

# Model of Consumer's Buying Intention towards Organic Food: A Study among Mothers in Indonesian

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**Abstract.** The aim of this study is to examine the model of consumer's purchase intention towards organic food in Indonesia. Its model presents the relationship among healthy consumption life style, attitude toward organic food, and purchase intention of organic food. This study uses survey data gathering from 250 mothers who have a child or children. Result indicates that healthy consumption life style are a good predictor for attitude toward organic food, meanwhile attitude toward organic food directly influence to purchase intention toward organic food.

**Keywords:** healthy consumption life style, attitude toward organic food, consumer's purchase intention

## 1. Introduction

Healthy lifestyle underlied by the slogan; "*back to nature*" has become a trend for global society of the world. This movement is based that everything coming from nature is good and beneficial and also ensures an existence of balance between human and nature (Chan, 2001). People become more realize that the use of unnatural chemicals, such as chemical pesticide, in agricultural production may cause negative effects for health of people and of environment.

In Indonesia, organic food was only known by society in around year 1997. As a comparison, organic food has been popular in Malay since around year 1992. Food safety problem, nutritional attributes, and eco-labelling become a sensitive issue in food industry. The safety food issue has raised society awareness on environmental crisis which demands every person to have a tendency of natural life style (Chan, 2001).

A revolution of environment-friendly products happens because it is proved that 30% until 40% of environmental degradation is caused by household consumption activity (Chan, 1996). An understanding to environment of all societies in a consumer context needs to be improved in order to solve those problems. Consumers will be more aware to the importance of environment-friendly product and be willing to pay environment-friendly product, such as organic food, with a better price (Laroche *et al.*, 2001).

A research conducted by Sihombing (2007) and preliminary study by a researcher (2009) indicated that the level of buying intention toward environment-friendly product is considered low. Therefore, factors which contribute to explain buying behavior of environment-friendly product, especially organic food, still

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need to be further explored. The understanding of factors which contribute to explain buying behavior of organic food is expected to be able to reduce environmental degradation through consumption aspect, or in economics law usually known as demand aspect. High demand increase of organic food will trigger the growth of organic food, or from economics aspects called as offering.

Some studies on consumer behavior try to indentify factors whose contribution is essential to consumer behavior of organic food product (Aertsens *et al.*, 2009; Bui, 2005; Chan, 2001; Chan & Lau, 2000; Chan, 1999; Chan & Yam, 1995; Chiou, 1998; Dispoto, 1997; Follows & Jobber, 2000; Gracia & Magistris, 2007; Kalafatis *et al.*, 1999; Ling-ye, 1997; Lodorfos & Dennis, 2008; Magnusson *et al.*, 2001; Maloney & Ward, 1973; Sampson, 2009; Sihombing, 2007; Tarkianien & Sundqvist, 2005). Those studies explore the variables which become antecedent for buying behavior of organic product.

Some findings in the research on consumer behavior of organic food product attest that there are antecedent variables toward buying behavior of organic product, based on healthy consumption life style (Chen, 2009; Baron & Kenny, 1986; Fraj & Martinez, 2006; Gil *et al.*, 2000; Magistris & Gracia, 2008), and consumer attitude (Aertens *et al.*, 2009; Chan & Lau, 2000; Chan, 1999; Chiou, 1998; Dispoto, 1997; Gracia & Margistris, 2007; Kalafatis *et al.*, 1999; Ling-ye, 1997; Lodorfos & Dennis, 2008; Maloney & Ward, 1973; Tarkianien & Sundqvist, 2005) as mediator for buying intention of organic product (Aertens *et al.*, 2009; Bui, 2005; Chan, 2001; Chan & Lau, 2000; Chan & Yam, 1995; Chiou, 1998; Follows & Jobber, 2000; Gracia & Margistris, 2007; Kalafatis *et al.*, 1999; Ling-ye, 1997; Magnusson *et al.*, 2001; Maloney & Ward, 1973; Sampson, 2009). Those variables are categorized in life style as determinant factor for buying behavior.

Value and life style are essential factors that need to be considered in the research on consumer buying behavior of organic product. Value is a good predictor compared to other factors (Sihombing, 2007, and Chan, 2001). On the other hand, life style is a required marketing segmentation in consumer behaviour. The research will consider life style, healthy consumption, and consumer value, that orientates to man-nature in predicting buying intention of organic food and its factors comprehensively.

The general objective of this research is to test intention model of organic food buying as well as factors that effect it. Specifically, the objective of this research is to test both stimulant and partial effect from predictor variable analyzed toward buying intention of organic food and toward the relation between other variables in accordance with model programme; those are variable effect of healthy life style, and attitude toward organic food, concerned with buying intention of organic food.

## **2. Theoretical framework and hypothesis**

A model that is based on development of attitude-behavior explained that individual attitude can be predicted through intention (Ajzen, 2005). Intention is a good predictor for behavior (Shaw & Constanzo, 1983). Ajzen and Madden (1986) stated that intention variable plays an essential role toward behavior because intention is considered as an agent of motivational factors that have an effect on a behavior. In addition, intention shows how hard a person is brave to do some efforts. Besides, intention also shows how many planned intention to do by a person. Then, intention is closely related to next behavior. Some findings on research of green consumer behavior supported the existence of effect of attitude toward products with buying intention of organic food (Chan, 1999; Chan & Lau, 2000; Dispoto, 1997; Ling-ye, 1997; Maloney & Ward, 1973; Aertsens *et al.*, 2009; Tarkiainen & Sundqvist, 2005; Sampson, 2009)

Researchers did attitude research in order to obtain an assurance whether attitude can be an accurate predictor toward behavior. The application of *Theory of Reasoned Action* can prove that attitude toward behavior has become an accurate predictor for attitude even though the prediction is done through intention. The creation of intention can be explained using planned behavior theory which assumes that humans always have a purpose in behaving (Fisbein & Ajzen, 1975). An attitude of behaving is a foundation for a creation of intention. In an attitude concerned with behavior, there are two main aspects. The first aspect is an individual belief which states that either performing or not performing certain behavior will cause certain effects or results. The second aspect is an individual knowledge concerned with attitude object and the aspect can also be an individual opinion that has certainly not fit yet to reality.

Ajzen (2005) in theory of planned behavior did a modification by adding a factor of individual background named *theory of planned behavior modified* (TPTM), which is *background factors*, such as personal, social, and information that affect individual attitude and behavior. Under this category, Ajzen entered three background factors in. They are personal, social, and information.

Background factor is a part that needs to be verified since there are not many researchs that consider those factors in explaining theory of planned behavior. Some researchs on buying behavior try to test a relation between personal factor and buying behavior of organic food. Chen (2009), in his research, found a positive relation between healthy life style and attitude toward organic food. A consumer who has healthy life style gives his priority more to organic food consumption, as a part of healthy life activity, and has positive attitude toward organic food, that supports people's health.

The more positive of individual belief caused by an object attitude, the more positive of individual attitude toward the object, and vice versa (Fisbein & Ajzen, 1975). An evaluation will impact on judging attitude given by an individual to every impact or to every result obtained by an individual. When either performing or not performing a certain behavior, this evaluation or this judging can be either beneficial or harmful. The higher of attitude score toward organic food, the higher of buying intention of organic food.

The result of researchs shows that there is a positive relation between attitude toward organic food and buying intention of organic food. (Chan, 1999; Chan & Lau, 2000; Dispoto, 1997; Ling-ye, 1997; Maloney & Ward, 1973; Gracia & Magistris, 2007; Kalafatis *et al.*, 1999; Chiou, 1998; Aertsens *et al.*, 2009). An analysis study shows that there is a relation between attitude toward organic food and buying intention for 0.497. A researcher, in introductory study, operationally finds evaluation and consumer's belief toward organic food based on health, on safety, on natural, on freshness, and on a negative respond that is insect or pest disturbance.

H1 : Attitude toward organic food has an effect on buying intention of organic food.

Healthy life style also has affects to consumer attitude toward organic food. Bloch (1984) defined healthy consumption life style as prevention orientation of health problem and maximized an individual prosperity through consumption pattern. Healthy consumption life style can be defined as the definition of consumption activity that is expressed in activity, in interest, and in opinion that orientates to health for life prosperity. The result of research done by Chen (2009) supported effect of healthy life style toward attitude on organic food.

Being seen from life style category, a consumer who has orientation toward health has *fulfilled* life style that pays special attention to health. Plumer (1974) said that life style segmentation measures humans activities in a pattern of an individual who spends his time, of an individual's interest, of an individual's point of view toward himself and other people and of basic characteristics, such as life cycle, income, education and where people live. In predicting consumer behavior, experts argued that an individual life style will determine attitude of individual consumption (Engel *et al*, 2000). Fraj & Martinez (2006), in their research, asserted that life style affects a consumer's behaving intention of environment-friendly product. It is supported by the result of research done by Margistris and Gracia (2008) that stated that healthy consumption life style has positive relation to a consumer's attitude on organic food.

A consumer who has healthy life style tends to do some efforts that are good for his body health, such as doing sports, consuming natural food, and having balanced life (Gil *et al*, 2000) so he is able to have positive attitude toward organic food. Besides, a consumer who has healthy life style considers all activities that support health more. A consumer has a thought that every activity done by him impossibility can support their health if the activity is not adjusted with healthy consumption pattern (Chen, 2009). Thus, organic food is an object of healthy life style. Healthy consumption life style forms an individual mind-set to accept activity form, interest, and opinion that supports health; they are having balance of consumption pattern, avoiding synthetic food, being interested to food health issue, considering relation of consumption and health, and managing healthy consumption pattern (Baron & Kenny, 1986; Fraj & Martinez, 2006; Gil *et al*, 2000; Magistris & Gracia, 2008). The higher a consumer's tendency to do healthy consumption life style, the better a consumer's attitude toward organic food.

H2 : Healthy consumption life style has an effect on attitude toward organic food.

### 3. Respondent and Data collection

Respondents in this research are 202 mothers who had child or children, making a decision on organic food consumption, processing food or cooking to family daily consumption, and living in Yogyakarta. This study was begun through field empirical observation, which was exploratory study, and also through secondary data concerned with natural environment. Meanwhile, an introductory survey through interview to the respondents is implemented. Open form questions is used in this research covered the advantage and disadvantage from the organic food purchase for family consumption, from everyone who took part in taking a choice in purchase organic food for family consumption and who became a reference in purchase organic food, from factors that caused a consumer either to be able or not to be able to buy organic food and from a consumer's point of view concerned with nature environment.

The respondents in this research were 12 mothers (12%) whose age was around 20-25 years old, 52 mothers (26%) whose age was around 26-30 years old, 72 mothers (36%) whose age was around 31-35 years old, 41 mothers (20%) whose age was around 36-40 years old, 15 mothers (7%) whose age was around 41-46 years old, and 10 mothers whose age was more than 46 years old. In addition, the respondents whose education was Senior High School were 36 persons (18%), who had diploma degree were 58 persons (28%), who had bachelor degree were 88 persons (44%), who had master degree were 16 persons (8%), who had doctor degree were 4 persons (2%). Furthermore, the respondents whose job was as a public servant were 32 persons (16%), whose job was as a private employee were 49 persons (24%), whose job was as an entrepreneur were 63 persons (31%), and whose job was pure as a housewife were 58 persons (29%). Then, the respondents whose family income for a month was less than Rp 1,000,000 were 12 persons (6%), whose family income for a month was around Rp 1,000,000 – Rp 2,000,000 were 31 persons (15%), whose family income for a month was around Rp 2,000,100 – Rp 3,000,000 were 46 persons (23%), whose family income for a month was around Rp 3.000.100 – Rp 4.000.000 were 54 persons (27%), whose family income for a month was around Rp 4,000,100 – Rp 5,000,000 were 27 persons (13%) and whose family income for a month was more than Rp 5,000,000 were 32 persons (16%).

### 4. Research Findings and Discussion

#### 4.1. Model Compatibility Testing

The result of model compatibility testing using chi-square, CMIN/ DF, GFI, AGFI, RMSEA, TLI, and CFI is summarized as follow.

Table.3. Goodness of Fit

Index	Cut off Value	Result	Model evaluation
Probability	$\geq 0,05$	0,473	Good
CMIN/DF	$\leq 2,00$	1,002	Good
GFI	$\geq 0,90$	0,954	Good
RMSEA	$\leq 0,08$	0,003	Good
AGFI	$\geq 0,90$	0,933	Good
TLI	$\geq 0,90$	1,000	Good
CFI	$\geq 0,90$	1,000	Good

Source: Primary data processing

Table 3. shows that the model that is thoroughly planned is *fit*. It is because after the process of testing its compatibility on the score of GFI, AGFI, TLI, and CFI and after the process of comparing it with the score on structural equality model, the result is good. The scoring criteria of the score of *p-value*, of CMIN/df (*relative x2*), and of RMSEA is good compared with the *cut of value* helped by *chi-correct*. As a whole, the *Chi-square* whose probability is  $0.473 > 0.05$  shows the effect of healthy consumption life style, of attitude toward organic food toward buying intention of organic food that is fit to empirical data in the field.

## 4.2. Model Causality Testing

The result of model causality testing in this research is completely described below:

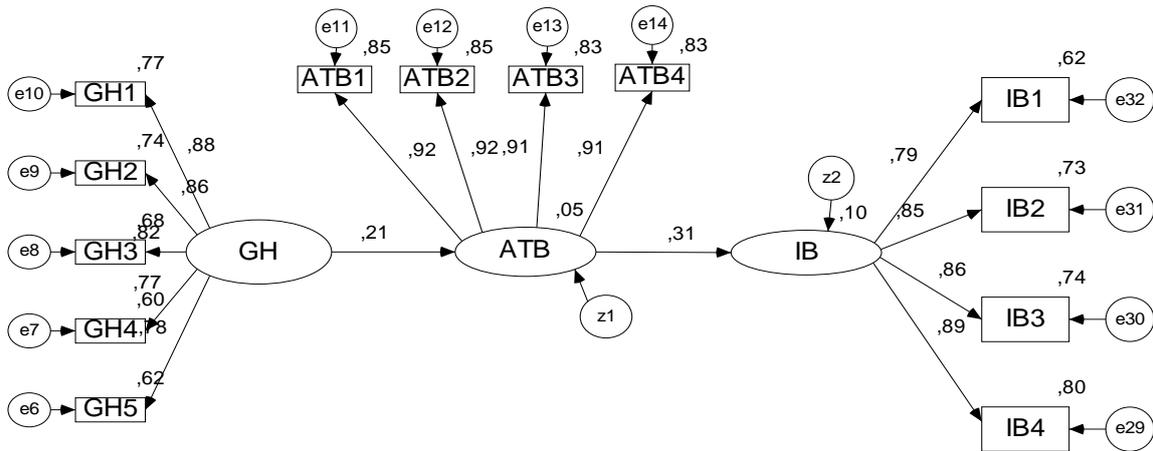


Figure 2. Path Model

The result of regression quality between latent variable which is often called as the estimation of *loading factors* or *lamda value* can be used to analyze the causality testing of variable. Based on the significance of the CR (*Critical Ratio*) value whose probability (p) value = 0.05, the result of regression quality on causality testing is as follow.

Table 4. Regression Weight Evaluation

Indicator	Estimate	S.E.	C.R.	P
ATB <--- GH	,368	,128	2,870	,004
IB <--- ATB	,232	,054	4,302	***

\*\*\*:0,000

Source: Primary data processing

The result of regression quality between latent variable which is often called as the estimation of *loading factors* or *lamda value* can be used to analyze the causality testing of variable. Further explanation on the analysis of the evaluation on regression quality can be described and explained that the variable of attitude toward organic food (ATB) significantly affects purchase intention of organic food (IB) whose significance level is 0.004, which is smaller than the probability value;  $\leq 0.05$ . Thus, the hypothesis 1 is accepted. The variable of healthy consumption life style (GH) significantly affects attitude toward organic food (ATB) whose significance level is 0.000, which is smaller than the probability value;  $\leq 0.05$ . Thus, the hypothesis 5 is accepted.

The amount of each latent variable either of *standardized direct effect* or of *standardized indirect effect* or of *standardized total effect* is summarized in Table.5.

Table 5. Direct Effect, Indirect Effect and Total Effect

Variable	Direct Effect	Indirect Effect	Total Effect
Healthy consumption lifestyle → Purchase intention of organic food	-	0,043	0,043
Attitude toward organic food → Purchase intention of organic food	0,314	-	0,275
Healthy consumption lifestyle → Attitude toward organic food	0,213	-	0,157

Source: Primary data processing

The amount of simultaneous variable contribution toward other variables is summarized in Table 6.

Table 6. Square Multiple Correlation

Independent variable	Dependent variable	Effective Contribution
Attitude toward organic food	Purchase intention of organic food	9,9%
Healthy consumption lifestyle	Attitude toward organic food	4,5%

Source: Primary data processing

Based on Table 6. above, it is admitted that, the variable of attitude toward organic food has a role for 9,9% toward buying intention of organic food. The variable of healthy consumption life style has a role for 4.5 % toward buying intention of organic food.

## 5. Discussion

The result of the research shows that attitude toward organic food are a good predictor for buying intention of organic food. The planned behavior theory mentions that intention is the function of three basic determinants. Attitude toward behavior consists of two main aspects, which are an individual's belief that either performing or not performing certain behavior will create certain effects or results and the aspect of an individual's knowledge concerned either with attitude object or with individual opinion, that has certainly not fit yet to reality. The more positive individual belief caused by an object attitude, the more positive individual attitude toward the object, and vice versa (Fisbein & Ajzen, 1975). An evaluation will have an effect on judging attitude given by an individual toward every effect or toward the result obtained by an individual. When either performing or not performing a certain behavior, this evaluation or this judging can be either beneficial or harmful. Some results of researchs showed attitude concerned with buying intention of organic food (Chan, 1999; Chan & Lau, 2000; Dispoto, 1997; Ling-Yee, 1997; Maloney & Ward, 1973; Gracia & Magistris, 2007; Kalafatis *et al.*, 1999; Chiou, 1998; Aertens *et al.*, 2009, Tarkiainen & Sundqvist, 2005; Lodorfos & Dennis, 2008). A consumer who has positive attitude toward organic food based on belief and on evaluation will consume organic food because it is considered beneficial for them.

In predicting consumer behavior, experts argued that a person's life style will determine his consumption behavior (Engel, *et al*, 2000). Fraj & Martinez (2006), in their research, asserted that life style will affect intention of consumer behavior toward environment-friendly product. It is supported by the result of a research done by Magistris and Gracia (2008) who mentioned that healthy consumption life style has positive relationship toward a consumer's attitude on organic food. A consumer who has healthy consumption life style will support the important role of organic food, so he tends to have positive attitude toward organic food.

## 6. Conclusion and Managerial Implication

Conclusions that can be taken from the findings of this research are first, the model that shows the effect of healthy consumption life style and attitude toward organic food toward buying intention of organic food is fit to empirical data in the field. Second, attitude toward organic food has significant effect toward buying intention of organic food. This means that the better attitude toward organic food, the higher buying intention of organic food. Third, healthy consumption life style has significant effect toward organic food. This means that the higher consumer's tendency to have man-nature orientation is, also the better attitude toward organic food is.

These findings give an implication that buying behavior of organic food will be able to increase consumers' care about environment through friendly-environment consumption pattern, that is able to reduce environment degradation and to increase health. It is expected to be able to be improved through elucidation and socialisation about organic food. In organic producers' perspective, an effort is needed to plant value that orientates to man-nature or to maintain balance of nature in consumption and to do organic food segmentation for groups of consumers who have healthy consumption life style.

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