

FACTORS AFFECTING INTENTION TOWARDS
ORGANIC FOOD PRODUCT CONSUMPTION:
A STUDY AMONG CHINESE GENERATION
“Y” UNIVERSITY STUDENTS

TAN POH LEONG

ASIA e UNIVERSITY

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“Y” UNIVERSITY STUDENTS

TAN POH LEONG

A Thesis Submitted to Asia e University in
Fulfilment of the Requirements for the
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ABSTRACT

This study is focused on determining the internal factors and external factors that affect the intentions of the Chinese Generation Y towards organic food consumption. This study also measures intention as a mediator variable in the relationships between internal factors and consumption, and external factors and consumption. Data was collected employing online survey questionnaires sent to 500 respondents, consisting of students of one university. The questionnaire was adopted and adapted from previous researchers. The gathered data were analysed using AMOS software. The outcome from the Structural Equation Modelling (SEM) analysis indicates that knowledge and awareness have significant effects on the intention to consume organic food products. Nevertheless, the relationship between environmental concerns, product attributes and health consciousness did not show any direct effect on intention. Besides that, knowledge, awareness, product attributes, health consciousness and environmental concerns, were non-significant predictors of organic food consumption. Furthermore, the media and advertising, and perceived behavioural control appeared as significant predictors of the intention variable. Yet, only subjective norm has been verified to be an insignificant predictor of the intention variable in this study. Amazingly, the intention has been a complete mediator between the six exogenous constructs, knowledge, health consciousness, environmental concerns, product attributes, perceived behavioural control, and the media and advertising in this research, while the intention mediating variable is only shown as a partial mediator between the subjective norm and consumption. It is hoped that the results of this study will assist food marketers and the Malaysian Ministry of Agriculture in gaining the intention and consumption of organic food products in Malaysia.

APPROVAL PAGE

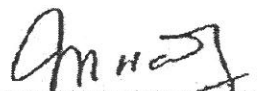
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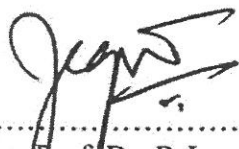
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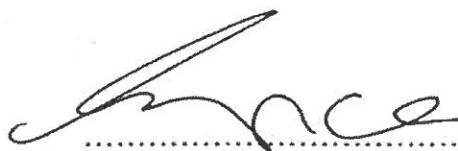
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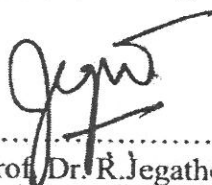


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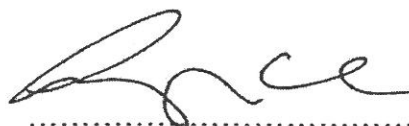


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Declaration

I hereby declare that the thesis submitted in fulfillment of the PhD degree is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

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CHAPTER 1

INTRODUCTION

1.1. Introduction

The agricultural chemical fertilizers used by farmers to grow fruits and vegetables, and the antibiotics for animals have been linked to human cancer, birth defects, infertility, Parkinson's Disease (PD) and antibiotic resistance (Alavanja, Samanic, Dosemeci, Lubin, Tarone, Lynch, Knott, Thomas, Hoppin, Barker, Coble, Sandler & Blair, 2004; Ascherio, Chen, Weisskopf, O'Reilly, McCullough, Calle & Schwarzschild, 2006; Lee, Sandler, Blair, Samanic, Cross & Alavanja, 2007). If the issues relating to agricultural chemical fertilizers are not solved immediately, consumers may face deterioration in their lives (Olshansky, 2005). In addition, most of the agro chemical fertilizers used by farmers cannot be absorbed by plants but they are usually carried away from the farm by rainfall, affecting rivers and aquatic life, and eventually creating pollution in the environment. The unsafe food and environmental problems may have changed consumers' decision towards a concern for safe, healthy, pesticide-free and environmentally friendly products, such as organically grown food products for consumption, compared to those grown conventionally (Bellows, 2007; Essoussi & Zahaf, 2008; Tsakiridou, Konstantinos & Tzimitra-Kalogianni., 2008).

Moreover, the above matter has influenced the World Health Assembly to adopt a resolution (WHA 53.15), in which the World Health Organization (WHO, 2007) instructed every country on a commitment towards greater concern on food safety by developing suitable and integrated healthy food systems for the reduction in health risks to consumers from farmed food products.

As a result, governments all over the world have increased their efforts concerning food health and safety issues. The WHO resolution has influenced the Malaysian Ministry of Agriculture to reduce the import of chemical fertilizers, and at the same time encourage local farmers to invest in organic agricultural food products.

Organic foods are produced according to a set of specified standards and each country may have different sets of policies and standards. Usually, the standard of organic foods is that it is produced without pesticides, herbicides, inorganic fertilizers, antibiotics or growth hormones, and it is not genetically modified. The United States Department of Agriculture (USDA) defines organic foods as products grown without the use of pesticides, synthetic fertilizers, sewage sludge, or genetically modified organisms (Dahm, 2009).

Thus, the organic farm production method neither creates pollution for the environment nor has side effects on the human body and animals on the earth. Furthermore, organic farming focuses in producing a green environment and authorized certificate food products. The farming production procedures are insured from the initial stage until consumption (Nardali & Ay, 2007).

1.2 The Malaysian Organic Food Market

The Malaysian Ministry of Agriculture has been promoting the concept of organic farming so that it can reduce the effects of inorganic pesticides and fertilizers on the farms. Furthermore, the MOA hopes to expand the area of organic farms from 2,367ha to 20,000ha (New Straits Times, November 19, 2007, pg. 29). The organic industry in Malaysia is expected to be worth RM800 million in the future (New Straits Times, November 19, 2007, pg. 29).

Besides that, in Malaysia the Non-Government Organisations (NGOs) started to introduce organic agriculture in the early 1990s. Then, consumers had already demanded organic food products. In early 1985, selected organic food products were imported and retailed mostly in Kuala Lumpur. In 1995, the Malaysian organic sector was a growing niche sector and production was mainly undertaken by professional operators. Early NGO initiative models are now largely taken on by the small and medium-size market entrepreneurs.

In 2001, the MOA reported a total organic cultivation of 131 hectares with 27 organic producers involved, which was five times higher than the early organic producers listed by the NGOs in 1996 (APEC, 2008). The MOA also estimated that organic farm lands would be increased to about 900 hectares and market valued at about US\$ 10 million a year (APEC, 2008).

According to Stanton, Emms and Sia (2011), over 65% of the organic food market is focused in Kuala Lumpur, about 15% around the Johor Baharu hypermarkets in the urban areas that are frequented by Singaporeans, and about 10% in Penang. The rest are spread amongst other cities such as Ipoh and large towns across Malaysia.

In the Eighth Malaysian Plan from 2001 to 2005, the government tried to increase the organic production area of 250 ha with the support for infrastructure improvements, namely farm roads, irrigation systems, electricity and water supply for US\$ 1,300 per hectare (APEC, 2008). Organic producers also had access to the available credit schemes and special loans for agricultural enterprises.

Under the Ninth Malaysia Plan from 2006 to 2010, the government targeted organic farming to reach a market value of US\$200 million. The Malaysian government

supported organic agriculture via research, extensions and promotions, but it was not opened to the private sector. Presently, a company called Country Farm is the biggest importer and retailer of organic products in Malaysia.

According to the Organic Monitor of projects in the South-East Asia, there was a 17% compound annual growth rate between 2007 and 2013 (Organic Monitor, 2006). Market revenues were expected to increase threefold to \$213 million at that time (Organic Monitor, 2006). Most growth was expected in the Malaysian markets (Organic Monitor, 2006).

In fact, the Malaysian 3rd National Agricultural Policy (1998 – 2010) had outlined specific measures to boost productivity and conserve the environment, which include organic farming (Bio Desaru, 2010). Through this policy, there has been an encouraging trend towards organic farming due to the growing consumer concern about the environment, health, quality of life and food safety.

Particularly in Johor, the State Government has reserved a total of 3,642ha for the Desaru Organic Food Valley. The Desaru Organic Food Valley in Johore, which consists of sustainable agriculture for organic food manufacturing, is probably the first big-scale organic food farm in the country. It has attracted some RM1.5bil worth of investments from 15 foreign and local investors (Bio Desaru, 2010).

Besides, supermarkets and hypermarkets are presently paying attention on organic products and most of them have put some organic food products on retail. In Malaysia, Jusco has been the first supermarket to experiment with organic items six years ago and they have been doing very well with their organic vegetables (Gan, 2007). Similarly, Carrefour and Giant have set up organic corners measuring from 800 to 1,000 sq. ft. in

prominent corners adjacent to the vegetable section, with consumers now demanding for certified organic fruits and vegetables (Gan, 2007).

The Malaysian government has also played an active role in promoting organic agriculture. According to the Malaysian Deputy Minister of Agriculture, Mr Chua Tee Yong, it is compulsory for organic vegetables and fruits to carry the ministry's Scheme Organic Malaysia (SOM) standard, effective since 2012.

1.3. Problem Statement

Due to the benefits of organic food products, the Ministry of Agriculture has encouraged local farmers to invest in organic food products. However, the expectation and encouragement to produce organic food products to reduce unsafe food issues by the Ministry of Agriculture were not easily achieved. This may be due to lack of demand from consumers (Ahmad, 2010; Musdiana, Siti, Etty, Muna, & Rizaimy, 2010; Ratna, 2006; Rezai, Mohamed, & Shamsudin, 2011).

Consequently, without addressing the problems, the organic food products sale would constantly fall behind in the marketplace and this would affect the economy in demand and supply issues, and eventually affect the finances of the organic food company's return of investment (ROI). Furthermore, the Ministry of Agriculture's initial objective to promote organic agriculture to decrease chemical fertilizers and to improve the environment may also be affected. Therefore, the above problems should not be avoided.

Understanding consumer demand behaviour is important for any food marketer and it is particularly critical for the organic food products market. The lack of consumer interest in organic food products at present may stem from several factors. Ten factors

were examined from a review of the literature, which are knowledge, awareness, health consciousness, product attributes, environmental concerns, subjective norms, perceived behavioural control, the media and advertising, intention and organic food consumption.

On top of that, some previous local researchers, for instance, Ahmad (2010); Charuz, & Muhamad (2014); Chin, Armin, Neda (2013); Musdiana (2010); Neda, Azami, & Bohan (2014); Rozhan, Ahmad, & Abu (2009) had omitted exploring the factors that influence a certain group of consumers, which is the intentions of the Chinese Generation Y towards organic food consumption. As a result, the gaps need to be bridged. Consequently, the results would encourage food marketers and the MOA to expand organic agricultural food production. Eventually, consumers would have safer food, a better environment and healthier lives.

In summary, this research is concerning an empirical evaluation of the various factors that predict the CGY's intention towards organic food consumption through the application of a research model which was expended from Theory Planned Behaviour (TPB). The research model consists of eight exogenous constructs such as, knowledge, awareness, health consciousness, product attributes, environmental concerns, subjective norms, perceived behavioural control, and the media and advertising, with intention as the mediating construct and organic food consumption as the endogenous construct. All of these eight exogenous constructs might affect the CGY's intention towards organic food consumption. The following was the set of research questions.

1.4 Research Questions

The following research questions, research objectives and hypotheses were proposed:

1. What are the effects of the internal factors (knowledge, awareness, health consciousness, product attributes and environmental concern) on the CGY's intention to consume organic food products?
2. What are the effects of the internal factors (knowledge, awareness, health consciousness, product attributes and environmental concern) on the CGY's organic food consumption?
3. What are the mediating effect of intention on the relationship between the internal factors (knowledge, awareness, health consciousness, product attributes and environmental concern) and CGY's organic food consumption?
4. What are the effects of the external factors (subjective norms, perceived behavioural control, and media and advertising) on the CGY's intention to consume organic food products?
5. What are the effects of the external factors (subjective norms, perceived behaviour control and media and advertising) on the CGY's organic food consumption?
6. What are the mediating effect of intention on the relationship between the external factors (subjective norms, perceived behaviour control, and media and advertising) and CGY's organic food consumption?