



# Healthy lifestyle and Consumer Willingness to Pay Organic Foods

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## **Abstract**

*Purpose – The objective of this study is to investigate the antecedents and consequents of attitude toward organic foods.*

*Design/methodology/approach – We proposed hypotheses to examine relationships between health consciousness, environmental consciousness and healthy life style on attitude and willingness to pay organic foods and the influence of subjective norm and perceived price on willingness to pay organic foods. Survey data was collected from 110 students from a private university in Jakarta as consumers of supermarkets . Structural equation modeling was used to test hypothesized Practical implications – This study will provide information on factors that influence consumer’s willingness to pay organic foods. Research limitations/implications – This study concerned on general organic foods. Since the different store formats have also very different characteristics it is likely that the consumers’ buying behavior differs between different Store’s formats.*

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**Keywords** – *Health consciousness, environmental consciousness, healthy life style, attitude and behavioral intentions towards organic foods, consumer willingness to pay organic foods.*

**Paper type:** *Research paper*

## **INTRODUCTION**

The trend of healthy life style reveals in Indonesia as indicated by the increases of the organic agriculture by 10% per year (Arifin et.al., 2009). This phenomena shows the growing of people interests in organic farming. Organic agriculture is expected to solve the health and environmental problems. The growth of production and



consumption of organic products in Indonesia in the last three years was quite rapid. The products labeled as organic are spreading on the market (*Lidya Inawati, 2010*). Organic is the one of the fastest growing agricultural markets due to the growing concern of consumers about their own health, the environment, and the reported crises and emergencies worldwide on food safety and environmental issues in recent decades (Sadek and Oktarani, 2009).

This study is expected will contribute to the existing studies in Indonesia. Previous studies on organic food marketing mostly conducted in the United States and the European settings. Little research was found concerning consumers' perception of organic food marketing in Indonesia. In particular, there is a paucity of studies on consumption trends in South-East Asian countries (i.e. Singapore, Thailand, Indonesia, Malaysia, Vietnam, etc.) even though the region represents some of the most promising markets for organic food (Voon, Ngui and Agrawal, 2011).

An interest in healthy and organic products is growing in Indonesia. The trend includes digestive health, immune system, fortification, going back to nature, weight management, cardiovascular health, oral health and beauty health (Fahwani and Slette, 2011)

The objective of this study is to investigate the antecedents and consequents of consumer's attitudes towards behavioral intentions of organic products. The results of the study can therefore provide insights for marketer of organic foods on the main variables that could be used for promoting more widespread consumption of the products in Indonesia

## **THEORETICAL FRAMEWORK**

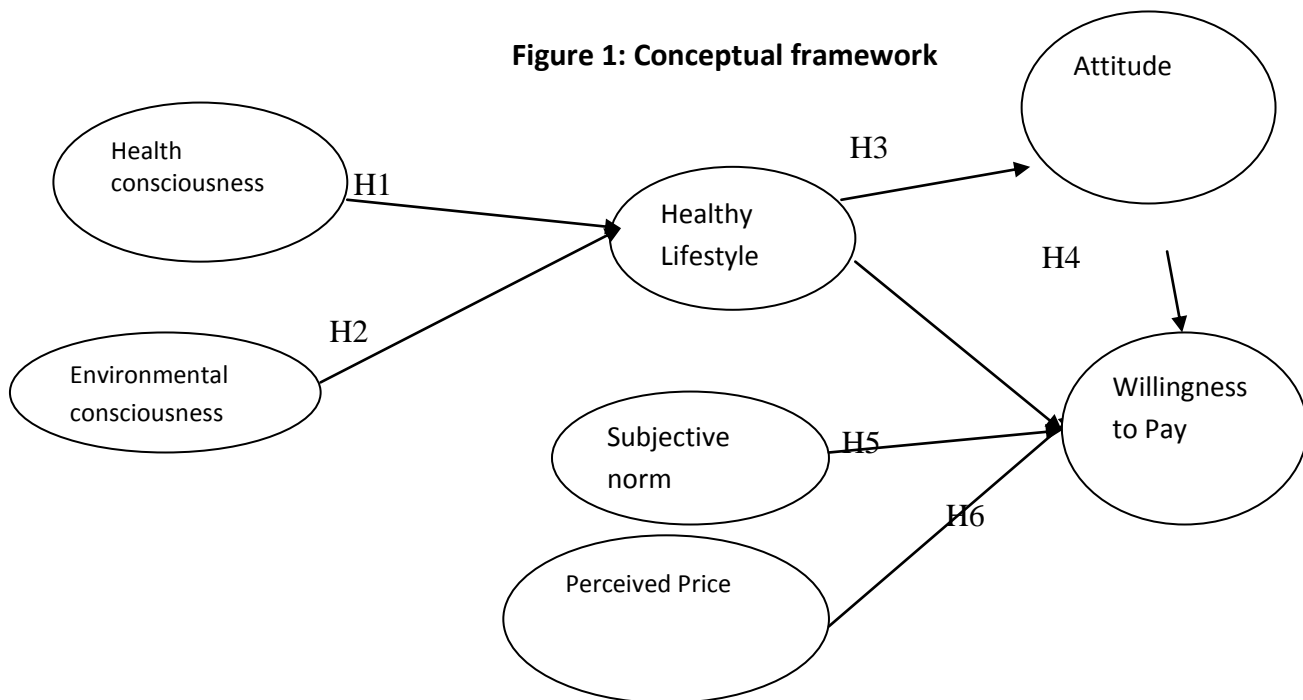
Previous studies indicates that causality flows from values through attitudes to behavior, forming a hierarchical relationship of value-attitude-behavior ( Maio and Olson, 1994; Thøgersen and Olander, 2002). It is believed that organic foods are healthier and promise better environmental protection. Thus, concerns for health and for the environment are the two most commonly stated drivers for purchasing organic foods (Wandel and Bugge, 1997). Health and environmental consciousness are believed to be determinants of consumer's attitude toward organic foods. Healthy lifestyle which emphasizes physical health-related activities may enhance the impacts of health consciousness and environmental attitudes on their attitude toward organic foods (Chen,2009).

Theory of Planned Behavior (Ajzen, 1991) is used to explain the antecedents of intention to buy organic products. The theory argues that an individual's intention to perform a behavior is influenced by a combination of behavioral attitudes (i.e. a person's beliefs about the desirability of behaviors); subjective norms (i.e. a person's



perceived relevance and importance of opinions of significant others); and behavioral control (i.e. a person's sense of control over behavior).

Specifically, this study considers consumer health consciousness, environmental consciousness and consumer knowledge as antecedents of attitude, subjective norm and the importance of price or cost as a predictor of behavioral intention (see Figure 1).



### ***Environmental consciousness and Health Consciousness***

Organic products are viewed as promoting a healthy lifestyle, explained by the acronym LOHAS (lifestyles of health and sustainability) (Essoussi and Zahaf, 2008). Values concerned with health and environment influence attitudes toward buying organic food (Chryssohoidis and Krystallis, 2005). Health conscious consumers care about the desired state of well-being and put forth an effort to maintain a healthy life (Newsom et al., 2005). Organic food is generally regarded as more nutritious and safer than conventionally-produced food, health-conscious consumers are more likely to develop positive attitudes towards the health enhancing attributes of organic food (Michaelidou and Hasson, 2008). A study of Chen (2009) found that health consciousness and environmental attitudes influence the consumer's attitude toward organic foods through his/her healthy lifestyle.



Therefore, Hypothesis 1, 2 and 3 are proposed as follows:

- H1. Health consciousness will positively influence attitude toward buying organic foods.**
- H2. Environmental consciousness will positively influence attitude toward buying organic foods.**
- H3. There is a positive relationship of Healthy lifestyle on Attitude**

### ***Behavioral intentions***

A broader conceptualization of the consumer behavioral intentions construct was proposed by Parasuraman et al. (1994) and this scale consisted of 13 items that aimed to capture five dimensions; loyalty to company, propensity to switch, willingness to pay more, external response to a problem and internal response to a problem, and since that time this scale has been used and refined in a number of studies (Bloemer et al., 1999; de Ruyter et al., 1998; Yu and Dean, 2001; Zeithaml et al., 1996).

### ***Attitude***

Attitude toward behavior refers to personal evaluations being favorable or unfavorable to perform the behavior. According to Ajzen (1985), an individual is more likely to perform a certain behavior if he/she has a positive attitude toward performing the behavior.

Several studies found the positive relationship between consumers' attitudes and behavioral intentions for green purchasing in different cultures, such as Asian, US, and European, and in different product categories (Chan and Lau, 2001; Kalafatis et al., 1999; Tarkiainen and Sundqvist, 2005). The likelihood of consuming organic vegetables is significantly and positively influenced by VELT-membership, subjective knowledge, attitude, motivations and the presence of children in the household (Aertsens et al., 2010).

Attitudes are significant in determining producer conversion to organic farming systems and consumer purchase behavior. For consumers, the concept of meat safety was also central to meat buying attitudes, particularly within the context of country-of-origin (McEachern, M.G., and Willock, J., 2004).

The strongest motivations for consuming organic vegetables are that they are produced without synthetic pesticides, are better for the environment, healthier, of higher quality and taste better (Aertsens, Mondelaers, Verbeke, Buysse and Huylenbroeck, 2010).



Therefore, Hypothesis 4 is proposed as follows:

**H4. Consumers' attitude toward organic products will have a positive influence on behavioral intentions to buy organic foods.**

#### ***Subjective norms***

Subjective norm is defined as the individual's perception of the likelihood that the potential referent group or individuals approve or disapprove of performing the given behavior (Fishbein and Ajzen, 1975; Ajzen, 1991). Subjective norm is shown as a direct determinant of behavioral intention (Ajzen, 1991).

Individuals' intention to consume organic food are likely to be strengthened if they believe that other individuals expect them to do so, or they wish to be identified with other individuals who are consuming organic food (Chen 2007). A strong relationship between subjective norm and intention has been shown in previous research (Kim and Chung, 2011; Bamberg, 2003; Kalafatis et al., 1999). Therefore, hypothesis 5 is proposed as follows:

**H5. Consumers' subjective norms will have a positive influence on their intentions to buy organic foods.**

#### ***Perceived behavioral control***

Perceived behavioral control refers to the degree of control that an individual perceives over performing the behavior (Chen, 2007; Kang et al., 2006). Thus, those who perceive a higher degree of personal control tend to have stronger behavioral intention to engage in a certain behavior (Ajzen, 1991). People belief concerning higher resources such as time, money, and skills will increase their perceptions of control and hence finally will increase their behavioral intentions increase Kim and Chung (2011).

As the organic products' relatively higher price has been n practically the most important reason for not buying organic food (Tarkiainen, 2005; Magnusson et al., 2001), higher price can avoid consumers to purchase organic food products

**H6. Perceived price influences the intention to buy organic food products**



## **METHOD**

Master of Management students in a private university in Jakarta participated in this study. A purposive sample was used in term of familiarity with organic foods. From 200 responses collected, 110 valid responses were used for further analysis.

### **Measures**

#### ***Health consciousness***

Three items (e.g. "I choose food carefully to ensure good health) were adapted from Tarkiainen and Sundqvist (2005)

#### ***Environmental consciousness***

Two items (e.g. Organic food is more environmentally friendly) were adapted from Voon, et.al., (2011)

#### ***Consumer's Knowledge***

Seven items were adapted from Aertson et al. (2010) (e.g I know a lot about how to judge the quality of organic food)

#### ***Attitude***

We asked respondents to indicate their attitude towards the consumption of organic food on six bi-polar "attitude scales" (1. good-bad; 2. unhappy-happy, 3. unpleasant-pleasant; 4. low spirited – high spirited; 5. terrible – great; 6. negative – positive); were adapted from Aertsends et al., (2010)

#### ***Subjective norm***

Two items were adapted from Voon et al. (2011) (e.g my friends and family consume organic food)

#### ***Perceived Price***

Two items were measured on a seven-point scale:

Only consumers with higher income can afford organic food", "Organic food is beyond my budget") were adapted from Voon et.al (2011).

#### ***Willingness to pay***

Two items were measured ("It is likely that I will purchase food", "If organic food is available, I buy it") were adapted from Kim and Chung (2011) and three items were adapted from White and Yu (2005) ("recommend the course to someone else", "Say positive things about the course", "Pay a higher price for the benefits currently received")



## RESULTS AND DISCUSSION

Following the two-step approach, a measurement model was first estimated using a confirmatory factor analysis (CFA). Each measurement item was loaded on its prior construct. The instrument reliability was assessed using Cronbach's alpha. The alpha values range from 0.68-0.80. Convergent validity meets the requirements in this study all the items had relatively high factor loadings on the underlying construct, the values range from 0.70 to 0.82. Overall model fit for CFA was assessed using the Chi-square test and a goodness of-fit-indices. Since the Chi-square test is significant (indicating the model a poor fit,  $\chi^2=778.21, p=0.000$ ), others indices of fit were assessed i.e. Comparative Fit Index (CFI), the Normed Fit Index (NFI), Root Mean Square Error (RMSEA) indicated the measurement model fit the data well (CFI=0.950), NFI=0.910, RMSEA=0.03).

As the second step, the proposed structural model was assessed. Again, since the Chi-square test was significant i.e.  $\chi^2=2.59, p=0.000$ , (indicating the poor fit), on the basis of CFI=0.95, NFI=0.92, RMSEA=0.02) indicated that the model fit was acceptable.

**Table 3. Structural model results**

Hypothesized relationship	Standardized coefficient	t-value	Results
H1 Health consciousness → Attitude	0.57	7.82*	supported
H2 Environmental consciousness → Attitude	0.29	5.76**	Supported
H3 Healthy Lifestyle → Attitude	0.38	3.65**	Supported
H4 Attitude → Willingness to pay	0.58	7.60**	Supported
H5 Subjective norm → Willingness to pay	0.36	7.72*	Supported
H6 Perceived Price → Willingness to pay	0.38	3.20*	Supported

\* $p < .05$  \*\* $p < .01$

Hypothesis 1 was supported. Health consciousness had the positive influence on attitude towards organic foods ( $\beta=0.57, t=7.82$ ). Environmental consciousness was also had a significant influence on attitude ( $\beta=0.29, t=5.76$ ) and Healthy lifestyle had an influence on attitude. Thus hypothesis 2 and Hypothesis 3 were supported. Hypothesis 4 and 5 and 6 were also supported. Attitude had an influence on willingness to pay ( $\beta=0.58, t=7.6$ ) and subjective norm and perceived price had significant effect on willingness to pay ( $\beta=0.36, t=7.2; \beta=0.38, t=3.20$ )

### Conclusions and Implications

The present study validated a model that predicts the antecedents and consequents of attitude towards organic foods among Indonesian consumers. Health



consciousness revealed has the strongest effect on attitude that finally influenced willingness to pay organic foods.

This research provides insights for organic foods marketers indicating that attitude is the most important determinant which was influenced by health consciousness. Perceived price was also deemed very important in influencing consumers' willingness to pay organic foods. The findings of this study suggest that marketers need to consider health consciousness and pricing as well as creating positive attitude in promoting more widespread consumption of organic foods in Indonesia .

### **LIMITATIONS AND FUTURE RESEARCH**

There are several limitations of this study. First we did not classify the organic foods based on its specific category. Second, the respondents in this study were only students . Since the consumers are fragmented into several segments, and also different store formats will have different characteristics and consumer behavior. Future study could consider the different market segments among different store formats.

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