



UNIVERSITI PUTRA MALAYSIA

***MARKETING FACTORS AND CONSUMER PERCEPTION ON
PURCHASE INTENTION OF ORGANIC PRODUCTS IN BINTULU,
SARAWAK, MALAYSIA***

JANET YEH SIEW CHING

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By

JANET YEH SIEW CHING

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillments of the Requirements for the Degree of Master of Science**

September 2016

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the Degree of Master of Science

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By

JANET YEH

September 2016

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Since few years ago, demand and interest towards organic products have increased significantly throughout the world due to the concern of human health, food safety and environmental friendly. The objective of this study is to investigate the relationship between marketing factors and perceptions of consumers on purchase intention for organic products. This research is conducted in Bintulu, Sarawak. Convenient sampling method is utilized in collecting the samples and multiple regression analysis is used to study the relationship between independent variables (marketing factors and consumers perception) and moderating factor (demographic factors) which was then hypothesized to the dependent variable (purchase intention).

The finding showed that there is a significant relationship between marketing factors and consumers' perceptions towards purchase intention. In terms of marketing factors, product availability, image and attribute show a significant relationship towards consumers' purchase intention. However, price had no significant relationship towards purchase intention in this study which means that price is not really affecting the value that is perceived by the consumers. The price of the organic products might be used as an indicator of the product quality and as consumers' investment for a healthy lifestyle. This study indicates that the consumers, who understand organic, concern about healthy lifestyle and perceive high value towards organic products, are more likely to develop intention towards organic products. Therefore, this finding gives insights into the practitioners, academician and policy makers to help them in different future perspective.

Keywords: purchase intention, organic products, marketing factors, perception.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

FAKTOR PEMASARAN DAN PERSEPSI PENGGUNA TERHADAP NIAT PEMBELIAN PRODUK ORGANIK DI BINTULU, SARAWAK, MALAYSIA

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Sejak beberapa tahun yang lalu, permintaan dan minat terhadap produk organik telah meningkat di seluruh dunia disebabkan ramai pengguna telah mementingkan kesihatan, keselamatan makanan and mesra alam. Objektif kajian ini adalah untuk mengenalpasti hubungan antara faktor pemasaran dan persepsi pengguna terhadap niat pembelian antara pengguna terhadap produk organik. Kajian ini dijalankan di Bintulu, Sarawak. Pengumpulan sampel telah menggunakan kaedah persampelan konvenien dan Analisis Regresi digunakan untuk mengkaji hubungan antara pembolehubah tidak bergantung (faktor pemasaran dan persepsi pengguna) dan pembolehubah perantaraan (punca demografi) yang kemudian akan dihipotesiskan kepada pembolehubah bergantung (niat pembelian).

Melalui kajian ini menunjukkan faktor pemasaran dan persepsi pengguna mempunyai hubungan langsung terhadap niat pembelian. Dari segi faktor pemasaran, kesediaan produk, imej dan ciri-ciri produk menunjukkan hubungan langsung terhadap niat pembelian pengguna. Walaubagaimanapun, harga produk tidak menunjukkan hubungan yang signifikan terhadap niat pembelian pengguna. Hal ini menunjukkan harga tidak semestinya akan mempengaruhi nilai yang diperolehi oleh pengguna. Harga untuk produk organik mungkin digunakan sebagai satu penanda bagi ciri-ciri kualiti dan sejenis pelaburan pengguna untuk menikmati kehidupan yang sihat. Oleh itu, kajian ini menunjukkan bahawa pengguna yang memahami organik, prihatin terhadap kehidupan yang sihat dan melihat nilai yang tinggi terhadap produk organic adalah pihak yang berminat terhadap produk organik. Oleh itu, kajian ini telah memberikan beberapa cadangan kepada pengawal, ahli akademik dan pembuat dasar untuk membantu mereka dalam pelbagai perspektif pada masa depan.

Kata Kunci: niat pembelian, produk organik, faktor pemasaran dan persepsi.

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Thank You.



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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
ASEAN	Association of Southeast Asian Nations
DOA	Department of Agriculture
FDA	Food and Drug Administration
FSQD	Food Safety and Quality Division
GMO	Genetically Modified Organism
GST	Good and Service Tax
IFOAM	International Federation of Organic Agriculture Movement
JAKIM	Malaysia National Halal Certification Agency
MOA	Ministry of Agriculture and Agro-based Industry
MSG	Monosodium Glutamate
NOP	National Organic Program
OCIA	Organic Crop Improvement Association
QAI	Quality Assurance International
SEM	Structural Equation Modeling
SPSS	Statistical Package for the Social Science
SOM	Skim Organic Malaysia
TPB	Theory of Planned Behaviour
Tukey's HSD	Tukey's Honest Significant Difference
UNESCAP	United Nations Economic & Social Commission for Asia & the Pacific
USDA	United States Department of Agriculture

CHAPTER 1

INTRODUCTION

This chapter covers an overview of the whole study. It includes the growth of the organic products by understanding the background and development of the organic product industries in Malaysia in order to identify the significant aspects of the study towards the influence of marketing factors and perception on purchase intention of organic products. Problem statement, research objectives, and justification of the study are discussed in this chapter.

1.1 The Growth of the Organic Products

In recent years, demand and interest towards organic products have increased significantly throughout the world due to the concern of human health, food safety and environmental concern (Gregory, 2000; Harper and Makatouni, 2002). There are a lot of international growth opportunities in the organic market, although the summit of the organic products tendency still not yet been reached (Ebrahimi, 2007). According to Lockie *et al.* (2004), organic product is one of the fastest growing sectors among the food industry over the past ten years. Furthermore, based on Willer *et al.* (2015), there are 1.9 million of organic producers around the world in year 2012 and the organic market size is 72 billion US dollars. Moreover, there are 82 countries with the organic regulation in 2011 while there are around 815 International Federation of Organic Agriculture Movement (IFOAM) affiliates from 120 countries all over the world. However, the size of the organic products market is not predictable yet because there are no any exclusive tariff codes for organic products, *i.e.* it is not officially recorded by the government or the food industry (Stanton *et al.*, 2011).

In the past few years, stated by trade sources, organic sector had been experienced a rapid growth of around 20% per annum. The trade sources also estimated the value of organic food market is around RM150 million which is around \$58 million at retail. In fact, the organic market is less than 1% of the total food and beverage market in Malaysia today (Stanton *et al.*, 2011). Besides, Ramli (2005) also mentioned that the second most important market in South East Asia region is the organic food market with a growing organic consumption. Malaysian government is actively developing the organic farming sector through cooperation with the programs and activities organized by Ministry of Agriculture and Agro-based Industry, Malaysia (MOA). The government noticed organic foods have potential in emerging Malaysia's niche markets and also all around the world. In 2004, Ministry of Agriculture and Agro-based Industry (MOA) had launched an organic certification scheme "Skim Organik Malaysia (SOM)" which had been changed to "myOrganic" in March, 2015 to promote the growth of organic product markets. There are more than 136 organic farms that had been certified with the SOM standard will be changed into the new myOrganic certification (Rozhan, 2015). In

2015, Malaysia Standard MS1529:2001 has been updated to MS1529:2015 plant-based organically produced, food requirement for production, processing, handling, labeling and marketing which released by the Department of Standard. According to Rozhan (2015), this new standard will follow the international standard for organic products.

Besides, the certification of organic products had been introduced by Ministry of Agriculture and Agro-based Industry which all the plant-based products from the local organic food sources can be sold as organic food to the markets if it is certified organic with the logo of “Malaysia Organic” (Samil and Norden, 2003). Moreover, Ministry of Agriculture and Agro-based Industry in Malaysia had planned to classify the organic agriculture as a growing niche market, raising the size of local organic farming and implementing different programs to promote the organic food products industries in order to provide financial support to develop the agriculture infrastructure development such as drainage, electricity and irrigation system and also to develop the organic food product markets (Badawi, 2006). Malaysia Department of Agriculture (DOA) reported that there is a growth of organic sector from 29 farms which received myOrganic certification in 2011 to 151 farms with a total area of 1848 ha in 2015.

Although the market of organic products is growing, the awareness on organic products in Malaysia is still not been promoted generally and the public is not well informed about the knowledge of organic products (Chen, 2007). In Malaysia, due to the small size of local organic industries, more than 60% of the organic products are imported (Mohammad *et al.*, 2014). This condition had provided opportunities for organic exporters in other countries to build demand among the Malaysian population with the right unique selling points. The exporting countries must provide a reliable label which is “certified organic” on these organic food products. Those specialist importers who had noticed the growing demand for organic foods are now bringing in processed organic foods from other countries to fulfill the market gap that is not supplied by local producers. These importers including Australia, USA, New Zealand, Finland, and China and most of the imports are processed consumer ready organic products. Those imported organic products are certified origins through verified copies of certification or on the finished labeled product itself (UNESCAP, 2002). United Nation Economic and Social Commission for Asia and the Pacific (2002) also mentioned that organic domestic market in Malaysia as undeveloped. However, the demand for organic products and organic sector is growing as Malaysia organic food distribution channels are currently much more disperse compared to those functional foods and nutraceuticals (Stanton *et al.*, 2011).

Nowadays, organic products in Malaysia are experiencing an established market as the life quality is increasing with the support from health-concerned consumers (Tiraieyari *et al.*, 2014). The organic products market has developed in various range such as from home based distributors, carrying to supermarket chains and dedicated to organic or health food shops. Organic products are distributed directly to the consumer’s doorstep through the home-based distribution approach. Specialist

organic food stores and supermarket chains distributed around 70% of the organic food products. The majority of the specialist organic stores are operated from single outlet. Usually, there is no promotion or advertisement supporting for any brand. Some of the health food and vegetarian restaurants had also begun to use organic ingredients in their meals (UNESCAP, 2002). Currently, these shops had been reported to increase significantly and today there are more than 200 organic outlets operating all over Malaysia (Suhaimie *et al.*, 2016). Malaysia government had undertaken various steps to support the organic product industries by reducing the food import bills, protecting the environment, solving the chemical residue issues in food production and improving the export of high quality safe food products.

1.2 Problem Statement

In Malaysia, the consumers are becoming more concerned about the nutritional value and health issue. Due to the higher standard of lifestyle, the demand for organic products has increased rapidly. The high demand in organic products compared to the supply had caused the concern for organic products industry (Zhen, 2013). However, most of the consumers heard or knew about the advantages of organic products and had a positive attitude or interest towards organic products but only few of them purchase organic products regularly (Rozhan, 2009). The consumers might only buy organic products once or only a few times in a year because they might think that the advantages of consuming organic products are very minimal to their health (Suhaimie *et al.*, 2016). The main factor that determined the demand for organic products and the information on the consumers' behavior are limited (Quah and Tan, 2009).

Furthermore, Malaysians are still not fully confident to the quality of the local organic products. Their perception on the local organic products is quite weak. The consumers will interrogate the reliability of the organic product and certification doubting whether the delegated panels just giving off myOrganic certification to those organic producers without a supposedly strict regulations (Suhaimie *et al.*, 2016). It is because there are indeed lots of organic products' imitations, which cause many consumers doubting in regards to the purity of the organic products. Consumers might worry of some dishonest producers who will mix both organic and inorganic products together when selling them in the organic markets. Due to the high demand, the organic producers might get the supply from some uncertified producers to fulfill the high demand for certain organic products. Meanwhile, most of the organic products from Malaysia are not acceptable worldwide because not all of them received the International Organic Certification (Suhaimie *et al.*, 2016). In view of the lack of enforcement for local organic product industries causing some difficulties to achieve the regulation and guidance on certification, production, handling and labeling for organic products. In contrast, the consumers might purchase organic products or put higher expectation and trust to the organic products, which are imported from other countries such as United State, Japan and Australia who had received the International Organic Certification

As Malaysian organic products are mostly in higher price, additional cost is incurred for the handling cost and payment for applying organic certification, resulting in higher price in goods due to the additional cost (Hill and Lynchehaun, 2002). Even though organic markets in Malaysia are considered as niche market, unfortunately they are not many people who would like to spend more for organic products as the price is higher than the conventional products (Saleki *et al.*, 2012). Furthermore, there are not many organic producers or marketers doing organic farming or organic production due to the difficulty and high cost to obtain organic certification standard.

Additionally, expertise in organic production that can provide technical support in relation to organic production is limited, although there is a lot of information that can be found from Internet, it is often not specific or practicable to the region. Consumers are more concern about their affordability on organic products and if the products worth the value of price or *vice versa* (Nurliyana, 2014). The reality is that the high prices of organic products are not affordable by low or middle income consumers. Most of the consumers will prefer to purchase fresh organic products such as vegetables and fruits if compared to other organic processed food products. They generally do not know the value of the high priced organic products when compared to the low cost conventional products (Stanton *et al.*, 2011). As such, buying organic products will be incurring extra expenses for consumers except for those who are convinced by the advantages of organic products and practised healthy lifestyle.

Other than that, Malaysian Organic Scheme (2007) mentioned that Malaysia has been categorized as one of the countries in Association of Southeast Asian Nations (ASEAN) which is lack of knowledge and recognition about organic products. Due to the lack of information about the production of organic products, most of the consumers make organic products purchase based on the asymmetrical information (Magistris and Gracia, 2008). Therefore, most of the consumers do not know the difference between organic and non-organic products. They do not appreciate and see the motive to pay a premium price for organic products. Organic products is not highly promoted and not well informed by general public in Malaysia (Stanton *et al.*, 2011). This had made it difficult in convincing the consumers to purchase organic products. Consumers might be unfamiliar with the term “organic” and lack of the information or knowledge such as organic certification system, contents, the labeling and products’ details of raw materials used. They cannot clearly identify the attribute of the organic products compared to those conventional products (Magistris and Gracia, 2008; Aryal *et al.*, 2009). This may affect the consumers’ purchase intention for organic products.

Consequently, it would be very useful to evaluate the future perspective of the demand for organic products in order to identify the factors that explained the consumers’ purchase intention for organic products.

1.3 Research Question

There are several questions need to be answered in this research, which are stated as follows:

- i. Is there any relationship between marketing factors (product image, availability, price and attribute) and consumers' perception (trustworthy, knowledge and perceived value)?
- ii. Is there any relationship between marketing factors (product image, availability, price and attribute) and purchase intention?
- iii. Is there any relationship between consumers' perception (trustworthy, knowledge and perceived value) and purchase intention?
- iv. Is there any moderating relationship of demographic factors between marketing factors (product image, availability, price and attribute), consumers' perception (trustworthy, knowledge and perceived value) and purchase intention?
- v. Is there any difference between the groups (high, medium or low on level of agreement) of marketing factors (product image, availability, price and attribute), consumers' perception (trustworthy, knowledge and perceived value) and purchase intention?

1.4 Objectives of the Study

In general, the objective of this study is to investigate whether there is any significant relationship between marketing factors, consumers' perception and purchase intention of consumers for organic products.

The specific objectives of the study are as follows:

- i. To investigate the relationship between marketing factors and consumers' perception.
- ii. To investigate the relationship between marketing factors and purchase intention.
- iii. To investigate the relationship between consumers' perceptions and purchase intention.
- iv. To determine the relationship between consumers' perceptions, marketing factors and purchase intention moderated by demographic factors.
- v. To determine the differences between the groups (high, medium or low on level of agreement) on purchase intention with regards to marketing factors and consumers' perception.

1.5 Significance of the Study

Currently in Malaysia, the purchases of organic products are still not in high demands among the consumers, despite the increasing awareness of health concern and the growing stages of organic products. As such, it is important to find out the main factors, which are influencing the consumers' purchase intention towards organic products.

By understanding the factors that are affecting consumers' purchase intention towards organic products, it can help formulate a more effective marketing communication and policy strategy, in which, it will greatly help the marketing managers, organic product sellers and organic producers to develop the most suitable strategy to boost the growth of the demand and supply of organic products. As such, the government and organic producers would be able to understand the consumers, gaining more beneficial knowledge to create a more positive impression, satisfaction and loyalty among the consumers towards organic products.

1.6 Organization of the Thesis

The current study is organized into five chapters as follows:

Chapter One – In this chapter, the background of the chosen subject (organic products) is presented, followed by the discussion on the problem statement and significance of the study. The chapter also includes the objectives of this study.

Chapter Two – This chapter reviews various literatures relevant to the study based on the past research findings, reviews and theories about the variables such as marketing factors and consumers' perception towards consumers' purchase intention for organic products.

Chapter Three – The third chapter explains the methods employed in the study including the data collection, sampling methods, questionnaire design and data analysis methods such as Reliability Test, Multiple Regressions, Pearson Correlation, Moderating Analysis and Analysis of Variance (ANOVA). The chapter also includes the research framework and hypotheses of this study.

Chapter Four – The fourth chapter presents the result and findings of the data analysis. The tables and figures of the results are shown to give a clear picture of understanding of the study and discussions are followed. The findings of the analysis are summarized as well.

Chapter Five – In the last chapter, the implications of the study and recommendations for further study are discussed. The limitations of the study are also highlighted in this chapter. Finally, the conclusion of the study is provided.

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