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To Buy or Not to Buy? Consumers' attitudes and Purchase Behavior for Organic Food in Malaysia

(Beli atau Tak Beli? Perilaku Pengguna dan Kelakuan Pembelian Makanan Organik di Malaysia)

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ABSTRACT

Organic products demand is increasing due to the awareness of the health benefits and nutritional values attached to these produces. However, in Malaysia, the organic industry is relatively small with more than 60% of the organic products being imported from overseas. Given the importance of this niche sector to the agriculture sector, marketers should understand how the consumers make decisions towards organic products. This study investigated the Malaysian organic purchasers on what affects them in their buying intention. The study uses a non-probability volunteer sampling method of 455 respondents using Structural Equation Modeling- Analysis of Moment Structures (SEM-AMOS). Results showed that health consciousness and animal welfare affects purchasing behavior directly and positively. Health consciousness, taste and food safety indirectly affect purchasing behavior while animal welfare does not have the indirect effect. This study seeks to assist organic product marketer in the development of effective marketing strategies for further increase of organic product consumption.

Keywords: Purchasing behavior; health conscious; better taste; animal welfare; food safety; attitude

ABSTRAK

Permintaan produk organik semakin meningkat demi kesedaran pengguna terhadap faedah kesihatan dan kandungan nilai pemakanan dalam produk orgnik. Namun begitu, di Malaysia, saiz industri organik agak kecil di mana 60% produk organic masih diimport dari luar negara. Memandangkan kepentingan sektor pertanian organik ini, pemasar haruslah memahami bagaimana pengguna membuat keputusan terhadap pembelian produk organik. Kajian ini memerhatikan pembeli organik Malaysia mengenai kelakuan mereka dalam pembelian produk organik. Kajian ini menggunakan kaedah "nonprobability sampling" yang terdiri daripada 455 responden dengan menggunakan Structural Equation Modeling- Analysis of Moment Structures (SEM-AMOS). Hasil kajian menunjukkan bahawa kesedaran kesihatan dan kebajikan haiwan akan mempengaruhi pembelian produk organic secara langsung dan positif. Kesedaran kesihatan, rasa dan keselamatan makanan akan mempengaruhi tingkah laku pembelian tidak langsung manakala kebajikan haiwan tiada kesan tidak langsung. Kajian ini bertujuan untuk membantu pemasar produk organik dari segi pemasaran supaya terdapat peningkatan dalam penggunaan produk organic di kalangan pengguna..

Kata kunci: Kelakuan pembelian; kesedaran kesihatan; kebajikan haiwan; sekuritti makanan; sikap

INTRODUCTION

The drastic increase of the human population globally has resulted in the continuing exploration of more efficient, lower cost and increasing scale of production for human sustainability. Yet, these have collectively led to massive pressures on the natural environment. Due to such challenges faced, ubiquitous stakeholders are moving into the area of organic farming and organic food consumption as part of the global social responsibility towards future sustainability. Zion Market Research has targeted that by 2024, the global organic food and beverages market will reach USD 323.09 billion from USD 124.76 billion in 2017 which is nearly a triple increase.

As for the local Malaysia market, the government does foresee the trend by incorporating organic farming as part of the emphasis in the National Agro-Food Policy 2011-2020 (Bakar et al. 2012). It was reported that organic

products consumption demand in Malaysia has a financial value of more than RM20 million a year with at least 12.4% per year (Suhaimee, Ibrahim & Abd Wahab 2016). Mustapha, Zubairu and Adamu (2018) reported that the demand for organic products is increasing due to the rising awareness on the health benefits and nutritional values attached to these produce. Still, the domestic organic industry is relatively small with more than 60% of the organic products being imported from overseas (Somasundram, Razali & Santhirasegaram 2016). Given the importance of this niche sector to the agriculture sector, it is thus important to understand how the consumers make decisions in terms of their purchasing behavior towards purchasing of organic products.

Past researches focusing on the understanding of consumer's purchasing behavior towards organic products have yielded inconsistent results. Past researchers agreed that health consciousness, taste, animal welfare and food safety affect the attitude of organic purchasers in their intention to buy (Hsu, Chang & Lin 2016; van Riemsdijk et al. 2017; Xie et al. 2015). However, other researchers found that health consciousness (Hoque, Nurul Alam & Nahid 2018), food safety (Hsu, Chang & Lin 2016) and animal welfare (Honkanen & Olsen 2009) may not affect the organic purchasers in their purchasing intention. Cabuk, Tanrikulu and Gelibolu (2014) claimed to be the first to test the mediation analysis between health consciousness, food safety and intention to buy in Turkey while Michaelidou and Hassan (2008) also claimed that limited examination of attitude as a mediator. Thus, there is a need to investigate the motive of the Malaysian organic purchasers in terms of what affects them in their buying intention.

LITERATURE REVIEW

ABC THEORY

The underpinning theory used in this study is Attitude Behavior Context (ABC) theory, where it is a model of attitude that defines multidimensional perspective by "affect, behaviour and cognition" (Solomon, 2010: 125). ABC theory is characterized as an environmental model, as it accommodated for the surroundings of the consumer (Guagnano, Stern & Dietz 1995). It consists of three parts: the antecedents which comprise of health conscious, better taste, animal welfare and food safety, the attitudinal factor refers to inward environment attitude of consumers towards organic food and the behavioral factor which is organic food purchasing behavior.

PURCHASING BEHAVIOR

Philip et al. (2017) defined consumer purchase behaviour as a learning process of how consumers select, buy, use and place the products and that consumers are using factors such as past experience, perception, price and branding in their purchase decisions. Vazifehdoust et al. (2013) stated that green purchasing behaviour is when one purchases products or services that minimizes the environmental impacts over the life cycle of the product or service where manufacturing, transportation, usage and disposal is concerned. Magnusson et al. (2001) study showed 67% of the respondents had positive attitudes toward organic food, but only 10% of the consumers were expected to buy organic food. Purchasing behaviour is differentiated from intention whereby those that they state their intention to buy but may not end up actually buying it (Niessen & Hamm 2008).

HEALTH CONSCIOUSNESS

Organic foods are considered healthier than conventional foods because it is produced without pesticides, synthetic chemicals, or additives. Health consciousness evaluates one's readiness to decide on health actions (Wang et al. 2019). Organic food purchasers are driven to sustain a healthy lifestyle and well-being because they are health conscious (Schifferstein & Ophuis 1998; Bishnoi & Kumar 2017). Likewise, in a study done in Canada by Hamzaoui-Essoussi and Zahaf (2012) indicated that consumers seem to be attracted by the health-conscious aspect provided by organic foods. Ayswarya and Vasanthi (2016) reported that rising health consciousness among consumers in major cities in India has contributed to surging demand for the organic market. Hence, positive reviews above suggested that health consciousness plays a significant role in initiating and enhancing the demand for organic food in the marketplace.

BETTER TASTE

Taste plays an important reason for consumers to purchase organic food and taste has been found to be the main determinant of food selection regardless of age groups (Nguyen, Girgis & Robinson 2015; Schifferstein & Ophuis 1998). Study by Aygen (2012) found Turkish consumers strongly agreed that organic products have better taste. The

study findings are similar with Aertsens et al. (2011) which concluded that taste is one of the top five reasons for Belgian consumers in purchasing organic vegetables. Consistent with the foregoing results (Bi et al. 2015: Cranfield, Henson & Blandon 2012; Hughner et al. 2007) also indicated that taste has been noted as the main reason to purchase organic products. In light of the increased purchase of organic foods as highlighted in the review above, taste is one of the prominent elements that need to be explored more extensively.

ANIMAL WELFARE

The World Animal Health Organization defines animal welfare as how animals cope with the condition in which they live. Human concern for animal welfare is based on the awareness that animals are sentient and that consideration should be given to their well-being, especially when animals are used for food, in animal testing, or as pets. For organic food consideration, consumers are concerned whether the human activities on organic farming will affect the survival of endangered species (Bousfield & Brown 2010). The demand for organic food is increasing also due to the consumer growing desire for high animal welfare standards (Sutherland, Webster & Sutherland 2013). This result is consistent with Harper and Makatouni (2002) where it showed animal welfare is used by consumers as an indicator to purchase organic food.

FOOD SAFETY

According to Henson and Traill (1993), food safety can be expressed as the probability of not suffering some hazard from consuming a specific food. Padel and Foster (2005) described food safety as toxic free and containing no pesticides, which had become the motivation for consumers to purchase organic food. Consumers are gaining knowledge on the physical threats that are involved in food production (Yee, Yeung & Morris 2005). For instance, the excessive food residues such as chemical sprays, fertilizers, artificial additives and preservatives which resulted from farming methods (Yee at al. 2005) and the lack of regulations from authorities on the food safety of organic food (Rehber & Turhan 2002) have set an alarm for consumers on food safety issues. Food safety concern is therefore identified as a concern when purchasing organic food.

ATTITUDE AS MEDIATOR

Ajzen (1991) stated that attitude is a person's degree to favorable or unfavorable evaluation toward the behavior. The more favorable the attitude, the better will be the behavioral outcomes which is also supported by the findings from Kozup, Creyer and Burton (2003) that support consumers' tendency to display a positive attitude when purchasing healthy and nutritional products. A recent finding by Singh and Verma (2017), also reveals that positive and significant effects of health consciousness influence the consumer attitude towards organic food products. In this study, data were collected from 611 consumers through a structured questionnaire and were analysed using various techniques such as factor analysis, independent *t*-test, ANOVA multiple linear regression, and hierarchical multiple regression analysis. Similarly, Voon, Ngui and Agrawal (2011) findings in Malaysia and Tsakiridou et al. (2008) findings in Greece show that generally consumers have positive attitude towards buying organic food. However, Tarkiainen and Sundqvist (2005) study findings in Finland shows that attitudes have an insignificant relationship towards buying organic food. Hence, to turn consumers towards buying organic food, study on consumer's attitude remains one of the most important factors that needs in-depth attention for exploration.

METHODOLOGY

This study uses the post-positivism research paradigm via a quantitative approach using a survey method. A 5-point Likert scale was used to allow the respondents to indicate their level of agreement for each of the exogenous and endogenous variables. Health consciousness was measured using six (6) items from Michaelidou and Hassan (2008). Three (3) items from Slamet, Nakayasu and Bai (2016) were used to measure better taste. Three (3) items were adopted from Steptoe, Pollard and Wardle (1995) to measure food safety, two (2) items were adopted from Lee and Goudeau (2014) to measure animal welfare, six (6) items were used to measure attitudes (Ajzen 2001) and five (5) items from Wee et al. (2014) to measure purchasing behavior.

Non-probability volunteer sampling method was employed since there is no sampling frame available (Saunders, Lewis & Thornhill 2012). The respondents were verbally asked for their voluntary participation and checking were done after the completion to ensure no missing value. Thus, a total of 455 final samples were collected from Malaysia

organic purchasers for data analysis using Structural Equation Modeling- Analysis of Moment Structures (SEM-AMOS). A two-stage approach was performed and reporting is based on the measurement model to confirm the validity and reliability of the data. Structural model was used to answer the research objectives via the hypotheses set. The data were checked to ensure non-normality issue whereby the skewness and kurtosis does not exceed the value of +/-1.5 (Tabachnick & Fidell 2013) and no outliers were deleted using the Mahalanobis Distance method because based on the critical ratio of Mardia's coefficient of multivariate kurtosis is already smaller than 1.96 (Gao, Mokhtarian & Johnston 2008).

DATA ANALYSIS

TABLE 1. Respondent's profile

	Number (N=455)	Percentage
Gender		
Male	104	22.9
Female	351	77.1
Age		
Under 20 years old	63	13.8
20-30 years old	81	17.8
31-40 years old	93	20.4
41-50 years old	81	17.8
Above 50 years old	137	30.1
Race		
Chinese	402	88.4
Malay	42	9.2
Indian	8	1.8
Others	3	0.7
Marital Status		
Single	180	39.6
Married with children	243	53.4
Married without children	32	7.0
Highest Education Level		
SPM	150	33.0
STPM	43	9.5
Certificate or Diploma	83	18.2
Bachelor's degree	112	24.6
Master's Degree	16	3.5
Doctoral Degree	3	0.7
Others	48	10.5
Occupation		
Student	84	18.5
Housewife	92	20.2
Employee	180	39.6
Self-employed	64	14.1
Unemployed	4	0.9
Retired	14	3.1
Others	17	3.7
Monthly Household Income		
Below RM2000	185	40.7
RM2000 – RM4000	111	24.4
RM4001 – RM6000	62	13.6
RM6001 – RM8000	34	7.5
RM8001 – RM10000	31	6.8
Above RM10000	32	7.0

From Table 1, the general profile of the respondents includes 351 female which is 77.1% with the remaining 104 male (22.9%). Most of them were above the age of 50 years old (30.1%) who are Chinese (88.4%). Both married with children (53.4%) and single (39.6%) respondents constitute the majority of the respondents. The majority of the respondents only attained SPM (33%) as part of their highest education level. The second highest group have obtained their bachelor's degree (24.6%). In terms of occupation, the majority of the respondents are working adults (39.6%)

with the second largest category which are housewives (20.2%). The largest reported monthly household income is below RM2000 (40.7%) and lowest at RM8001-RM10,000 at 6.8%.

TABLE 2. Composite reliability, Cronbach alpha and average variance extracted for all constructs

Construct	Items	Factor Loading	Cronbach Alpha	CR	AVE
Health Consciousness	Reflect about my health.	0.852	0.937	0.937	0.712
	Self-conscious about my health.	0.871			
	Alert to changes.	0.842			
	Aware of my health.	0.860			
	Take responsibility.	0.846			
	Aware of the state of my health.	0.790			
Better Taste	Organic is tastier.	0.721	0.829	0.842	0.641
	Organic is fresher.	0.886			
	Organic is higher quality.	0.786			
Animal Welfare	Produced in ways does not harm animals.	0.791	0.813	0.815	0.688
	Produced in ways protecting animals'	0.866			
Food Safety	No additives.	0.872	0.886	0.887	0.724
	Contain natural ingredients.	0.821			
	Contain no artificial ingredients.	0.859			
Attitude	Interesting	0.800	0.919	0.920	0.657
	Good idea	0.857			
	Important	0.848			
	Beneficial	0.827			
	Wise	0.760			
	Favorable	0.767			
Purchasing Behavior	Regular purchaser.	0.756	0.905	0.905	0.658
	Own consumption.	0.718			
	Buy again.	0.866			
	Best choice	0.865			
	Loyal patron	0.839			

TABLE 3. Assessment of discriminant validity

Construct	Health Consciousness	Better Taste	Animal Welfare	Food Safety	Attitude	Purchasing Behavior
Health Consciousness	**0.844**					
Better Taste	0.596	**0.801**				
Animal Welfare	0.512	0.653	**0.829**			
Food Safety	0.582	0.647	0.696	**0.851**		
Attitude	0.558	0.655	0.597	0.656	**0.811**	
Purchasing Behavior	0.542	0.599	0.574	0.547	0.758	**0.811**

*Bold denotes squared root of AVE

Convergent validity is achieved for all constructs because the AVE values for all constructs exceeded 0.5. The table also indicates all the factor loadings are above 0.7 and composite reliability exceeds 0.7 (Fornell & Larcker 1981) Thus, the reliability of the constructs is all considered to be good and acceptable (Table 2). Table 3 also signified that the Discriminant Validity is achieved since the values in bold which represent the square root of AVE are higher than all the values in its rows and columns. The rest of the values show the correlation between the constructs with other constructs within the conceptual model. The Confirmatory Factor Analysis (CFA) was analyzed using the IBM-SPSS-Amos version 21. The results (Table 4) shows that the conceptual model is fit based on the reported Chisq/df= 3.081, CFI=0.943, RMSEA=0.065, and PNFI=0.796 (Hooper 2008).

TABLE 4. Benchmark and fit indices

Index Categories	Index	Index Value	Benchmark Value	Support	Result
Absolute Fit	RMSEA	0.065	0.08	Hooper, 2008	Achieved
Incremental Fit	CFI	0.943	>=0.9	Hooper, 2008	Achieved
Parsimonious Fit	PNFI	0.796	>0.5	Hooper, 2008	Achieved

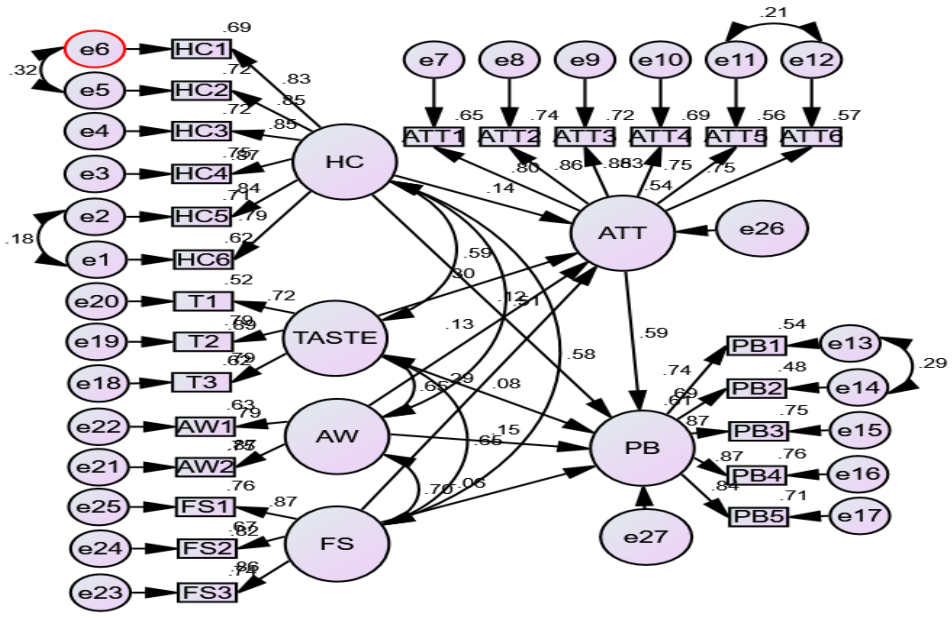

FIGURE 1. Conceptual model

TABLE 5. Regression path coefficient for hypothesis testing

	Estimate	S.E.	C.R.	p-value	Result
H_{1a}: HC→ATT	.156	.054	2.884	.004	Sig at .05
H_{2a}: Taste→ATT	.312	.066	4.769	***	Sig at .01
H_{3a}: AW→ATT	.115	.057	2.007	.045	Sig at .05
H_{4a}: FS→ATT	.272	.059	4.593	***	Sig at .01
H_5: ATT →PB	.569	.060	9.559	***	Sig at .01
H_{1b}: HC→PB	.126	.050	2.514	.012	Sig at .05
H_{2b}: Taste→PB	.086	.061	1.397	.162	n.s.
H_{3b}: AW→PB	.126	.053	2.373	.018	Sig at .05
H_{4b}: FS→PB	-.056	.055	-1.012	.311	n.s.

Note: HC – Health Consciousness, Taste – Better Taste, AW – Animal Welfare, FS – Food Safety, ATT – Attitude, PB – Purchasing Behavior

Table 5 indicates that the rest of the hypotheses proposed were supported with the exception to taste (t=0.086, p=0.162) and food safety (t=-0.056, p=0.311) in affecting purchasing behavior. All the four motives in terms of health consciousness (t=0.156, p=0.004), better taste (t=0.312, p=0.000), animal welfare (t=0.115, p=0.045) and food safety (t=0.272, p=0.000) affects attitude of the organic purchasers positively. Where else, only health consciousness (t=0.126, p=0.012) and animal welfare (t=0.126, p=0.018) affects purchasing behavior directly and positively.

TABLE 6. Mediating testing

	95% Confidence Interval		p-value	Result
Indirect Effect	Lower Bound	Upper Bound		
HC →PB	.021	.179	.008	Sig at 0.05
Taste →PB	.095	.284	.001	Sig at 0.05
AW →PB	-.002	.157	.055	n.s.
FS →PB	.083	.250	.001	Sig at 0.05

Using the bootstrapping method, the 95% CI for the indirect effect for health consciousness (.021, .179); better taste (095, .284); animal welfare (-.002, .157) and food safety (.083, .250) based on the lower bound (LB) and upper bound (UB) value. It shows that health consciousness, better taste and food safety LB and UB value is outside the 0 value. The null hypothesis shows that if 0 falls within the interval of LB and UB, then the result fail to reject the null hypothesis which means that there is no mediating effect. Thus, the result shows that with the exception to animal welfare, the rest of the constructs have indirect effect towards purchasing behavior via attitude (Table 6).

DISCUSSION, RECOMMENDATIONS AND LIMITATIONS FOR FUTURE RESEARCH

Health consciousness is reflected as one of the crucial factors that is able to influence consumer attitudes towards organic products. The relationship between health consciousness and attitudes shows significant results. This result is concurrent with Chen and Wei (2017) study in Taiwan which shows health consciousness has a direct relationship with attitudes. Besides, organic food study by Chen (2009) also indicated there is a significant relationship between health consciousness and attitudes. Food taste also plays an important role in determining consumer attitudes. The findings of this study show that there is a significant relationship between taste of organic food and consumer attitudes. This is supported by past study results which have pointed out significant relationship between taste and attitudes (Koritar, Philippi & dos Santos Alvarenga 2017). Organic food consumers show concerns to animal welfare. Previous study by Phillips et al. (2012) study on university students resulted in a significant relationship between animal welfare and attitudes. This finding is parallel to our study findings which stated significant relationships too. Preceding study in Malaysia by Quah and Tan (2009) results shows that food safety is an important determinant that influences consumer attitudes. The relationship shows a significant relationship between food safety and attitudes. Likewise, Michaelidou and Hassan (2008) findings also indicate food safety as one of the most important predictors that influence consumer's attitudes. Recent study by Jose and Koshy (2018), mentioned that food safety influences positive attitudes towards organic products. All these results are consistent with this present study finding. Collectively, it shows that as organic food is perceived to be healthy, tasty, safe for consumption and exhibits concern on animal welfare increases the attitude toward organic food.

Based on the findings, it shows that consumers have positive attitudes towards purchase behavior of organic food. Similarly Basha and Lal (2019) studies in India also shows consumer attitude has positive relationship towards purchasing organic foods because consumers have the understanding that organically produced foods are healthier. Other studies by Voon et al. (2011) in Malaysia and Tsakiridou et al. (2008) in Greece also supported that positive attitude influences purchase behavior which is parallel with the findings of this present study. Thus, it is noteworthy to study consumer attitudes perspectives in influencing their purchase behavior. Numerous studies have supported that health consciousness is one of the most influential factors for organic food consumers (Schifferstein & Ophuis 1998; Padel & Foster 2005; Bishnoi & Kumar 2017). Coupled with the perception, most health consciousness past studies have shown significant relationship. This current study finding also confirms significance results towards purchase behavior. However, based on the result, it was shown that taste does not affect the purchasing behaviour of organic products consumers. This could be due to individuals perceived consumption of organic food is for the health-related benefits. Thus, the benefits have overwritten the importance of taste in consumers' decision-making (Eertmans, Baeyens & Van den Bergh 2001). Furthermore, Fillion and Arazi (2002) claim that organic food does not taste better in their studies.

Earlier study by Bousfield and Brown (2010) and Sutherland et. al. (2013) claimed that high animal welfare standards that care for the survival of endangered species has increased the demand for organic food. The current study findings shows there is a significant relationship between animal welfare and purchase behavior of organic food. Indeed, Harper and Makatouni (2002) and Padel and Foster (2005) also found similar results. The relationship between food safety and purchase behavior in our study shows insignificant results which are consistent with research conducted by Hsu et al. (2016). Thus, it can be concluded that Malaysian consumers are more concerned with the perceptions of health consciousness and concern towards animal welfare when directly consuming and purchasing organic food as compared to others since taste and food safety is not their concern directly.

Bishnoi and Kumar (2017) has confirmed that health consciousness has direct influence towards purchase behavior of organic food. Chen and Wei (2017) support the relationship of health consciousness towards attitudes while Basha and Lal (2019) studies indicated the importance of consumers' attitudes towards purchasing organic foods. This current study reveals that attitudes as a mediator do influence the relationship between health consciousness and purchase behavior of organic food. The result of this study shows a significant relationship between taste and purchase behaviour mediated by attitude. Hence, the role of attitudes has influence between taste and purchase behaviour. Taste has proven as an important indicator in food purchase behaviour. Aygen (2012). Consumers

pay more attention to taste before purchase. Past studies (Voon et al. 2011 & Tsakiridou et al. 2008) verify the importance of attitudes towards purchase behaviour. In terms of the mediation effect of attitude between animal welfare and purchasing behaviour, it was found to be insignificant. Animal welfare was argued to have credence characteristics whereby it cannot be confirmed before or even after purchase (Napolitano, Serrapica & Braghieri 2013). Therefore, consumers are not able to verify their purchases whether their purchases will directly contribute towards the welfare of the animals. Napolitano et al. (2013) also mentioned that price-conscious consumers viewed the values of animal welfare to be negative which only resulted in the unnecessary passing of additional costs to producers and consumers. Hence, it does not affect them in their attitude and ultimately purchase behaviour. Food safety influences attitudes (Jose & Koshy 2018). Furthermore, Padel and Foster (2005) supported the relationship between food safety and purchase behavior. Our study confirms the significance results of the mediation role of attitude. Moreover, research by de-Magistris and Gracia (2016), and Lea and Worsley (2005), suggested that consumers tend to develop a positive attitude when purchasing products and this attitude influences their choices during the purchasing process. More so, the relationship between attitude and purchase behaviour is a fundamental key to affecting demand and market.

Health consciousness is one of the important decision-making factors in purchasing organic food (Hamzaoui-Essoussi & Zahaf 2012). Marketers are encouraged to promote their organic food using health benefits such as highlighting the nutritional values to the consumers. Words such as 'safe; 'healthy' and 'better taste' are appropriate to be labeled on the packaging to portray a consistent image and a good impression for organic food consumers. Information on the benefits of consuming organic food should be widespread in public to increase consumer knowledge and to build consumer awareness towards organic food. Taste plays a significant reason for consumers to purchase organic food (Nguyen et al. 2015). Thus, marketers need to explore taste more extensively. For instance, marketers can organize an activity to enable visitors to enjoy organic food from farm to table, where it enables the consumers to cook the organic food right after harvest. This enables the consumers to taste organic food on the spot for its taste, freshness, texture and the sweetness contain in organic food.

The demand for organic food is increasing due to the consumer growing desire for high animal welfare standards (Sutherland et al. 2013). Producers need to guarantee organic farm animals are fed with organic diets and free from unnecessarily routine antibiotics. Organic farm animals need to be guaranteed of space and access to paddocks during their lifetime. This is to ensure consumers, when they buy organic, they can be assured that animals have lived a healthy life. Padel and Foster (2005) described food safety as toxic free, containing no pesticides and this had become the motivation for consumers to purchase organic food. Thus, practices such as establishing beneficial habitats, companion planting, green manures and crop rotations are all-important tools for pest and disease management in organic farming systems. These activities need to be done in organic farming to convince consumers that it is safe to consume organic food. Besides, producers can organize a farm tour for the public, to show them how their organic foods are grown organically.

In line with this, the managerial implications indicated that the predominant role of consumers' attitudes based on the findings of this study can significantly shape consumer purchasing behaviour towards organic foods. Thus, to give certainty on the benefit of consuming organic foods', marketers and policymakers should impart messages to their consumers through the appropriate channel.

Using Attitude-Behavior-Context theory, the results emphasized the importance of personal antecedents in shaping attitudes that in turn affected behaviors regarding organic food purchasing behavior. In particular, results pointed out the importance of consumer attitude and provided marketers and policymakers with strategies to communicate with the different segments to promote organic foods. Moreover, it will inspire more researchers to use this theory and also other relevant variables to measure organic food purchasing behavior in Asian context particularly in Malaysia.

Every research conducted is not without its limitations. The limitation for the current study is that the survey was only conducted using English language. Besides, the majority of the respondents for the study is mainly Chinese with a limited number of respondents. Based on Abu Dardak, Zainal Abidin and Ali (2009), the majority of the organic purchasers are still Chinese in Malaysia. Similarly, a previous study by (Ibitoye et al. 2014) also revealed that Chinese consumers were more aware of organic food consumption compared to the other races in Malaysia.

Lastly, the limited number of constructs used for the study may limit the scope of study. Thus, it was suggested that future studies can consider using other languages besides English. The future study may consider a better proportion of the respondents by including more respondents from other races. Lastly, the study suggested that in addition to the construct used which is based on the environmental attitude of consumer towards organic products, other contextual factors such as emotional evaluations towards organic products (Aertsens et al. 2009) or the integration of consumer characteristics (Higuchi, 2015) may also be considered.

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