3 4 5
2. I have switched to organic product for ecological reasons. 1 2 3 4 5
3. When I have a choice between two equal products, I will buy the one that less harmful to other and the environment. 1 2 3 4 5
4. I will or have voted for a candidate in an election at least in part because he/she in favour of strong environmental protection. 1 2 3 4 5
5. I have avoided buying product that had potentially harmful environmental effects. 1 2 3 4 5
6. I have read newsletter, magazines or other publications written by environmental groups. 1 2 3 4 5
7. I have signed a petition in support of protecting the environment. 1 2 3 4 5
8. I have boycott or avoided from buying the products from a company that is harming the environment. 1 2 3 4 5
9. I have/will recycle the product that I buy to save the environment. 1 2 3 4 5

## Part 11: Brand Image

Please indicate the extent of your opinion with the statements describing the statements by “circling” the corresponding box using the following scales:

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1	2	3	4	5

1. I feel more comfortable buying organic food from a brand that has a green image. 1 2 3 4 5
2. I am aware that a strong brand image gives me confidence in organic food. 1 2 3 4 5
3. An innovative and new image of eco-friendly food created by some companies tends to attract consumers in going green. 1 2 3 4 5
4. I like brand or organic food than conventional food. 1 2 3 4 5
5. Brand is very important to define my choice of organic food. 1 2 3 4 5
6. I will buy well-known brand of organic food that possesses a positive symbolic meaning 1 2 3 4 5

Thank you

## APPENDIX B

### CONSUMER PURCHASE BEHAVIOUR FROM 2010-2019

No	Author / Year	Industry / Country	IV	MV	DV	Findings
1	Song & Liew (2019)	Organic (Malaysia)	Food safety, Health consciousness, Affordability, Environment concern	Purchase Intention (Mediator)	Purchase Behaviour	The findings reported that food safety concern, health consciousness, and environment concern have significantly influenced purchase intentions of organic food. Purchase intentions is positively correlated to the actual purchase of organic food. There was no significant effect of affordability on purchase intentions. Based on the findings, strategies to enhance the quality, long-term health benefits, environment friendliness, and reduce in pricing of organic food should be undertaken.
2	Alam et al. (2019)	Retail Product (Malaysia)	Attitude, Subjective norm, Behavioral control, Knowledge, Price	-	Intention to Buy	The results of the multiple regression analysis show that attitude, subjective norm, perceived behavioural control, knowledge and reasonable price have significant and positive effect on energyefficient household product buying intention among residences in Malaysia
3	Victor et al. (2018)	Information Technology (India)	shopping experience, awareness about dynamic pricing, privacy concerns, buying strategy, fair price perceptions, reprisal intentions and self-protection intentions	-	Purchase Decision	The results of the exploratory factor analysis identified shopping experience, awareness about dynamic pricing, privacy concerns, buying strategy, fair price perceptions, reprisal intentions and self-protection intentions as factors which could have a significant influence on consumer behavior and their prospective purchase decisions.
4	Chen et al. (2018)	Green product (Belt & Road country)	Collectivism, Individualism, Objective knowledge, Subjective knowledge, Environmental awareness, Governments' role, Media exposure, Social influence, Perceived monetary value	Environmental attitude (mediator), Product attitude (mediator)	Purchase Intention	Environmental attitude, product attitude, social influence, and perceived monetary value positively affected purchase intention; among these attributes, product attitude most substantially affected purchase intention. Cognitive values (collective and individual) significantly and positively affected environmental and product attitudes. Regarding individual environmental literacy, objective knowledge did not significantly affect environmental attitude, whereas subjective knowledge positively and significantly affected product attitude. In addition, both environmental awareness and government role (extrinsic motivating attributes) significantly and positively affected environmental and product attitudes for sustainable consumption. Media exposure also exerted a significant positive effect on environmental attitude.
5	Solaiman et al. (2017)	Electronic (Bangladesh)	Functional Value, Social Value, Emotional Value, Epistemic Value, Conditional Value, Corporate Value	-	Green Purchase Behaviour	Functional value, social value, Conditional value and corporate image value has positive relationship with green purchase behaviour, while epistemic value and emotional value does not.

CONSUMER PURCHASE BEHAVIOUR FROM 2010-2019

No	Author / Year	Industry / Country	IV	MV	DV	Findings
6	Rehman et al. (2017)	Fashion (Pakistan)	Personal Factors, Sales Promotion	-	Consumer Buying Behaviour	Personal factors have positive and statistically significant effects on the buying behaviour. Likewise, sales promotion has positive but statistically insignificant effects on buying behaviour of consumers in the fashion clothing industry of Pakistan.
7	Asshidin, Abidin & Borhan (2016)	Retails (Malaysia)	Perceived Quality, Emotional Value	-	Consumer Buying Behaviour	There are significant relationship between perceived qualities, emotional value on consumer buying behaviour.
8	Lautiainen (2015)	Retail (Finland)	Social Factors, Personal Factors, Psychological Factors	-	Consumer Buying Behaviour	There are a relationship between social, personal and psychological factors and the buying decision-making process in coffee brand selection, but it was not credible.
9	Bashir, Mehboob & Bhatti (2015)	Retail (Pakistan)	Trust, Time, Product Variety, Convenience, Privacy	-	Online Buying Behaviour	Trust, time, product variety and convenience is affecting the online buying behaviour. While privacy does not.
10	Ghosh (2015)	E-Marketing (India)	Attitude, Product Acceptance	-	Internet Buying Behaviour	Attitude and product acceptance are positive associate to internet buying.
11	Mai & Vu (2015)	Retail (Vietnam)	Meaning and Form, Emotional Traits, Cultural Symbols, Image, Advertisement, Symbolic, Self-Identity	Perceived Quality, Brand Recognition, Brand Recall	Consumer Buying Behaviour	Emotional traits, image, advertisement, symbolic, perceived quality and brand recognition were positively associated with consumers' buying behaviour.
12	Khan, Liang & Shahzad (2015)	E-Commerce (China)	Perceived Benefit: Price, Convenience, Product info, Return policy, Delivery Perceived Risk: Product, Financial. Delivery	Satisfaction (Mediator)	Consumer Re-Purchase Behaviour	Perceived benefit and perceived risk are significant related to re-purchase behaviour.
13	Thanasuta (2015)	Retails (Thailand)	Price, Quality, Brand, Value, Risk perception, Product categories	-	Consumer Buying Behaviour	Price, value and brand has significant relationship between consumer buying behaviour. While quality, risk perception and product categories is insignificant relationship.

## CONSUMER PURCHASE BEHAVIOUR FROM 2010-2019

No	Author / Year	Industry / Country	IV	MV	DV	Findings
14	Dumaz (2014)	Retails (Turkey)	Motivation, Perception, Learning, Belief and Attitude	-	Consumer Buying Behaviour	Motivation, perception, learning, belief and attitude are significantly related to buying behaviour.
15	Jain, Goswami & Bhutan (2014)	Retails (India)	Perceived risk, Perceived enjoyment, Perceived usefulness, Perceived ease of use	-	Online Shopping Buying Behaviour	Perceived risk, perceived enjoyment, perceived ease of use and perceived usefulness are affecting the online shopping behaviour of consumer.
16	Tran, Balas, Shao, Dubinsky & Jackson (2014)	Airline (USA)	Brand Differential	Motivational to conform (Mediator)	Consumer Buying Behaviour	Importance of relationship between brand differential on purchase decision and also a direct and positive impact of mediated by consumers' motivation to conform towards purchase decision.
17	Ahmed, Parmar & Amin (2014)	Education (Pakistan)	Packaging colour, Packaging material, Design of wrapper, Innovation	-	Consumer Buying Behaviour	Packaging elements such as its colour, material, design of wrapper and innovation are the important factors related on purchase decision.
18	Sata (2013)	Telecommunication (Ethiopia)	Price, Social factors, Durability, Brand name, Product features, After sales	-	Consumer Buying Behaviour	Consumer's value price, and then followed by the product features of the mobile phone associated with purchase decision.
19	Rahman & Dost (2013)	Education (Pakistan)	Environmental concern, Social value, Self-Image, Man Nature oriented	-	Consumer Green Buying Behaviour	Social value, self-image and man nature oriented associated with purchase decision, while environmental concern does not.
20	Zhang & Kim (2013)	Fashion (China)	Brand consciousness, materialism, Social comparison, Fashion innovativeness, Fashion involvement	Attitude (Mediator)	Consumer Intention Buying Behaviour	Brand consciousness, social comparison and fashion innovativeness have significant impact on both attitude and consumer intention buying behaviour. While the Materialism and Fashion involvement are not significant related.
21	Jaafar, Pan & Mohamed (2013)	Retails (Malaysia)	Intrinsic: Perceived quality, perceived risk, Perceived value, Extrinsic: Perceived price, Advertisement, Packaging, Store image, Consumer attitude: Trust, Familiarity, Economic	-	Consumer Purchasing Behaviour	All the factors are significant related to purchase decision but the most significant factor that influencing consumers' purchasing behaviour on private label food products is 'consumers' attitude' and 'perceived price'.

CONSUMER PURCHASE BEHAVIOUR FROM 2010-2019

No	Author / Year	Industry / Country	IV	MV	DV	Findings
22	Furaji, Latuszynska & Wawrzyniak (2012)	Electrical appliances (Iraq)	Product, Price, Promotion, Place	Culture, Social, Personal, Psychological (Mediator)	Consumer Purchasing Behaviour	All independent variables are weakly associated. However, social factors, physical and marketing mix elements are strongly associated with buying behaviour.
23	Musyoki (2012)	Automotive (Kenya)	Perceived price, Perceived quality, Perceived brand, Cultural factors, Image, Level of income	-	Consumer Buying Behaviour	All independent variables are associated with consumer buying behaviour.
24	Kekce (2012)	Retails (USA)	Consumption Values	-	-	Consumption values are antecedent's consumers' purchase decisions.
25	Kim, Forsythe, Gu & Moon (2012)	Fashion (China & South Korea)	Self-Direct values, Social affiliation values	Experiential needs, Social needs, Functional needs (Mediator)	Consumer Buying Behaviour	Positive relationship between both values on buying behaviour.
26	Huong (2012)	Retails (Vietnam)	Trust, Price perception, Appearance	-	Consumer Buying Behaviour	Trust and Price has significant impact on consumer buying behaviour. While appearance does not have significant relationship.
27	Wahyuningsih (2011)	Insurance (Australia)	Customer value: Passive, Rational active, Relational dependent	Satisfaction (Mediator)	Consumer Behavioural Intention	There are no significant relationship between value, satisfaction and consumer behavioural intention.
28	Hung, Chen, Peng, Hackley, Tiwaskul & Tiwaskul & Chou (2011)	Retails (Taiwan)	Social value, Trait of vanity, Luxury Brand Perception: Functional value, Experiential value, Symbolic value	Perception (Moderator)	Consumer Purchase Decision	Social value and most of the factors of luxury brand perception positively support to purchase decision except symbolic value. There are weak support towards purchase decision by trait of vanity and moderating effect on perception.
29	Haque, Rahman & Khatibi (2010)	Information Technology (Malaysia)	Consumer morality, Social values, Moral judgement	-	Consumer Buying Behaviour	There are positive relationship between consumer moralities, social value, and consumer moral judgment towards consumer buying behaviour.

## APPENDIX C

### SUMMARY OF RESEARCH FOR ORGANIC PRODUCT GLOBALLY FROM YEAR 2012 TO 2020

No	Author	Year	Choice of Respondent	Country	Independent Variable (IV)	Mediator/Moderator Variable (MV)	Dependent Variable (DV)	Consequences Variable (CV)	Underpinning Theory Used	Findings
1	Ashraf	2020	335 respondents in Dhaka	Bangladesh	Self-Efficacy,	Attitude, Subjective norms, External control (mediator)	Bounded Rational Plan	-	Bounded Rational Theory	Findings show that attitude, subjective norms and perceived social support have direct effects on consumers' intent or plan as well as mediating roles in the link between self-efficacy and organic food purchase plan.
2	Li et al.	2019	1,750 respondent in Chinese Market	China	Subjective norms, Perceived control, Income, Attitude, Trustworthiness, Identity expressiveness	Purchase Attitude	Purchase Behaviour	-	Theory of Planned Behaviour	The finding found out that the influence of subjective norms on purchase intention is verified to be completely mediated by purchase attitude, suggesting that up to now, the role of social norms may have been simplified, and even underestimated by marketing researchers. Additionally, for the first time, identity expressiveness is confirmed to play a minor but significant role in purchase intention. Perceived trustworthiness is also confirmed to be the important predictor of purchase intention. Finally, household income is not only the second most important predictor of purchase intention, but it is also the most important predictor of actual purchase.
3	Chiciudem et al.	2019	568 respondent in North West	Romania	Barrier, Consumer perception	-	Purchase Intention	-	Theory of Planned Behaviour	The results indicated that the most important barrier in consumption was price, followed by perishability and availability. High prices, mistrust, and lack of proper promotion for organic food are the influencing factors for organic food.
4	Chattopadhyay & Khanzode	2019	105 respondents of Bengaluru	India	Demographic Factors	-	Consumption Awareness	-	Theory of Planned Behaviour	It is concluded that the consumption has increased lately although more awareness should be created to make the consumption more popular among consumers
5	Pestek et al.	2018	202 of online survey respondents in southern region	Bosnia & Herzegovina	Organic Food Knowledge, Subjective Norm, Personal Norm, Organic Food Scepticism, Attitudes, Consumer Innovativeness	-	Segmentation of Organic Food Buyer	-	Theory of Planned Behaviour and Norm-Activation Model	The authors analysed the heterogeneity of organic food buyers with latent class model. Four distinct latent classes (i.e. segments) of organic food buyers were identified. Those segm were named as enthusiastsocial-seekers, enthusiastic moralists, hostile seldom shoppers, and hostile heavy shoppers.
6	Konuk	2018	274 pregnen women in Istanbul	Turkey	Health Consciousness, Environmental Concern, Consumer Innovativeness	-	1. Purchase Intentions Toward Organic Food, 2. Willingness to Pay a Premium	-	Theory of Reasoned Action	Results indicated positive effects of health consciousness, environmental concern and customer innovativeness on both purchase intentions and willingness to pay a premium toward organic food. Specifically, it was innovativeness on both purchase intentions and willingness to pay a premium toward organic food. Specifically, it was found that health consciousness had the greatest influence on purchase intentions and willingness to pay a premium.
7	Hani, Pap & Stanic	2018	411 primary household shoppers	Croatia	Behavioural Belief, Uniqueness-Seeking Lifestyle, Perceived Behavioural Control	Attitudes, Subjective Norm	Intention to Purchase	1. Actual Purchase, 2. Willingness to Pay, 3. Commitment	Theory of Planned Behaviour	All proposed constructs were shown to have a significant positive influence on intention, and intention had a significant positive influence on actual behaviour, but also the indirect and mediation effects of the variables within the model, which explain 87 per cent of the variance in intention and 21% of the variance in actual behaviour.

## SUMMARY OF RESEARCH FOR ORGANIC PRODUCT GLOBALLY FROM YEAR 2012 TO 2020

No	Author	Year	Choice of Respondent	Country	Independent Variable (IV)	Mediator/Moderator Variable (MV)	Dependent Variable (DV)	Consequences Variable (CV)	Underpinning Theory Used	Findings
8	Krishnakumara & Niranjana	2017	240 respondents in Tirupur district of Tamil Nadu	India	Awareness, Knowledge, Psychological Factors	-	Consumers Buying Behaviour of Organic Product	-	Theory of Planned Behaviour	The study has found the association between demographic characters and awareness level about organic food products. The study also has revealed that factors like gender, family income, education and occupational status differentiate consumers of organic and non-organic food products. Besides, psychological factors such as attitude, perception, belief and intention have shown positive results for the organic food consumers
9	Oroian et al.	2017	568 respondents in Romania	Romania	Natural and Sustainable Consumption, Extrinsic Attributes, Health Concern, Sensory Appeal, Weight Concern, Social Status	-	Attitude Towards Organic Product	-	Theory of Reasoned Action	Findings indicated that health concerns, sensory appeal, natural and sustainable consumption and weight concerns are the main reasons for consuming organic food products.
10	Mehmedovic et al.	2017	218 online access panel provider	Developing European Country	Health consciousness, Perceived Intrinsic Quality, Perceived Extrinsic Quality	Life Equilibrium	Purchase Intention	-	Theory of Reasoned Action	The results obtained from this study show that the perceived quality associated with the intrinsic attributes of organic food mediates a positive influence of life equilibrium on consumers' organic food purchase intentions. Also significant relationship on life equilibrium mediates the effects of health consciousness on the evaluation of intrinsic and extrinsic food quality attributes.
11	Persaud & Schillo	2017	988 Canadian respondents	Canada	Social Identity, Social Influence	Perceived Value, Consumer Innovative	Purchase Intent	-	Theory of Reasoned Action	The results show that the two social dimensions which is social identity and social influence are influence purchase intention and the perceived value of organic products partially mediates these relationships. Furthermore, the personal characteristic (consumer innovativeness) moderates these relationships.
12	Hsu, Chang & Lin	2016	252 respondent	Taiwan	Natural Content, Health Consciousness, Food Safety Concern, Subjective Knowledge	Attitude	Purchase Intention	-	Theory of Reasoned Action	The results show that food safety concern and subjective knowledge have a significantly positive impact on attitudes towards organic food and purchase intentions, and natural content has a significantly positive effect on attitudes towards organic food. Health consciousness and attitudes towards organic food also have a significantly positive effect on purchase intentions. Subjective knowledge of organic food, health consciousness, and food safety concern are important factors impacting organic food purchase intentions.
13	Bailey, Mishra & Tianyi	2016	284 Indian consumers	India	Public Relation model: Green Consumption Values, Advertising Model: Green Consumption Values	Green Trust, Green Brand Attitude, Attitude towards Green, Advertising	Green Brand Support Intention, Green Brand Purchase Intention, Green Brand Attitude	-	Consumption Values	The results show that green can enhance understanding of consumers' green attitudes and intentions. Green consumption values have an impact on how Indian consumers respond to advertising and public relations stimuli, as green influences perceptions of green brand trust, attitudes toward green marketing communications and green brand support and purchase intentions.
14	Irianto	2015	200 respondents in Surakarta City	Indonesia	Health Consciousness, Environmental Consciousness, Product Price, Subjective Norm	v	Purchasing Intention Organic Food	-	Theory of Planned Behaviour	Health consciousness and environmental consciousness were the determinants of an individual's positive attitude to buy organic food. The effect of gender difference on attitude, intention, and behaviour of purchasing organic food confirmed the previous studies descriptively purchasing organic food confirmed the previous studies descriptively

SUMMARY OF RESEARCH FOR ORGANIC PRODUCT GLOBALLY FROM YEAR 2012 TO 2020

No	Author	Year	Choice of Respondent	Country	Independent Variable (IV)	Mediator/Moderator Variable (MV)	Dependent Variable (DV)	Consequences Variable (CV)	Underpinning Theory Used	Findings
15	Braga Juniors et al.	2015	811 respondents in Sao Paulo	Brazil	Environment Concern		Purchase Intention		Declare Purchase	There is a possibility the consumer does not realize the importance of changing the habit of consumption, more fixed in their routine to buy and past experience you have that attitude strengthens the fact suffer a low influence his behavior.
16	Liang	2014	753 respondent	Taiwan	Attitudes, Subjective Norms, Perceived Control		Purchase Intention		Theory of Planned Behaviour	Attitudes toward purchasing organic food online had the greatest positive influence on purchase intentions, cognitive control and, subjective norms. Populations with different FRLs were divided into traditional food, uninvolved food, and enthusiastic food shoppers, and these all also showed significant differences with respect to the TPB model, their online organic food.
17	Akbar et al.	2014	160 respondents Lahore, Karachi & Islamabad	Pakistan	Green Purchase Attitude, Green Purchase Value, Green Perceived value, Green Perceived Trust, Ecological Knowledge		Green Purchase Intention		Theory of Planned Behaviour	Results of study shown a significant relationship of green purchase attitude, green perceived value, green trust and ecological knowledge on green purchase intention. These factors influence the green purchase intention
18	Hung, Lin & Chen	2013	228 members of health community	Taiwan	Structural Capital, Relational Capital, Cognitive Capital	Knowledge Donating, Knowledge Collecting	Purchase Intention	Purchase	Theory of Planned Behaviour	Relation capital has significantly effect on both knowledge donating behaviour and knowledge collecting behaviour. Cognitive capital also has a significantly effect on knowledge donating behaviour and knowledge collecting behaviour. In addition, knowledge sharing is in relation to organic consumption behaviour, knowledge collecting behaviour displays a positive positive effect on consumer purchase intention. The results also indicate that member's purchase intention related to organic food positively and significantly affect their actual purchasing behaviour. Nevertheless, structural capital is not significantly associated with knowledge donating behaviour and knowledge collecting behavior.
19	Chen	2012	964 respondent in Shanghai, Beijing, Chengdu and Shenzhen	China	Product, Regulatory, Lifestyle, Ethnocentrism	Belief, Attitude	Purchase Intention	Pre-Purchase Intention / Actual Purchase	Consumer Decision Process, Theory of Planned Behaviour	The findings of this study have revealed that the influencing stage's product related regulatory and lifestyle constructs directly or indirectly influence urban Chinese consumers' beliefs/attitudes, pre-purchase evaluation and behavioural/purchase and behavioural/purchase intention. Furthermore, The cognitive/affective stage of which beliefs and attitudes were the main component was found to be a significant predictor of pre-purchase The evaluation of alternatives stage, pre-purchase evaluation was found to have a highly significant effect on behavioural/purchase intentions.

## APPENDIX D

### SUMMARY OF PREVIOUS RESEARCH FOR ORGANIC PRODUCT IN MALAYSIA FROM YEAR 2012 TO 2020

No	Author	Year	IV	MV	DV	Consequences Variable	Underpinning Theory Used	Findings
1	Phang & Liew	2019	Attitude, Subjective norm, Perceived behavioral control, Self-Identity, Awareness of consequences, Ascription of responsibility	Personal Norm	Purchase Intention of Organic Food	-	Theory of Planned Behaviour	The result indicated that purchases of grocery organic products are driven by both rational and emotional motives. There were significant impacts of perceived behavioural control, attitude, and personal norm on purchase intention of organic food. Interestingly, the results show that Malaysian shoppers did not use organic food as a mean to show socially desirable behaviours, but rather as a personal norm in which they were aware of the consequences and felt responsibilities to these negative consequences.
2	Song & Liew	2019	Food safety, Health consciousness, Affordability, Environment concern	Purchase Intention	Actual Purchase	-	Theory of Planned Behaviour	The findings reported that food safety concern, health consciousness, and environment concern have significantly influenced purchase intentions of organic food. Purchase intentions is positively correlated to the actual purchase of organic food. There was no significant effect of affordability on purchase intentions. Based on the findings, strategies to enhance the quality, long-term health benefits, environment friendliness, and reduce in pricing of organic food should be undertaken.
3	Zailani et al.	2019	Functional value, Social value, Emotional value, Conditional value, Epistemic value	-	Willingness to pay for Biofuels	-	Theory of Consumption Values	The results of the analysis revealed that functional values, specific condition, emotional values and novelty seeking were among the main factors that influence drivers' willingness to pay for biofuels. Social values were shown to not be a significant factor. The results of the study contribute to the literature by testing the relationship between consumption values and willingness to pay for biofuels. The information provided in the present research might be beneficial for policy makers in modifying tactics and strategies towards the successful promotion of the usage of biofuels in developing countries.
4	Ahmad & Omar	2018	Appearance consciousness, Environment consciousness, Health consciousness Functional value, Experiential value, Symbolic value	-	Repurchase intention	-	Theory of Consumption Values	Environment consciousness, health consciousness and functional value has significant relation on purchasing organic beauty product. However, appearance consciousness, experiential value and symbolic value does not support the relationship.
5	Iranmanesh, Jayaraman, Zailani & Ghadiri	2017	Perceived savings, Perceived quality, Perceived self, Expression value, Perceived convenience	Deal Proneness (Moderator)	Intention to purchase organic product	-	Theory of Reasoned Action	The results showed that perceived savings, self-expression value, and convenience positively affected consumers' intention to purchase grocery products under Volume Discounts. Deal proneness negatively moderated the relationship between perceived quality, innovation, and consumers' intention to purchase under Volume Discounts.
6	Song	2017	Past experience, Health consciousness, Personal values	Attitude	Purchase organic product	-	Theory of Planned Behaviour	The findings showed that all four hypotheses were accepted. Health consciousness had the greatest positive influence on consumer attitude of organic food, followed by past experience and personal values. Purchase of organic food products was significantly affected by consumer attitude of the products.

SUMMARY OF PREVIOUS RESEARCH FOR ORGANIC PRODUCT IN MALAYSIA FROM YEAR 2012 TO 2020

No	Author	Year	IV	MV	DV	Consequences Variable	Underpinning Theory Used	Findings
7	Omar, Nazri, Osman & Ahmad	2016	Gender, Age, Level of income, Level of education, Presence of children in the household	-	Intention to purchase organic product	-	Theory of Planned Behaviour	The findings revealed that, gender, age, level of education did have significant impacts on the consumer intention to buy organic food. These findings will consumer behaviour regarding organic food consumption and the appeal to those interested in consumer behaviour regarding organic food consumption and the continued development of Malaysia's organic food industry.
8	Hossain & Lim	2016	Knowledge, Health Consciousness, vironmental Concern, Price, Availability, Government support policy, Perceived beliefs & attitudes	-	Consumer behaviour towards organic food	-	Theory of Planned Behaviour	The study found that government support and policy, perceived beliefs and attitudes, knowledge and availability have a significant positive relationship with consumer behavior towards organic foods. However, health consciousness, environmental concern and price do not have any significant relationship with consumer behavior towards organic foods.
9	Siti Hasnah, Loi & Kok	2015	Environmental Concern, Health factors with food safety, Knowledge of health factors, Perceived value of health	-	Purchasing intention Consumer's towards	-	Theory of Planned Behaviour	The results of the analysis show that environmental concern, health factors, and perceived value influence consumers' purchasing intention towards organic food. Interestingly, knowledge concerning organic food is not significant in influencing the intention to purchase organic food.
10	Nezakati & Hosseinpour	2015	Attitude, Subjective norms, Perceived behavioural control	-	Intention to purchase	Green product purchasing	Theory of Planned Behaviour	The result show that there are significant relationship among the variables towards green purchase.
11	Chiew, Ismail & Ishak	2014	Health, Safety, Environmental friendly and animal welfare. Product quality	-	Intention to purchase organic food product	Actual Purchase behaviour	Theory of Planned Behaviour	Result indicated that intention to purchase organic food was significantly influenced by the consumer's perception of safety, health, environmental factors and animal welfare of the products. Also, there was no significant effect of consumers' perceived quality of organic food products on their intention to purchase the products. Actual purchase behavior of organic food products was significantly affected by the purchase intention of the food products was significantly affected by the purchase intention of the products. Significant means differences were observed in the purchase intention of organic food products according to the respondents' gender, age, income level, education level and residence area.
12	Siti Sarah, Syezreen & Nor Hashima	2014	Awareness	-	Purchase intention on organic food products	-	Theory of Planned Behaviour	results show respondents are highly aware of organic food, they find purchase organic food products for their families.
13	Chan	2013	Environmental Attitudes, Social Influence, Self Efficacy, Store Image, Roles of Salesperson	Willingness to pay more (moderator)	Purchase Intention	-	Theory of Planned Behaviour	The results revealed that environmental attitudes and self efficacy were found to be the factors that drive the purchase intention of consumers on purchasing of green personal care products. In addition, it was found that willingness of consumers to pay more on green personal care products was moderating the relationship between environmental attitudes and purchase intention.

SUMMARY OF PREVIOUS RESEARCH FOR ORGANIC PRODUCT IN MALAYSIA FROM YEAR 2012 TO 2020

No	Author	Year	IV	MV	DV	Consequences Variable	Underpinning Theory Used	Findings
14	Chia, Chow, Ong & Woon	2013	Environmental conscious, Health conscious, Perceived expensiveness, Limited availability, Labelling and certification, Social demographic	-	Consumers' willingness to pay	-	Theory of Planned Behaviour	The study revealed that all respondents are willing to pay for organic products price premium. Environmental psychology is related to explain consumer willingness to pay as well. Consumers are willing to purchase organic products because these products are pesticides-freed and chemical-freed. A strong health conscious is the one of the main determinants of willingness to pay followed by consumer perception and quality towards the organic products. The result of analysis shows that social demographic and level of knowledge could not explain the willingness to pay of organic product.
15	See & Mansori	2012	Acceptability, Affordability, Availability, Awareness, Consumer innovativeness	-	Intention to purchase	-	Theory of Planned Behaviour, Diffusion of Innovations Theory	The results have discovered that acceptability, affordability, and awareness main important factors that can influence consumer purchase intention.
16	Ooi, Kwek & Keoy	2012	Environmental knowledge, Environmental attitude, Government initiative, Peer pressure	-	Green purchase intention	-	Theory of Planned Behaviour	The results of the study indicated that environmental knowledge, environmental attitude, governmental initiative and peer pressure have significant influences on green purchase intention of Malaysian consumer. In contrast, eco-label failed to show significant relationship to green.
17	Voon, Kwang & Agrawal	2011	Attitude, Subjective norms,	Afford (Mediator)	Willingness to pay	Actual purchase	Theory of Planned Behaviour	Attitude and subjective norms exerted significant positive effects on willing to pay (WTP) while the effect of affordability was not significant. Attitude further impacted subjective norms and affordability, thus indicating that efforts to promote consumption growth should focus on influencing consumer attitudes.
18	Shaharudin, Pani, Mansor, Elias & Sadek	2010	Health Consciousness, Perceived value, Food safety concern, Religious factor	-	Purchase intention	-	Theory of Reasoned Action	The result has shown some differences with the previous literature which described that religious factor plays one of the most influential roles in shaping food choice in plays one of the most influential roles in shaping food choice.
19	Ahmad & Juhdi	2010	Perceived Worth, Environmental friendl, Safety health, Product information	-	Intention to purchase	-	Theory of Planned Behaviour	Result indicated that the intention to purchase organic products were heavily influenced by the perception on organic product worth of purchase and the belief on the safety and health aspect of the product.

## APPENDIX E

### SUMMARY OF RESEARCH THAT USE THEORY OF CONSUMPTION VALUES (TCV) GLOBALLY FROM 2010 TO 2020

No	Author / Year	Year	Industry / Country	IV	MV	DV	Consequences IV	Findings
1	Ural et al.	2020	Social class (Turkey)	Individualism, Collectivism, Global consumer culture	Materialism	Consumption values	-	The results indicate that materialism partially mediates the relationship between global consumer culture and consumption values besides the relationship between collectivism and consumption values. Materialism full mediates the relationship between individualism and consumption values. The results reveal that there aren't differences the direction and power of the structural model paths between middle-class group and other-class group except for indirect effects.
2	Furukawa et al.	2019	Shoes (Japan)	Functional value, Emotional value, Social value, Epistemic value.	-	Customer satisfaction, Brand commitment	-	The results show that consumption values except epistemic value have positive effects on consumer satisfaction and brand commitment. In particular, this article uncovers the moderating effect of age in social values and consumer satisfaction. Specifically, social values affect consumer satisfaction when consumers are under 39 years old. This paper also found that functional value and social value have the strongest effect on consumer satisfaction and brand commitment, respectively, compared with other values. Contravening consumption value theory, our data suggests that epistemic value impedes brand commitment
3	Qasim et al.	2019	Food (India)	Functional value (price), Functional value (quality), Social value, Conditional value, Epistemic value, Emotional value	Environmental Self-Identity	Behaviour intention to consume organic	-	The finding that conditional value, emotional value, epistemic value, and functional value quality have a significant positive influence on consumers' behavioral intention to consume organic food. Further finding that environmental self-identity significantly mediates the structural relationship between consumption values and the behavioral intention to consume organic food. The results imply that the interventions targeting environmental self-identity are a promising way to promote sustainable consumption behavior. Our findings also have important implications for the development of the organic food market based on consumption values and self-identities
4	Omigie, Zo, Rho & Ciganek	2017	Financial Services (Kenya)	Aesthetic Value, Conditional Value, Convenience Value, Monetary Value, Epistemic Value, Self-Gratification Value, Social Value	-	Customer pre-adoption choice Behaviour to use M-PESA	-	The finding showed that aesthetic, conditional, convenience, monetary, epistemic and self-gratification value are positive determinants of customer pre-adoption choice to use M-PESA mobile financial services but not social value.
5	Solaiman et al.	2017	Electronic Products (Bangladesh)	Functional Value, Social Value, Emotional Value, Epistemic Value, Conditional Value, Corporate Image Value	-	Green purchase	-	The finding showed that functional value, social value, conditional value and corporate image value are influencing consumers to get involved in green purchase behaviour of environment friendly and energy efficient electronic product. While the emotional value and epistemic value are not influencing the consumer towards green purchase behaviour.
6	Wang	2016	Retails (China)	Objective Status, Subjective Status, Materialism	Post Materialism	Functional Value, Emotional Value, Social Value	-	The results show that objective social status has a negative effect on post-materialism, whereas subjective social status has a positive effect. Social status does not seem to have a significant effect on materialism. Post-materialism also has a strong positive effect on the consumption orientations of emotional value and social value.
7	Hsieh	2016	Food (Taiwan)	Consumption Values, Perceived Value	Brand image	Purchase intention	-	The findings result shown that the consumption values and perceived value had effect on brand image. Consumption value and Perceived value had positive effect on purchase intention. While brand image did not have significant effects on purchase intention.
8	Assarut & Somkiat	2015	E-Commerce (Thailand)	Monetary Value, Convenience Value, Security Value, Social Value, Conditional Value, Epistemic Value, Emotional Value	Perceived Value	Behavioural intention	-	There are positive relationship between the consumption values and behavioural intention. Not significant relationship between consumption value and perceived value but there are strong relationship between perceived value and behavioural intention.
9	Phau et al.	2014	Tourism (Mauritius)	Consumption Values	Perceived Destination Image	Destination choice intention	-	Only emotional/epistemic, social and functional values were found to significantly influence perceived beneficial image of the tourism destination. Only social and conditional values were found to significantly influence destination choice intention.

SUMMARY OF RESEARCH THAT USE THEORY OF CONSUMPTION VALUES (TCV) GLOBALLY FROM 2010 TO 2020

No	Author / Year	Year	Industry / Country	IV	MV	DV	Consequences IV	Findings
10	Yoshida et al.	2013	Sport (Japan & USA)	Functional Quality, Technical Quality, Aesthetic Quality	Utarian Value Factor, Symbolic	Behaviour intention	Post purchase behaviour	The results indicate that three quality dimensions (functional, technical and aesthetic quality) have a significant impact on their respective value dimensions in the context of sporting events. Moreover, the construct of entertainment and community prestige have positive effects on customers' behavioural intentions.
11	Wang et al.	2013	Telecommunication (Taiwan)	Conditional Value, Functional Value, Social Value, Emotional Value, Epistemic Value	-	Behavioural intention to use	-	Consumption values especially epistemic value and emotional value have stronger relationship and significantly affect consumer behavioural intention to use mobile apps. While the conditional values influences behavioural intention to use mobile apps through the mediation of other consumption values such as functional value, social value, emotional value and epistemic value.
12	Lin & Huang	2012	Retail (Taiwan)	Functional Value, Social Value, Emotional Value, Conditional Value, Epistemic Value, Environmental Concern	-	Consumer choice behaviour regarding green products	-	The finding showed that consumers with high environmental concern support green products more, and indicated positive relationship.
13	Kekec	2012	Retail (USA)	Functional Value, Symbolic Value, Emotional Value, Epistemic Value	Conditional Value	Consumer Buying Behaviour	-	Consumption values are antecedent's consumers' purchase decisions.
14	Hung et al.	2011	Retail (Taiwan)	Functional Value, - Experiential Value - Symbolic Value Social value, Trait of Vanity	-	Consumer Buying Behaviour	-	Social value and most of the factors of luxury brand perception positively support to purchase decision except symbolic value. There are weak support towards purchase decision by trait of vanity and moderating effect on perception.

## APPENDIX F

### SUMMARY OF PREVIOUS RESEARCH THAT USE THEORY OF CONSUMPTION VALUES (TCV) IN MALAYSIA FROM 2010 TO 2020

No	Author	Year	Industry	IV	MCV	DV	Consequence IV	Findings
1	Abdullah et al.	2019	Tourism	Functional value, Social value, Emotional value, Epistemic value, Conditional value, Environmental knowledge, Environmental attitude, Destination image	Environmental consumption value	Responsible Environmental Behaviour Intention	-	The results empirically revealed that environmental knowledge and destination image significantly influenced the tourists' intention to behave in an environmentally responsible manner. Thus, in fostering a more responsible behavior among tourists, more emphasis can be placed on enhancing their knowledge while capitalizing on the destination's image.
2	Zailani et al.	2019	Biofuels	Functional value, Social value, Emotional value, Epistemic value, Conditional value	-	Willingness to pay for Biofuels	-	The results of the analysis revealed that functional values, specific condition, emotional values and novelty seeking were among the main factors that influence drivers' willingness to pay for biofuels. Social values were shown to not be a significant factor. The results of the study contribute to the literature by testing the relationship between consumption values and willingness to pay for biofuels. The information provided in the present research might be beneficial for policy makers in modifying tactics and strategies towards the successful promotion of the usage of biofuels in developing countries.
3	Ramayah, Rahman & Ng	2018	E-Commerce	Functional value, Social value, Emotional value, Epistemic value, Conditional value	-	Intention to purchase online	-	The result of the study indicates that functional and emotional values have a strong relationship and predict online purchasing intention. However, social, epistemic, and conditional values do not predict intentions to purchase online.
4	Ahmad & Omar	2018	Organic Cosmetics	Appearance consciousness, Environment consciousness, Health consciousness, Functional value, Experiential value, Symbolic value	-	Repurchase intention	-	Environment consciousness, health consciousness and functional value has significant relation on purchasing organic beauty product. However, appearance consciousness, experiential value and symbolic value does not support the relationship.
5	Mohamed & Yeo	2017	Cosmetics	Social value, Emotional value	Customer experience value	Customer satisfaction	-	Findings of this study show that respondents are predominantly influenced by both social value and emotional value towards halal cosmetics products.
6	Mohamed, Rahman & Hamzah	2017	Halal product	Emotional Value, Epistemic value, Halal concern	-	Customer choice behaviour	-	The resulting point out that the three independent variables has positive relationship that influences the customer choice behaviour.
7	Amamashaun, Tunkarimu & Dastane	2016	Convenience store	Functional value, Emotional value, Social value, Conditional value, Economic value, Self-Efficacy	Customer satisfaction	Customer loyalty & retention	-	Findings of the research conclude that despite slight variations, functional value, emotional value, social value, conditional value and economic value considerably influence customer satisfaction as well as customer loyalty and retention. However, Self-Efficacy does not.
8	Rahman, Osmangani, Hassan, Anwar & Fattah	2016	Education tourism	Consumption Values, Destination Cues, Nostalgia	Destination image	Attitude	-	The results of data analysis support the stated hypotheses. All the direct relationships were significant and positive. However, Destination Image found a partial mediating role among the relationships. Theoretical and practical implications are also discussed.
9	Teoh & Noor Azila	2015	Automotive	Functional value, Symbolic value, Emotional value, Novelty value, Conditional value	Consumers attitude	Consumers purchase intention	-	Functional value, conditional value and consumers' attitudes are found to have significant relationships with consumers' purchase intention while emotional value influence consumers' purchase intention indirectly through the indirect consumers' attitudes.
10	Teoh & Noor Azila	2015	Automotive	Functional value, Symbolic value, Emotional value, Novelty value, Conditional value	-	Intention to purchase hybrid car	-	The results of the study indicated that functional value is the most significant predictor of consumers' intention to purchase hybrid car. In contrast, symbolic value, emotional value and novelty value failed to show significant relationship with consumers' intention to purchase hybrid car.
11	Teoh	2015	Automotive	Functional value, Symbolic value, Emotional value, Novelty value, Conditional value	Brand preference	Intention to purchase hybrid car	-	Positive relationship between functional value, emotional value, novelty, conditional value and consumers' attitudes toward intention to purchase the hybrid car. While, symbolic value and brand preference does not.
12	Suki & Suki	2015	Automotive	Functional value, Social value, Epistemic value	-	Environment concern regarding green product	-	Results revealed that statistically significant differences were observed among the light users, average users and heavy users in terms of functional value, social value, and epistemic value that affect consumer environmental concern regarding green products.

## APPENDIX G

### RELIABILITY

```

/VARIABLES=PPOF1 PPOF2 PPOF3 PPOF4 PPOF5 PPOF6 APB1 APBH2 APBH3
APBH4 APBH5 APBH6 APBH7 APBH8 FV1
  FV2 FV3 FV4 FV5 FV6 SV1 SV2 SV3 SV4 SV5 SV6 EV1 EV2 EV3 EV4 EV5 NV1 NV2
NV3 NV4 CV1 CV2 CV3 MV1 MV2
  MV3 MV4 MV5 EC1 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 BI1 BI2 BI3 BI4 BI5 BI6
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
/SUMMARY=TOTAL.
  
```

### Reliability

		Notes
Output Created Comments		20-OCT-2019 23:33:27
Input	Data Active Dataset Filter Weight Split File N of Rows in Working Data File Matrix Input	C:\Users\ACER\Documents\IBM\Data for viva.sav DataSet1 <none> <none> <none>
Missing Value Handling	Definition of Missing Cases Used	User-defined missing values are treated as missing. Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=PPOF1 PPOF2 PPOF3 PPOF4 PPOF5 PPOF6 APB1 APBH2 APBH3 APBH4 APBH5 APBH6 APBH7 APBH8 FV1 FV2 FV3 FV4 FV5 FV6 SV1 SV2 SV3 SV4 SV5 SV6 EV1 EV2 EV3 EV4 EV5 NV1 NV2 NV3 NV4 CV1 CV2 CV3 MV1 MV2 MV3 MV4 MV5 EC1 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 BI1 BI2 BI3 BI4 BI5 BI6 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE /SUMMARY=TOTAL.
Resources	Processor Time Elapsed Time	00:00:00.05 00:00:00.11

## Scale: ALL VARIABLES

### Case Processing Summary

		N	%
Cases	Valid	169	100.0
	Excluded <sup>a</sup>	0	.0
	Total	169	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.937	58

### Item Statistics

	Mean	Std. Deviation	N
PPOF1	3.9763	.85184	169
PPOF2	3.6982	.96242	169
PPOF3	4.1124	.84819	169
PPOF4	4.4024	4.00048	169
PPOF5	3.9527	.91814	169
PPOF6	3.7515	.96844	169
APB1	3.2249	1.08960	169
APBH2	3.1775	1.10377	169
APBH3	3.5148	1.04714	169
APBH4	3.5030	1.11336	169
APBH5	3.8284	1.02940	169
APBH6	4.0947	2.54306	169
APBH7	3.3314	1.11655	169
APBH8	3.4201	1.11583	169
FV1	3.7929	.94413	169
FV2	3.9704	.80494	169
FV3	4.0592	.84307	169
FV4	3.8107	.87946	169
FV5	3.3609	1.13122	169
FV6	3.5444	1.08539	169
SV1	3.3669	1.07807	169
SV2	3.3905	1.05848	169
SV3	3.4556	1.79271	169
SV4	3.2189	1.07155	169
SV5	3.6805	1.00814	169
SV6	3.4260	1.07826	169
EV1	3.6568	.96392	169
EV2	3.6272	.92426	169
EV3	3.4793	1.00053	169
EV4	3.6154	1.02353	169
EV5	3.3195	1.08766	169
NV1	3.4438	1.01100	169
NV2	3.4675	1.09672	169
NV3	3.4320	1.03931	169
NV4	3.5917	.98449	169
CV1	3.3018	1.03397	169
CV2	3.6450	1.03135	169
CV3	3.9112	.85798	169
MV1	3.4497	1.08513	169
MV2	4.0118	.88633	169
MV3	4.0888	.82976	169
MV4	4.0178	.87609	169

MV5	4.1302	.86305	169
EC1	3.8402	.78181	169
EC2	4.0710	4.02015	169
EC3	3.9290	.70351	169
EC4	3.8698	.72840	169
EC5	3.9527	.75444	169
EC6	3.8876	.81234	169
EC7	3.8757	.84653	169
EC8	3.8639	.86558	169
EC9	3.9704	.73538	169
BI1	3.7456	1.00611	169
BI2	3.8225	.95330	169
BI3	3.8225	.90854	169
BI4	3.6331	.98578	169
BI5	3.6213	1.03442	169
BI6	3.6805	.97817	169

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PPOF1	210.8639	1126.011	.605	.935
PPOF2	211.1420	1117.670	.664	.935
PPOF3	210.7278	1123.949	.645	.935
PPOF4	210.4379	1095.783	.187	.947
PPOF5	210.8876	1124.696	.581	.935
PPOF6	211.0888	1133.105	.419	.936
APB1	211.6154	1121.667	.527	.935
APBH2	211.6627	1115.880	.600	.935
APBH3	211.3254	1121.435	.553	.935
APBH4	211.3373	1123.380	.492	.935
APBH5	211.0118	1125.524	.503	.935
APBH6	210.7456	1127.357	.161	.940
APBH7	211.5089	1115.609	.596	.935
APBH8	211.4201	1115.995	.591	.935
FV1	211.0473	1121.807	.611	.935
FV2	210.8698	1126.912	.625	.935
FV3	210.7811	1126.005	.612	.935
FV4	211.0296	1127.577	.559	.935
FV5	211.4793	1115.811	.585	.935
FV6	211.2959	1116.519	.602	.935
SV1	211.4734	1114.953	.628	.935
SV2	211.4497	1115.344	.635	.935
SV3	211.3846	1123.631	.287	.937
SV4	211.6213	1120.808	.549	.935
SV5	211.1598	1124.433	.531	.935
SV6	211.4142	1123.792	.503	.935
EV1	211.1834	1115.305	.701	.934
EV2	211.2130	1118.383	.681	.935
EV3	211.3609	1117.887	.634	.935
EV4	211.2249	1114.211	.674	.934
EV5	211.5207	1118.203	.577	.935
NV1	211.3964	1128.050	.475	.935
NV2	211.3728	1123.021	.505	.935
NV3	211.4083	1120.553	.571	.935
NV4	211.2485	1121.735	.586	.935
CV1	211.5385	1128.310	.460	.936
CV2	211.1953	1129.384	.446	.936
CV3	210.9290	1128.412	.558	.935
MV1	211.3905	1119.335	.562	.935
MV2	210.8284	1126.167	.578	.935
MV3	210.7515	1131.009	.531	.935
MV4	210.8225	1133.897	.452	.936
MV5	210.7101	1126.909	.581	.935
EC1	211.0000	1130.071	.583	.935

EC2	210.7692	1070.179	.285	.945
EC3	210.9112	1132.331	.602	.935
EC4	210.9704	1133.874	.549	.935
EC5	210.8876	1131.338	.580	.935
EC6	210.9527	1128.783	.584	.935
EC7	210.9645	1131.915	.504	.935
EC8	210.9763	1132.118	.489	.936
EC9	210.8698	1131.340	.595	.935
BI1	211.0947	1121.503	.576	.935
BI2	211.0178	1129.506	.483	.935
BI3	211.0178	1128.910	.518	.935
BI4	211.2071	1124.118	.548	.935
BI5	211.2189	1124.958	.509	.935
BI6	211.1598	1129.849	.464	.936

**Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
214.8402	1161.337	34.07840	58

FREQUENCIES VARIABLES=Gender Race Age Marital Education Occupation Income  
 BrandLocal BrandImported  
 Local Imported  
 /ORDER=ANALYSIS.

**Frequencies**

**Notes**

<p>Output Created Comments Input</p> <p style="margin-left: 20px;">Data</p> <p style="margin-left: 40px;">Active Dataset Filter Weight Split File N of Rows in Working Data File</p> <p>Missing Value Handling</p> <p style="margin-left: 20px;">Definition of Missing</p> <p style="margin-left: 40px;">Cases Used</p> <p>Syntax</p> <p>Resources</p> <p style="margin-left: 20px;">Processor Time Elapsed Time</p>	<p style="text-align: right;">20-OCT-2019 23:41:55</p> <p>C:\Users\ACER\Documents\IBM\Data for viva.sav DataSet1 &lt;none&gt; &lt;none&gt; &lt;none&gt;</p> <p style="text-align: right;">169</p> <p>User-defined missing values are treated as missing. Statistics are based on all cases with valid data. FREQUENCIES VARIABLES=Gender Race Age Marital Education Occupation Income BrandLocal BrandImported Local Imported /ORDER=ANALYSIS.</p> <p style="text-align: right;">00:00:00.03 00:00:00.03</p>
--	--

**Statistics**

		Gender	Race	Age	Marital	Education	Occupation	Income				
N	Valid	169	169	169	169	169	169	169				
	Missing	0	0	0	0	0	0	0				

**Statistics**

		BrandLocal	BrandImported	Local	Imported
N	Valid	116	53	116	53
	Missing	53	116	53	116

**Frequency Table**

**Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	37	21.9	21.9	21.9
	Female	132	78.1	78.1	100.0
	Total	169	100.0	100.0	

**Race**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	113	66.9	66.9	66.9
	Chinese	31	18.3	18.3	85.2
	Indian	24	14.2	14.2	99.4
	Others	1	.6	.6	100.0
	Total	169	100.0	100.0	

**Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-25 years old	72	42.6	42.6	42.6
	26-35 years old	49	29.0	29.0	71.6
	36-45 years old	27	16.0	16.0	87.6
	46 years old and above	21	12.4	12.4	100.0
	Total	169	100.0	100.0	

**Marital**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	106	62.7	62.7	62.7
	Married	59	34.9	34.9	97.6
	Divorced/Widowed	4	2.4	2.4	100.0
	Total	169	100.0	100.0	

**Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary	18	10.7	10.7	10.7
	Diploma	33	19.5	19.5	30.2
	Bachelor's degree	93	55.0	55.0	85.2
	Master's degree	23	13.6	13.6	98.8
	Doctoral/PhD degree	2	1.2	1.2	100.0
	Total	169	100.0	100.0	

**Occupation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private Sector	110	65.1	65.1	65.1
	Government Sector	32	18.9	18.9	84.0
	Self-Employed	6	3.6	3.6	87.6
	Retired/Pensioner	2	1.2	1.2	88.8
	Student	19	11.2	11.2	100.0
	Total	169	100.0	100.0	

**Income**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than RM3,000	76	45.0	45.0	45.0
	RM3,001 - RM5,000	51	30.2	30.2	75.1
	RM5,001 - RM10,000	30	17.8	17.8	92.9
	Above RM10,000	12	7.1	7.1	100.0
	Total	169	100.0	100.0	

**BrandLocal**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BrandLocal	116	68.6	100.0	100.0
Missing	-99.00	53	31.4		
	Total	169	100.0		

**BrandImported**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BrandImported	53	31.4	100.0	100.0
Missing	-99.00	116	68.6		
	Total	169	100.0		

**Local**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nationalistic	7	4.1	6.0	6.0
	Supporting	28	16.6	24.1	30.2
	Fresh and Widely available	28	16.6	24.1	54.3
	Cheaper	27	16.0	23.3	77.6
	Saves Money	26	15.4	22.4	100.0
	Total	116	68.6	100.0	
Missing	-99.00	53	31.4		
	Total	169	100.0		

**Imported**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Prestige, Value and Quality	21	12.4	39.6	39.6
	Doubt to Buy Local Product	4	2.4	7.5	47.2
	Trust Imported Brand	21	12.4	39.6	86.8
	Exclusivity	7	4.1	13.2	100.0
	Total	53	31.4	100.0	
Missing	-99.00	116	68.6		
Total		169	100.0		

#### Notes

Output Created		21-OCT-2019 00:47:40
Comments		
Input	Data	C:\Users\ACER\Documents\IBM\Data for viva.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	169
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
Syntax	Cases Used	All non-missing data are used. DESCRIPTIVES VARIABLES=PPOF1 PPOF2 PPOF3 PPOF4 PPOF5 PPOF6 APB1 APB2 APB3 APB4 APB5 APB6 APB7 APB8 FV1 FV2 FV3 FV4 FV5 FV6 SV1 SV2 SV3 SV4 SV5 SV6 EV1 EV2 EV3 EV4 EV5 NV1 NV2 NV3 NV4 CV1 CV2 CV3 MV1 MV2 MV3 MV4 MV5 EC1 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 BI1 BI2 BI3 BI4 BI5 BI6 /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

#### Notes

Output Created		21-OCT-2019 00:56:57
Comments		
Input	Data	C:\Users\ACER\Documents\IBM\Data for viva.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	169
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.

Syntax	DESCRIPTIVES VARIABLES=PPOF1 PPOF2 PPOF3 PPOF4 PPOF5 PPOF6 APB1 APBH2 APBH3 APBH4 APBH5 APBH6 APBH7 APBH8 FV1 FV2 FV3 FV4 FV5 FV6 SV1 SV2 SV3 SV4 SV5 SV6 EV1 EV2 EV3 EV4 EV5 NV1 NV2 NV3 NV4 CV1 CV2 CV3 MV1 MV2 MV3 MV4 MV5 EC1 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 BI1 BI2 BI3 BI4 BI5 BI6 /STATISTICS=MEAN STDDEV MIN MAX.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

DATASET ACTIVATE DataSet1.

SAVE OUTFILE='C:\Users\ACER\Documents\IBM\Data for viva.sav'  
/COMPRESSED.

DESCRIPTIVES VARIABLES=PPOF1 PPOF2 PPOF3 PPOF4 PPOF5 PPOF6 APB1 APBH2 APBH3 APBH4 APBH5 APBH6 APBH7

APBH8 FV1 FV2 FV3 FV4 FV5 FV6 SV1 SV2 SV3 SV4 SV5 SV6 EV1 EV2 EV3 EV4 EV5 NV1 NV2 NV3 NV4 CV1 CV2

CV3 MV1 MV2 MV3 MV4 MV5 EC1 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 BI1 BI2 BI3 BI4 BI5 BI6

/STATISTICS=MEAN STDDEV RANGE MIN MAX KURTOSIS SKEWNESS.

## Descriptives



### Notes

Output Created	21-OCT-2019 01:05:20	
Comments		
Input	Data	C:\Users\ACER\Documents\IBM\Data for viva.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	169
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax	DESCRIPTIVES VARIABLES=PPOF1 PPOF2 PPOF3 PPOF4 PPOF5 PPOF6 APB1 APBH2 APBH3 APBH4 APBH5 APBH6 APBH7 APBH8 FV1 FV2 FV3 FV4 FV5 FV6 SV1 SV2 SV3 SV4 SV5 SV6 EV1 EV2 EV3 EV4 EV5 NV1 NV2 NV3 NV4 CV1 CV2 CV3 MV1 MV2 MV3 MV4 MV5 EC1 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 BI1 BI2 BI3 BI4 BI5 BI6 /STATISTICS=MEAN STDDEV RANGE MIN MAX KURTOSIS SKEWNESS.	

Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.07

**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Propensity to purchase	169	4.00	1.00	5.00	3.9763	.85184	-1.007	.187	1.067	.371
Propensity to purchase	169	3.00	2.00	5.00	3.6982	.96242	-.578	.187	-.600	.371
Propensity to purchase	169	3.00	2.00	5.00	4.1124	.84819	-.987	.187	.697	.371
Propensity to purchase	169	3.00	2.00	5.00	4.1065	.82405	-.976	.187	.836	.371
Propensity to purchase	169	3.00	2.00	5.00	3.9527	.91814	-.793	.187	-.026	.371
Propensity to purchase	169	4.00	1.00	5.00	3.7515	.96844	-.716	.187	-.097	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.2249	1.08960	-.039	.187	-1.169	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.1775	1.10377	-.089	.187	-1.187	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.5148	1.04714	-.465	.187	-.784	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.5030	1.11336	-.309	.187	-1.150	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.8284	1.02940	-.710	.187	-.334	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.9172	1.05458	-.788	.187	-.434	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.3314	1.11655	-.140	.187	-1.249	.371
Actual purchase behaviour	169	4.00	1.00	5.00	3.4201	1.11583	-.187	.187	-1.141	.371
Functional value	169	3.00	2.00	5.00	3.7929	.94413	-.733	.187	-.280	.371
Functional value	169	3.00	2.00	5.00	3.9704	.80494	-.916	.187	.870	.371
Functional value	169	3.00	2.00	5.00	4.0592	.84307	-.897	.187	.543	.371
Functional value	169	3.00	2.00	5.00	3.8107	.87946	-.788	.187	.084	.371
Functional value	169	4.00	1.00	5.00	3.3609	1.13122	-.249	.187	-1.124	.371
Functional value	169	4.00	1.00	5.00	3.5444	1.08539	-.539	.187	-.874	.371
Social Value	169	4.00	1.00	5.00	3.3669	1.07807	-.429	.187	-.879	.371
Social Value	169	4.00	1.00	5.00	3.3905	1.05848	-.409	.187	-.834	.371
Social Value	169	4.00	1.00	5.00	3.3373	1.07950	-.304	.187	-.997	.371
Social Value	169	4.00	1.00	5.00	3.2189	1.07155	-.154	.187	-1.011	.371
Social Value	169	4.00	1.00	5.00	3.6805	1.00814	-.769	.187	-.197	.371
Social Value	169	4.00	1.00	5.00	3.4260	1.07826	-.397	.187	-.952	.371
Emotional value	169	3.00	2.00	5.00	3.6568	.96392	-.595	.187	-.640	.371
Emotional value	169	3.00	2.00	5.00	3.6272	.92426	-.563	.187	-.568	.371

Emotional value	169	4.00	1.00	5.00	3.4793	1.00053	-.466	.187	-.649	.371
Emotional value	169	4.00	1.00	5.00	3.6154	1.02353	-.586	.187	-.623	.371
Emotional value	169	4.00	1.00	5.00	3.3195	1.08766	-.131	.187	-1.166	.371
Novelty value	169	4.00	1.00	5.00	3.4438	1.01100	-.562	.187	-.653	.371
Novelty value	169	4.00	1.00	5.00	3.4675	1.09672	-.382	.187	-1.049	.371
Novelty value	169	4.00	1.00	5.00	3.4320	1.03931	-.331	.187	-1.010	.371
Novelty value	169	4.00	1.00	5.00	3.5917	.98449	-.543	.187	-.671	.371
Conditional value	169	4.00	1.00	5.00	3.3018	1.03397	-.110	.187	-1.241	.371
Conditional value	169	4.00	1.00	5.00	3.6450	1.03135	-.660	.187	-.570	.371
Conditional value	169	4.00	1.00	5.00	3.9112	.85798	-1.030	.187	1.008	.371
Monetary value	169	4.00	1.00	5.00	3.4497	1.08513	-.265	.187	-1.122	.371
Monetary value	169	3.00	2.00	5.00	4.0118	.88633	-.958	.187	.476	.371
Monetary value	169	3.00	2.00	5.00	4.0888	.82976	-.990	.187	.861	.371
Monetary value	169	4.00	1.00	5.00	4.0178	.87609	-1.110	.187	1.150	.371
Monetary value	169	3.00	2.00	5.00	4.1302	.86305	-1.099	.187	.907	.371
Environmental concern	169	4.00	1.00	5.00	3.8402	.78181	-1.300	.187	1.920	.371
Environmental concern	169	4.00	1.00	5.00	3.7751	.79976	-1.196	.187	1.343	.371
Environmental concern	169	4.00	1.00	5.00	3.9290	.70351	-1.457	.187	3.533	.371
Environmental concern	169	3.00	2.00	5.00	3.8698	.72840	-1.197	.187	1.830	.371
Environmental concern	169	4.00	1.00	5.00	3.9527	.75444	-1.184	.187	2.329	.371
Environmental concern	169	3.00	2.00	5.00	3.8876	.81234	-.869	.187	.654	.371
Environmental concern	169	4.00	1.00	5.00	3.8757	.84653	-.892	.187	.780	.371
Environmental concern	169	4.00	1.00	5.00	3.8639	.86558	-1.070	.187	1.212	.371
Environmental concern	169	3.00	2.00	5.00	3.9704	.73538	-.953	.187	1.482	.371
Brand Image	169	4.00	1.00	5.00	3.7456	1.00611	-.712	.187	-.287	.371
Brand Image	169	4.00	1.00	5.00	3.8225	.95330	-.888	.187	.100	.371
Brand Image	169	4.00	1.00	5.00	3.8225	.90854	-1.038	.187	.765	.371
Brand Image	169	4.00	1.00	5.00	3.6331	.98578	-.528	.187	-.625	.371
Brand Image	169	3.00	2.00	5.00	3.6213	1.03442	-.395	.187	-1.008	.371
Brand Image	169	4.00	1.00	5.00	3.6805	.97817	-.595	.187	-.496	.371
Valid N (listwise)	169									