
Intention to Purchase Organic Foods among Consumers in Kubang Pasu District, Kedah

Hasnizam Shaari^{1}, Tan Yew Kuan²*

¹Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia (zamree@uum.edu.my)

²DXN Pharmaceutical Sdn. Bhd., 06000 Jitra, Kedah, Malaysia (yewkuan@hotmail.com)

ARTICLE INFO

Article history:

Received in revised form:

18 October 17

Accepted:

05 December 2017

Keywords:

Intention to purchase, organic foods, marketing, and Theory Of Planned Behavior.

ABSTRACT

In this millennium, more and more consumers enlightened and empowered than before. Consumers had placed a greater demand from marketers to produce more innovative, hygiene and safer products to fulfil their needs and wants. For instance, organic foods are not new to the food industry and became one of buzz-word in today's emerging market. Despite the increasing trend on supply of such organic foods, demand of organic foods are relatively small especially in the developing countries such as Malaysia. Underpinned by Theory of Planned Behavior, this study attempts to examine the relationship between attitude towards organic foods, environmental concern and consumer's knowledge on intention to purchase organic foods. A study among 117 consumers in Kubang Pasu, Kedah revealed that only environmental concern plays a significant role in explaining intention to purchase organic foods. Both attitude and consumer's knowledge towards organic foods have insignificant influence intention to purchase organic foods. Hence, based on the result and considering previous literatures, further empirical evidence is needed to confirm either attitude towards organic foods is ethnic-centered and ecoliteracy is more relevant in explaining intention to purchase organic foods in Malaysia.

© 2017. Hosting by Aibma Management. All rights reserved.

1. INTRODUCTION

Demand for healthier products and services are highly demanded around the globe. Malaysia is also in the list of organic foods producer but the development of this market is relatively low as compared to developed countries such as

United States of America, United Kingdom, Germany and Japan (Research Institute of Organic Agriculture, 2009).

In Malaysia, specifically in Kedah state, organic producers were dominated by DXN Pharmaceutical, Gano Excel Enterprise, Jin Teik Organic Marketing Sdn. Bhd, MK Orchard and Agro Bio-Future Sdn. Bhd. Besides a well-known massive organic plantations located in Cameron

Corresponding author: Hasnizam Shaari

E-mail address: zamree@uum.edu.my

Affiliation: Universiti Utara Malaysia, Malaysia.



Hosting by AiBMA Management

© 2017. Hosting by Aibma. All rights reserved.

<http://dx.doi.org/10.1018/j.jarims.2017.10.017>

Highland district in Pahang, Kedah is also recognized as a suitable farming for organics produce. This is highlighted by former Kedah state's Menteri Besar, Datuk Seri Mukhriz Mahathir during the launch of Kedah Agro's organic brand of fruits and vegetables on 21 April 2014. "Kedah Agro" a government-linked company under the state government had partnered with MK Orchard Sdn. Bhd. which aimed to spearhead and anchor the realization of Kedah Organics. During the speech, he encouraged more local farmers to engage and grow more organic produces (The Star, 2014). Among others, Datuk Seri Mukhriz Mahathir added it is vital to understand how the food ecosystem functioned to meet the growing need for stable and sustainable food supplies, with the rise of consumer's health awareness, growing concerns about food quality, the excessive use of pesticides and chemicals in crops, thus, organic foods has become a buzzword within the market.

Beside the increasing concern of government and authorized parties, demand from the consumers side still can be considered low (Euromonitor, 2014). Hence, it is important to understand factors that contribute to the demand of organic foods in order to facilitate the development and growth of such industry. For the purpose of the study, non-price determinants were examined in relation to consumers' intention to purchase organic foods. Based on the literatures, organic foods are marketed at premium price, thus price element is excluded in this study to avoid possibility of bias finding.

A growing number of studies from various developing countries such as China, Sri Lanka, Indonesia as well as Malaysia have stressed that buying intention and behavior of organic products is related to attitudes (Nirushan, 2017; Kapuge, 2016; Slamet, Nakayasu & Bai, 2016; Teng & Wang, 2016). Attitude is recognized as the best agent for transformation. As organic foods demand consumers with change in lifestyles, taste, preferences and buying behaviors (Hossain & Lim, 2016), consumers were postulated to have adequate and favorable attitude towards organic foods before they could commit to adopt organic foods. Hence, this study attempts to examine how consumers' attitude could affect their purchase intention of organic foods.

Organic-based product consumers are generally classified as a 'concerned consumer' - those sensitive to moral and health issues (Weatherell, Tregear & Allinson, 2003). Environment concerns which relate to moral and health issues, were identified as a possible determinants of intention to purchase organic foods. Traditional produces was claimed as hazardous to environment through the extensive usage of chemicals and pesticides in the farming industry (Slamet et al., 2016). However, a mixed results were recorded regarding the influence of environment concerns on intention to purchase organic foods (such as Kapuge, 2016; Pomsanan, Napompech & Suwanmaneepong, 2015). Hence, this study attempts to determine the relationship between environment concerns on intention to purchase organic foods.

Consumer buying behavior towards organic foods can be secured by increasing the sequence of dissemination of

information. According to Bazoche, Deola and Soler (2008), such practices will changed consumers' knowledge regarding the environment, human attitudes and, thus, buying behavior. In the context of organic foods, Hossain and Lim (2016) stressed that consumers need to be exposed to more information on organic foods to facilitate consumer's information searching, processing and decision making. The greater knowledge the consumers have about organic foods, the greater probability for them to buy organic foods (Gracia & de Magistris, 2007). Hence, this study integrates product knowledge, attitude and environmental concerns on intention to purchase organic foods among Kubang Pasu district consumers.

2. LITERATURE REVIEW

Attitude is known as the best predictors for belief and behavior. Based on Theory of Planned Behavior-TPB (Ajzen, 1991), attitude towards one phenomena could explain why people behave accordingly. In this study, attitude towards organic food is postulated to explain consumers' intention to purchase organic foods. The more favorable consumers' attitude towards organics foods, the higher their tendency to adopt organic foods. For the purpose of the study, intention to purchase represent the actual behavior towards organic foods. This is because, based on TPB, intention can be best predict the actual behavior (Ajzen, 1991).

Attitude towards organic foods refers to consumer beliefs that organic foods is healthier, natural, nutritious and sustainable than conventional foods. A study by Slamet, et al. (2016) among 887 consumers in Indonesia revealed that, attitude towards organic foods significantly affect intention to purchase organic foods. This is consistent with the findings of Kapuge (2016) and Azam et al. (2012). However, Pomsanam, Napompech and Suwanmaneepong (2014) stated that, Cambodian consumers had a different attitude towards organic foods as compared to Thai consumers. Based on the literature, it is hypothesized that:

H1: *Consumers' attitude towards organic foods has a significant relationship on intention to purchase organics foods.*

Subjective norms also seem relevant in understanding consumers' intention towards certain behavior. In the context of the recent study, environmental concerns is postulated as a collective perception towards how individual perceived themselves towards the nature. The higher the persons perceived that they need to comply with others' attitude and behavior towards certain issue, the higher their willingness to engage in such behavior. According to Hossain and Lim (2016), environmental concern refers to level and stewardship of the consumer to make product purchase decisions that environmentally friendly.

A study by Voon, Ngui and Agrawal (2011) among 406 respondents in Kuching city, indicated that health and environmental concern have a positive significant relationship with intention to purchase organic foods. This is consistent with the findings of researchers such as Mhlophe (2016) and

Wee et al. (2014). However, researchers such as Hossain & Lim (2016) studied on 97 respondents from Penang city indicated the insignificant result between environmental concerns and intention to purchase organic foods. Based on the mixed results, it is hypothesized that:

H2: *Consumer's environmental concern towards organic foods has a significant relationship on intention to purchase organic foods.*

Perceived behavioral control (PBC) is another element that could justify one's attitude and behavior. According to Ajzen (1991), perceived behavior control refers to the extent to which performance of the behavior is easy or difficult. If they perceived that they had more resources and confidence, the higher the tendency to certain behavior to occur. In this study, PBC is conceptualized as consumer's knowledge towards organic foods which refers to the amount of resource or information they had towards the organic foods. It is postulated that, the more knowledge consumers have towards organic foods, the higher the tendency for them to adopt organic foods. A study by Hossain and Lim (2016) stressed that consumers' knowledge towards organic foods significantly affect intention to purchase organic foods. This is also supported by researchers such as Yang, Al-Shaban and Nguyen (2014), and Aertsens et al. (2011). Hence, based on the literature, this study hypothesized that:

H3: *Consumer's knowledge towards organic foods has a significant relationship on intention to purchase organic foods.*

Based on the preceding discussions and hypothesized relationships, the following Figure 1 summarized the proposed model.

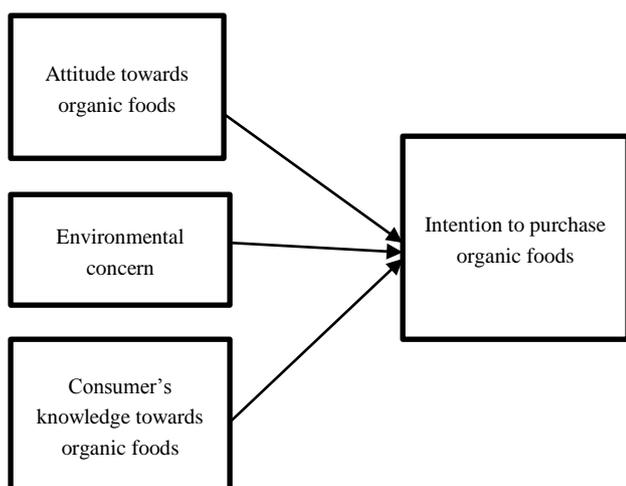


Figure 1: Proposed Model

3. METHODOLOGY

This research employed a quantitative approach with cross-sectional study in nature to examine the correlation or

relationship between the attitude towards organic foods, environmental concerns, and consumer's knowledge and purchase intention of organic foods in Kubang Pasu district, Kedah. The unit of analysis in this study is an individual consumer. Population of the study consists of Kubang Pasu population which is about 220,740 people (<https://www.citypopulation.de/php/malaysia-admin.php?adm2id=0205>).

A mall-intercept survey approach is employed in this study to gather adequate number of respondents. Based on Green's (1991) rule of thumb, a sample size for examining relationship should be larger than 50 sample. Green suggests that a formula for appropriate sample size i.e. $N > 50 + 8m$ (where m is the number of independent variables). This study consists of three independent variables, thus adequate sample size should be 74 [50 + 8(3)]. In considering a low response rate for mall-intercept survey (Homik & Ellis, 1988), questionnaire distributed was doubled into 150 sets. Three main shopping malls in Kubang Pasu were selected namely; Tesco Hypermarket, Yawata Supermarket and C-Mart Mall and 50 sets of questionnaire were distributed respectively.

Respondents were selected during their checkout from the shopping mall. Every 10th shoppers were approached. After a one month duration of data collection, a total 132 set questionnaires were gathered. Thus response rate is 88%. However, based on pre-data screening, only 117 responses were usable. The remaining data could not be further analyzed due to too many missing values and 'easy answer' selection by the respondents (indifference score for all statements).

The questionnaire consists of several sections mainly to gain information regarding consumers' attitude, environmental concerns, knowledge and intention to purchase organic foods. The first part detailing demographic profiles mainly in dichotomous scale. The second part comprises the measurements for attitude, environmental concerns, and consumer's knowledge and intention to purchase organic foods. The measurement for intention to purchase organic foods was adapted from Wong et al. (2012). Measures for attitude and environmental concerns were adapted from King (2011) with 6 and 9 items respectively. Consumer knowledge measure was adapted from Aertsens et al. (2011) with 7 items. All measurements are in 5-point Likert scale (1-strongly disagree to 5-strongly agree). The analyses were done through statistical tools; SPSS 22.0.

4. FINDINGS AND DISCUSSIONS

The following Table 1 summarized the profile of the respondents of the study. Based on the Table 1, majority of the respondents were female (73.5%). Most of the respondents aged between 21-35 years old (74.4%) followed by 36-50 years category (23.1%). About 47% of the respondents had obtained degree or professional degree and 34.2% had a diploma or certificate. Majority of the respondents were Malay (80.3%), followed by Chinese (17.1%) and the remaining were Indian and other ethnicities. Most of the respondents were married (56.4%), served the

private institution and earned between RM1,001 to RM3,000 monthly.

Table 1: Respondent's Profile

Respondent's profile	Frequency	Percentage (%)
Gender		
Male	31	26.5
Female	86	73.5
Age		
20 years and below	2	1.7
21 – 35 years	87	74.4
36 – 50 years	27	23.1
51 years and above	1	0.9
Education level		
Secondary School	15	12.8
Diploma / STPM	40	34.2
Degree / Prof. Degree	55	47.0
Master	4	3.4
PhD	3	2.6
Race		
Malay	94	80.3
Chinese	20	17.1
Indian	1	0.9
Thai	1	0.9
Other	1	0.9
Marital Status		
Single	51	43.6
Married	66	56.4
Employment		
Private	81	69.2
Government	10	8.5
Self Employed	5	4.3
Social Worker	5	4.3
Housewife	4	3.4
Student	11	9.4
Other	1	0.9
Income Range		
RM1000 and Below	22	18.8
RM1001~RM3000	77	65.8
RM3001~RM6000	9	7.7
RM6001~RM10,000	4	3.4
RM10,000 and above	5	4.2

To assess the reliability of the data, reliability test was conducted using SPSS analysis. According to Sekaran (2006), an acceptable Cronbach's Alpha value is 0.60 and above. Meaning that the Cronbach's Alpha value which less than 0.60 should be eliminated from further analysis. Following Pallant (2011) procedures, initial reliability analysis of consumer

attitude was 0.520 which is below the acceptable level as proposed by Sekaran (2006). As a result, two items from consumer attitude towards organic foods were deleted (namely attitude1 and attitude2) leaving four reliable items. The following Table 2 reported the reliability result of this study.

Table 2: Result of Reliability Analysis

Variable	Number of Items	Cronbach's Alpha	Reliability
Purchase Intention	4	0.815	Good
Consumer Attitude	4	0.642	Acceptable
Environmental Concern	9	0.621	Acceptable
Consumer Knowledge	7	0.652	Acceptable

In order to answer the research objectives, multiple regression analysis was conducted. All the assumptions of regression suggested by Hair et al. (2006) were tested and observed. None of the results indicate any violation of the assumptions. The following Table 3 summarized the result of multiple regression analysis.

Dependent Variable Purchase Intention of Organic Foods	
Independent Variables:	
H1: Attitude towards organic foods	.119
H2: Environmental concern	.338**
H3: Consumer knowledge towards organic foods	.080
F Value	7.533
R ²	.167
Adjusted R ²	.145
Durbin-Watson	1.619

* p <.05, **p<.01

Based on Table 3, using this sample, only one hypothesis is supported; i.e. H2 - significant relationship between environmental concerns on intention to purchase organic foods. Both H1 and H3 statistically were not significant. Only environmental concern ($\beta = .338, p < .01$) was found to have a significant and positive relationship to intention to purchase organic foods. Overall, the variance explained by the set of predictor is 16.7%.

Using this sample among Kubang Pasu district, the result is quite unique as compared to the previous studies on organic foods. Surprisingly, attitude towards organic foods statistically insignificant thus inconsistent with earlier studies of Hossain and Lim (2016), Pomsanam et al. (2014) and Teng and Wang (2015). A study of Hussain and Lim (2016) among 105 respondents in Penang revealed that perceived belief and attitude positively influenced buying behavior of organic foods. Although attitude was acclaimed as the best predictor for intention to purchase organic foods, the assumption is not hold true in most situation. This is highlighted by Pomsanam et al. (2014) that recorded Thai consumers and Cambodian

had a different belief and attitude towards organic foods. In their study among 800 consumers of Thai and Cambodian revealed that attitude only significantly influences intention to purchase organic foods among Thai consumers and not for Cambodian. A plausible explanation for this result could be that Malaysian especially consumers in Kubang Pasu tend to have the same attitude for both organic foods and traditional/conventional foods. Consumer's knowledge towards organic foods also insignificantly influence intention to purchase organic foods. The details examination towards the data indicated that the mean score for consumer's knowledge is 3.1133 (std deviation=.4875) which is among the lowest score among all the variables. This could be the plausible explanation for insignificant result.

Only one proposed hypothesized relationship was significant; namely relationship between environmental concern and intention to purchase organic foods thus concurs with the previous findings of Pomsanam et al. (2014) and Kapuge (2016). Based on the studied sample, feeling uneasy of what had happened nowadays with the environment and the awareness that so-called "ecological crisis" face humankind has been greatly affected their attitude and behaviour towards environmentally friendly products.

The findings indicate that, consumers who had a favourable attitude towards environmental concern are more likely to purchase organic foods. This is also supported by the previous findings that argued that environmental concerns was the major force for organic farming effort in many Southeast Asia countries (Slamet et al., 2016). As this study conducted after the launching of "Kedah Organics" campaign by former Menteri Besar Kedah in 2014, there is a possibility of the consumers in Kubang Pasu were more concerned about environmental thus provide a significant result in this study.

CONCLUSION AND RECOMMENDATIONS

This study contributes to extend the literature in the organic foods attitude and behaviour. Based on the results, it raised the question whether attitude towards organic food is explainable based on ethnicity or race. As Pomsanam et al. (2014) recorded a different findings between Thai and Cambodian on attitude towards organic foods, this study also recorded the similar findings as compared to the findings of Hossain and Lim (2016). Majority of respondents of this study were Malays whereas Chinese consumers dominated study conducted by Hossain and Lim (2016) in Penang. Does different ethnicity and/or religion have different perception and belief on organic food? This need to be researched in future study to confirm the interaction of ethnicity in purchase behaviour of organic foods.

Consumer's knowledge is also another subject to be tested in the new context as most literature consistently highlighted the ability of consumer's knowledge in determining intention and actual purchase of organic foods. Ecoliteracy instead of consumer knowledge per se as suggested by Cheah and Phau (2011) seems relevant in examining determinant of intention to purchase organic foods. As an owner of the organic foods brand, extensive marketing communication is needed to be

strategized mainly to educate and form a favourable attitude towards organic foods. If consumers were about to have the same attitude between organic foods and conventional foods, it is dangerous to the marketers as most organic foods were priced at a premium price. More relevant and targeted information are need to be disseminated to the consumers about the organic foods to stimulate their awareness and later to form an appropriate attitude and behaviour towards organic foods.

REFERENCES

- Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J., & Van Huylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food. *British Food Journal*, 113 (11), 1353 – 1378.
- Ajzen, I. (1991). Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Azam N.H.M., Othman, N., Musa, R., AbdulFatah, F. & Awal, A. (2012). Determinant of organic food purchase intention. Retrieved online from <http://ieeexplore.ieee.org/abstract/document/6422990/>
- Bazoche, P., Deola, C. & Soler, L. (2008). *An experimental study of wine consumers' willingness to pay for environmental characteristics. 12th Congress of the European Association of Agriculture Economists*. Retrieved from <http://www.legrenelleenvironment.fr/grenelleenvironment>
- Cheah, I. & Phau, I. (2011). Attitudes towards environmentally friendly products-The influence of ecoliteracy, interpersonal influence and value orientation. *Marketing Intelligence & Planning*, 29(5), 452-472.
- Euromonitor (2014). Analysis by Osman Ghani, <http://smallcaptraders.com/chartered-financial-analyst-cfa-research-report-on-nasdaq-stkl-sunopta-inc/>
- Gracia, A. & De Magistris, T. (2007). Organic food product purchase behaviour: a pilot study for urban consumers in the south of Italy. *Spanish Journal of Agricultural Research*, 5, 439-51.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, 26, 499-510.
- Hornik, J. & Ellis, S. (1988). Strategies to secure compliance for a mall intercept interview. *Public Opinion Quarterly*, 52, 539-551.
- Hossain, M.T. & Lim, P.X. (2016). Consumers' buying behaviour towards organic foods: Evidence from the emerging market. *Malaysian Management Review*, 52(2), 7-17.
- Kapuge, K.D.L.R. (2016). Determinants of organic food buying behaviour: special reference to organic food purchase intention of Sri Lankan customers. *Procedia Food Science*, 6, 303-308.
- King, J.J. (2011). Ecologically friendly food buying and recycling: environmental attitudes and behaviors in a Tennessee survey. *Electronic Theses and Dissertations*.

- Paper 2257. Retrieved from <http://dc.etsu.edu/etd/2257>
- Mhlophe, B. (2016). Consumer purchase intentions towards organic food: Insights from South Africa. *Business & Social Sciences Journal*, 1(1), 1-30.
- Nirushan, K. (2017). Factors influence on purchase intention of organic food products in Trincomalee District. Retrieved from <https://edupediapublications.org/journals/index.php/IJR/article/view/7398/0>
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS (4th ed.)*. Maidenhead: Open University Press/McGraw-Hill.
- Pomsanam, P., Napompech, K. & Suwanmaneepong, S. (2014). An exploratory study on the organic food purchase intention among Thai-Cambodian cross-border consumers. *Asian Journal of Applied Science*, 7(5), 294-305.
- Sekaran, U. (2006). *Research Method for Business: A Skill Building Approach*. United Kingdom: John Wiley & sons, Inc.
- Slamet, A.S., Nakayasu, A. & Bai, H. (2016). The determinants of organic vegetable purchasing in Jabodetabek region, Indonesia. *Foods*, 5 (85), 1-18.
- Teng, C.C. & Wang, Y.M. (2015). Decisional factors driving organic food consumption-generation of consumer purchase intentions. *British Food Journal*, 117(3), 1066-1081.
- The Star News (2014) <http://m.thestar.com.my/story.aspx?hl=+Kedah+efforts+to+promote+organic+farming+bearing+fruit&sec=business&id=%7B7EF9F744-46D1-4224-9435-44484AA11A04%7D>
- Voon, J.P., Ngui, K.S. & Agrawal, A. (2011). Determinants of willingness to purchase organic food: an exploratory study using Structural Equation Modeling. *International Food and Agribusiness Management Review*, 14(2), 103-120.
- Weatherell, C., Tregear, A. & Allinson, J. (2003). In search of the concerned consumer: UK public perceptions of food, farming and buying local. *Journal of Rural Studies*, 19(2), 233-44.
- Wee, C.S., Md. Ariff, M.S., Zakuan, N., Mohd Tajudin, M.N., Ismail, K. & Ishak, N. (2014). Consumers perception, purchase intention and actual purchase behavior of organic food products. *Review of Integrative Business and Economics Research*, 3(2), 378- 397.