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Organic Knowledge as Antecedent of Purchase Intention on Organic Food

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Abstract: This research aims to examine a model which presents effects of organic knowledge, of attitude toward organic food, of subjective norm, and of purchase behavioral control toward purchase intention of organic food. Data collection method of this research is questionnaire, which was arranged through an exploration study. The sample of this research were housewives as the end consumers of organic food from Yogyakarta, Jakarta and Surabaya-Indonesia. The data was analyzed using Structural Equation Modelling (SEM). The result of this research proves that organic knowledge is a indirect predictor for purchase intention of organic food. Organic knowledge, subjective norm, attitude toward organic food, and purchase behavioral control give positive contribution for purchase intention of organic food. An extended model of theory planned behavior is thus proposed by this research to include consumer knowledge in addition to behavioral intentions as the main motivating factors in purchasing organic food.

Keywords: Organic knowledge; Organic food; Purchase intention; Subjective norm; Attitude

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INTRODUCTION

The focus of this study is an increased need for quality healthcare in the areas of food and nutrition-induced changes in the concept of satisfying the physical needs into achieving a healthy life. The increase is formed due to the belief that a healthy and natural diet can lower the prevalence of various diseases (Kotz and Story, 1994). This raises the demand for and consumption of products related to health care (Moorman and Matulich, 1993; Worsley and Scott, 1999). Various health literature tends to always suggest to consume fresh and natural food. Good food is all fresh food which fulfills nutrient needs of body. They are food that consists of carbon-hydrate elements, of protein, of fat, of vitamin, of mineral, of water and of other essential substances, such as fiber, enzyme, and antioxidation. Food contaminated by pesticide will leave harmful residue which keeps piling up in humans' body. The trend of consuming organic food actually starts to improve along with the awareness of the importance of food factors for health.

The research done by University of Montreal in Quebec shows that presentation of pesticide used in children's food, such as fresh strawberry and celery, can increase the risk of Attention Deficit Hyperactivity Disorder (ADHD) for children. Scientists in the United States of America and in Canada found that children who have high residue degree in their urine are susceptible to suffer the ADHD. ADHD means development disorder in the improvement of children's motoric activity. This disorder impacts on mental problems, such as way of thinking, of acting, and of feeling. Children who suffer ADHD will have a problem on their concentration and on their mind focus. According to a study done by National Academy of Sciences in year 2008, it was known that 28% of frozen blueberries sample, 25% of fresh strawberries sample, and 19% of celeries sample, contains pesticide residue (Bouchard et al., 2010).

Consuming organic food consistently is believed to be able to become an effort to defend ourselves from threat caused by various diseases. Organic food is considered healthy because the planting process until the harvesting process does not pass a chemical process or does not use synthetic substances, such as pesticide, herbicide, fertilizer with chemical content, hormonal injection or antibiotic. Besides, the process is also without a process of radiation ionization as well as of genetic modification. The development of organic food in countries runs well especially in Europe countries. Organic agricultural sector in Uni-Europe is predicted to be able to increase for 30% in year 2010 of all agricultural areas when, in year 2005, organic agricultural sector had increased for 10% of all agricultural areas. England, known as one of leaders on organic food market in Europe, had an approximation of market value for about 1.2 trillion-pound starlings in year 2003 or for about half of other market leaders, such as Germany (Padel and Foster, 2005). In Indonesia, organic food was only known by society in around 1990. The safety food issue has raised society awareness on environmental crisis which demands every person to have healthy and economical life style (Junaedi, 2006) and to have a tendency of natural life (Chan, 2001).

Some green consumer research tries to explore the factors which have contribution to predict consumer decision (see Aertsens et al., 2009; Bui, 2005;

Chan, 2001; Chan and Lau, 2000; Chan, 1999; Chan and Yam, 1995; Chiou, 1998; Dispoto, 1997; Follows and Jobber, 2000; Gracia and Magistris, 2007; Kalafatis et al., 1999; Ling-ye, 1997; Lodorfos and Dennis, 2008). Those research found the factors which become purchase intention antecedent of organic product. Environmental problems stem from human activity and consumption and production patterns so that the necessary human society in particular human concern in maintaining the quality of the environment. Behavioral preserve environmental quality depends heavily on the knowledge, attitudes, and values in consumers as human beings (Chen and Chai, 2010; Mansaray and Abijoye, 1998; Said, 2003). Knowledge is an essential factor that needs to be considered in the research of consumer behavior of organic food. Aspects of consumer knowledge on the product also need to be considered in consumer behavior research as it relates to purchasing considerations. Lodorfos and Dennis (2008) suggest the importance of information as part of organic consumer decision making. Aspects of knowledge are aspects that influence purchasing behavior (Engel et al., 2005), information seeking behavior (Brucks, 1985), and helping consumers learn new products (Moreau et al., 2001). The attitude that becomes the basic component in the theory of planned behavior is determined by the level of individual belief and can change according to the level of knowledge (Aertsens et al, 2009). Aspects of product knowledge become one of consumer considerations in evaluating the product. Product knowledge shows how much product information has been absorbed by consumers (Engel et al, 2005).

Organic knowledge will be a consideration for eco-friendly consumer decisions. Consumers who are knowledgeable about the product will ignore the premium price of the environmentally friendly products to be consumed. Gracia and Magistris (2007) revealed that consumer knowledge is a consideration of consumers in distinguishing the attributes of organic products with other conventional products, as well as consumer evaluations on organic products. Several studies have indicated the partial role of organic knowledge toward the consumption behavior of organic products (Amyx et al., 1994; Chan, 1999; Gracia and Magistris; 2007; Magistris and Gracia, 2008; Poelman et al., 2008; Schlegelmilch et al., 1996; Vining and Ebreo, 1990; Yiridoe et al., 2005).

An antecedent variable on organic food buying behavior, that was ever conducted in Indonesia, show different perspectives. Studies of consumer behavior related to organic food have been conducted in several developed countries such as Switzerland, Britain and some other developed Asian countries. Indonesia is a developing country that has different consumer characteristics, especially organic knowledge, so it needs to be studied further. Some research indicated the fact that purchase behavior of environment-friendly product in Indonesia is still low (Sihombing, 2007; Suprpto and Wijaya, 2012). YLKI (2012), the first and the largest consumer association in Indonesia, conducted a survey results with 609 respondents in several regions in Indonesia which showed low consumption of organic food in Indonesia. One of the reasons indicates that consumers do not have sufficient organic knowledge. Principally, the problem formulation based on program of empiric model can be formulated through the objective of this research is to test the effect from predictor variable analyzed toward purchase intention of

organic food; those are variable effect of organic knowledge, attitude toward organic food, subjective norm, purchase behavioral control, concerned with purchase intention of organic food.

REVIEW OF LITERATURES

An ecology problem is rooted from human activity, consumption pattern and human production, so it requires people's care, and especially society's care in maintaining environmental quality. Behavior in maintaining ecology quality extremely depends on the level of on the knowledge, attitudes, and values in consumers as human beings (Chen and Chai, 2010; Mansaray and Abijoye, 1998; Said, 2003). Based on those arguments, it can be said that knowledge, attitude, and value will easily establish concern, attention, and consumer friendly behavior to environment. With reference to the objectives of this study outlined previously, the following discussion will specify the research hypotheses in these researches.

Organic Knowledge

Knowledge is one of the characteristics that affect the decision-making process. Knowledge is a relevant factor that affects consumers in collecting and organizing information received (Alba and Hutchinson, 1987), using information received for decision making and using information as an evaluation of products to be consumed (Martin and Simintras, 1995). Consumers consider the general consequence of personal consumption by evaluating the benefits and impacts of consumption on the basis of the knowledge they possess. Consumer knowledge is all the information consumers have about a wide range of products, as well as other related knowledge and information related to their role as consumers (Engel et al, 2005). Knowledge in consumer research is one of the characteristics that influence the decision-making process. Knowledge is a relevant factor that affects consumers in collecting and organizing information received (Alba and Hutchinson, 1987), using information received for decision-making process (Martin and Simintras, 1995).

Knowledge is an important constituent in understanding consumer behavior because of its role in determining information seeking behavior (Brucks, 1985), studying new products (Wood and Lynch, 2002), adoption process (Moreau et al., 2001) and use of food labels (Nayga, 2000). Organic knowledge is defined as the ability of consumers to identify a number of concepts related to organic products through information held by consumers (Chan and Lau, 2000; Magistris and Gracia, 2008). Peattie (1998) suggests analogously the marketing theory of green products, that consumers with high environmental knowledge tend to have the motivation to make purchases of green products. Consumers who realize the importance of consequences of consumption will encourage consumers to buy organic food (Follows and Jobber, 2000; Vlosky et al, 1999; Bui, 2005; Laroche et al., 2001). The relationship of organic knowledge with consumer attitudes based on the results of previous studies still shows the controversy of opinion. Several

studies have shown inconsistencies in the results of research on the relationship of knowledge with consumer attitudes toward organic food. Organic knowledge has a role to stimulate consumer attitudes toward organic products in a positive way (Gracia and Magistris, 2007; Magistris and Gracia, 2008; Poelman et al., 2008; Schlegelmilch et al., 1996; Vining and Ebreo, 1990; Yiridoe et al., 2005). Chan (2001) explains that knowledge influences consumer attitudes on organic food but with a significance level of 10%. Some research results show different results. Organic knowledge has no effect on consumer attitudes on organic food (Arbuthnot and Lingg, 1975; Chiou, 1998; Geller 1981; Laroche et al., 1999; Maloney and Ward, 1973; Ramsey and Rickson, 1976; Schahn and Holzher, 1990).

Consumers with organic knowledge tend to have a positive attitude toward organic food because they believe organic food is beneficial to consumers. Consumers are also convinced by consuming organic food, consumers will benefit like health, naturalness, and consumption safety. Organic knowledge is an important factor because it represents the ability of consumers to distinguish organic or non-organic products and form a positive attitude on organic products (Magistris and Gracia, 2007). In general, the meta-analysis study showed that there was an association of organic knowledge with attitudes toward organic products that was 0.30 (Chan, 2001). The higher the score of organic knowledge the more positive the consumer attitude on organic food. Therefore, the hypothesis is formulated as follows:

Hypothesis 1: Organic knowledge has an effect on attitude toward organic food

Attitude, Subjective Norms and Behavioral Control

Attitude, subjective norms and behavioral control directly plays a role toward intention of buying behavior. The creation of intention can be explained using planned behavior theory which assumes that humans always have a purpose in behaving (Fisbein and 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.

The planned behavior theory explained that behaviour can be predicted through intention (Ajzen, 2008). 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. Intention show how hard an individual is brave to do some efforts. Intention also shows how many planned intentions to do by a individual. Then, intention is ideal variable to predict next behavior. Some findings on research of organic food buying behavior supported the existence of effect of attitude toward products, of subjective norm, and of behavior control concerned with buying intention of organic food (Aertsens et al., 2009; Chan, 1999; Chan and Lau, 2000; Chiou, 1998; Dispoto, 1997; Gracia and Magistris, 2007; Kalafatis et al., 1999; Ling-ye, 1997; Maloney and Ward, 1973;

Sampson, 2009; Tarkiainen and Sundqvist, 2005). Suprpto and Wijaya (2012) shows a meta-analysis study of a relation between consumer attitude and purchase intention for 0.497. 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.

The contribution of subjective norm toward intention by Fishbein and Ajzen (1975) used a term named motivation to comply in order to illustrate this phenomenon which is whether an individual obeys other people's point of view that has an effect in his life or not. Engel et al (2005) suggests that consumer behavior is influenced by social factors which act as social functions for consumers such as reference groups, families, and status. Reference groups have a strong influence on product choice and brand choice for consumers because it is a behavior's model. The family is the most important consumer buying organization in the community and is the object of extensive research. Family members are the most influential primary reference group in purchases because they are closest to individuals, especially in Indonesia. Some findings have proved that subjective norm has relationship with purchase behavior toward organic food (Aertens et al., 2009; Lodorfos and Dennis, 2008; Sampson, 2009). A consumer, in deciding the organic food purchase, considers the reference model to purchase organic food. Suprpto and Wijaya (2012) shows an meta-analysis study of a relation between subjective norm and organic purchase intention for 0.325.

Behavior is determined by individual beliefs about the availability of resources and opportunities related to specific behaviors. If the individual has a high perceived behavior control then he will know the actions that need to be done. Behavioral control is closely related to whether or not a behavior is performed. Two factors that determine behavior control are the power of control factors, which are individual belief about the availability of factors that affects him to actualize behavior and the effect power of factors, which are the effect power of factors that determine whether behaving is easy or difficult to do. To show the buying organic food behavior, consumers consider factors that make it easier or make it harder for consumers to buy organic food. Suprpto and Wijaya (2012) in the preliminary study found operational perceived behavior control that is the availability, the ease in obtaining organic food, food prices, consumer finance aspects, and product authenticity (legitimacy). Some research results show the relationship between behavior control such as price and income (Taner and Kast, 2003) with the organic food buying behavior. Some finding of the research showed that behavioral control has relationship with purchase behavior of organic food (Aertsens et al., 2009; Lodorfos and Dennis, 2008; Tarkiainen and Sundqvist, 2005). Suprpto and Wijaya (2012) shows an meta-analysis study of a relation between behavior control and purchase intention. Its amount is 0.512. In order to perform purchase behavior of organic food, a consumer considers the factors that either ease or harden him to buy organic food. Therefore, for the present research hypothesis is formulated as follows:

Hypothesis 2: Attitude toward organic food has an effect on purchase intention of organic food

Hypothesis 3: Subjective norm has an effect on purchase intention of organic food

Hypothesis 4: Purchase behavioral control has an effect on purchase intention of organic food

Research Model

Based on theoretical study, on previous research, and on introductory research, a research proposed an empirical model of purchase behavior toward organic food. The proposed theoretical model is expected to be appropriate with empirical data in the field. The model of purchase behavior toward organic food proposed in this research can be described through Figure 1 below.

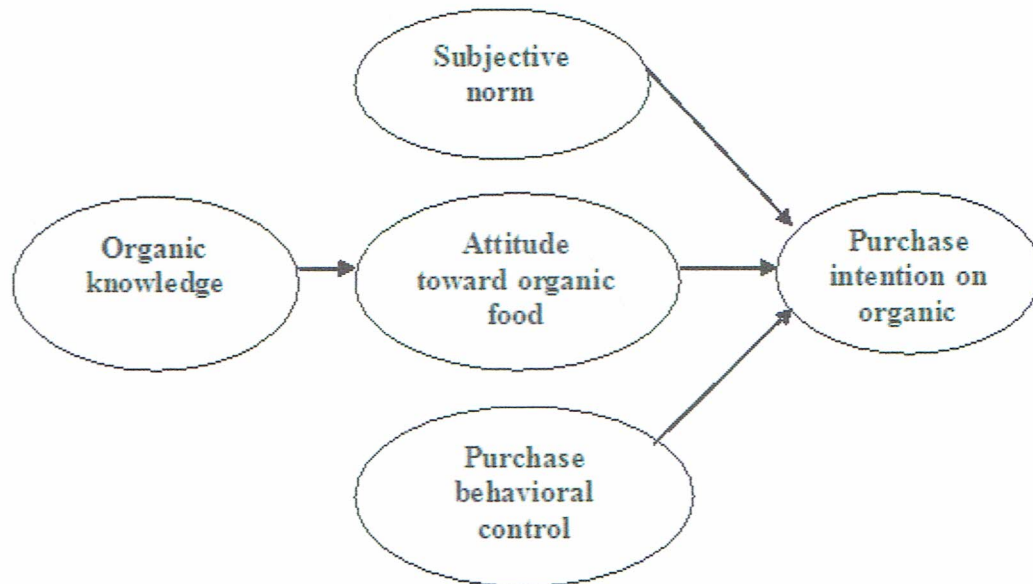


Figure 1. Research model

RESEARCH METHODOLOGY

Questionnaire Design and Measurement

The research instrument was adopted from previous research ie Chan (2001); Suprpto and Wijaya (2012) and some instrument were developed from exploratory research. Each of these items was evaluated on a five-point Likert scale from 1-Strongly disagree to 5-Strongly agree.

Sampling and Data Collection

Population in this research was consumers of organic food in Yogyakarta, Jakarta and Surabaya- Indonesia. In this research, sample technique used non-probability technique whose methodology was purposive sampling. The used

assumption was purposive sampling which were; having certain characteristics, which were consumers, especially mothers who had making a decision on processing food or cooking to family daily consumption. The choice consideration of the sample was based on Davies et al (1995) and Fotopoulos and Krystallis (2000). Their research showed that consumers who often buy organic products are women who have child and have high education because they consider the quality of a product more rather than the price. A Total of 427 consumers of organic food from Yogyakarta, Jakarta and Surabaya- Indonesia participated in the survey. Appendix 1 reveals the instrument used in the survey.

Data Analysis

Validity and Reliability Analysis

The tested validity is factor validity through Confirmatory Factor Analysis (CFA). The loading factor value is measured from the latent variables through each variable observed. The loading factor value ranges 0.72 to 0.93 over 0.5. The results of factor loading are shown in Table 1. Table 2 reveals composite reliability. Composite reliability coefficient for a review of each of the variables ranged 0.72 to 0.95. All variables were above the limit of the minimum value (0.7). Structural Equation Modelling (SEM) is used in this research to analysis the data towards satisfying the objectives.

Table 1: Factor loading

Indicator	Organic knowledge	Attitude toward organic food	Subjective norm	Purchase behavior control	Purchase intention
PO1	0.90				
PO2	0.93				
PO3	0.92				
PO4	0.92				
SB1		0.92			
SB2		0.91			
SB3		0.89			
SB4		0.91			
NS1			0.73		
NS2			0.72		
NS3			0.74		
NS4			0.76		
KP1				0.77	
KP2				0.91	
KP3				0.87	
KP4				0.93	
IB1					0.73
IB2					0.82
IB3					0.78

Table 2: Composite reliability

Variable	Factor loadings	Error variances	Composite Reliability
Organic knowledge			0.95
PO1	0.90	0.81	
PO2	0.93	0.86	
PO3	0.92	0.85	
PO4	0.92	0.85	
Subjective norm			0.72
NS1	0.73	0.47	
NS2	0.72	0.48	
NS3	0.74	0.45	
NS4	0.76	0.42	
Attitude toward organic food			0.72
SB1	0.92	0.53	
SB2	0.91	0.52	
SB3	0.89	0.61	
SB4	0.91	0.50	
Purchase behavior control			0.90
KP1	0.77	0.41	
KP2	0.91	0.17	
KP3	0.87	0.24	
KP4	0.93	0.14	
Purchase intention			0.73
IB1	0.73	0.47	
IB2	0.82	0.33	
IB3	0.78	0.39	

HYPOTHESIS TESTING

Model Compatibility Testing

The result of model compatibility testing using chi-square, CMIN/ DF, GFI, AGFI, RMSEA, TLI, and CFI is summarized in Table 3.

Table 3: Goodness of fit

Index	Cut off Value	Result	Evaluation
Probability	≥ 0.05	0.092	Good
CMIN/DF	≤ 2.00	1.178	Good
GFI	≥ 0.90	0.928	Good
RMSEA	≤ 0.08	0.015	Good
AGFI	≥ 0.90	0.952	Good
TLI	≥ 0.90	0.946	Good
CFI	≥ 0.90	0.948	Good

Table 3 shows that the model is thoroughly planned is *fit*. As a whole, the *Chi-square* whose probability is $0.092 > 0.05$ shows the effect of organic knowledge, of attitude toward organic food, of subjective norm, of purchase behavioral control toward purchase intention of organic food that is fit to empirical data.

Model Causality Testing

The explanation on the hypothesis testing can be described and explained that the variable of organic knowledge significantly affects attitude toward organic food whose significance level is 0.00. The results of the hypothesis test is summarized in Table 4. Thus, the hypothesis 1 is accepted. Attitude toward organic food significantly affects purchase intention of organic food whose significance level is 0.000. Thus, the hypothesis 2 is accepted. The variable of subjective norm significantly affects purchase intention of organic food whose significance level is 0.000. Thus, the hypothesis 3 is accepted. The variable of purchase behavioral control significantly affects purchase intention of organic food whose significance level is 0.000. Thus, the hypothesis 4 is accepted. The amount of simultaneous variable contribution toward other variables is summarized in Table 5.

Table 4: Regression weight evaluation

Indicator	Estimate	Probability	Result
Organic knowledge→ Attitude toward organic food	0.24	0.00	H1 Accepted
Attitude toward organic food→ Purchase intention	0.46	0.00	H2 Accepted
Subjective norms→Purchase intention	0.31	0.00	H3 Accepted
Purchase behavioral control→ Purchase intention	0.23	0.00	H4 Accepted

Note: H1..2..3... denotes Hypothesis 1...2...3

Table 5: Squared multiple correlation

Independent variable	Dependent variable	Effective contribution
Organic knowledge	Attitude toward organic food	0.057
Attitude toward organic food	Purchase intention on organic food	0.361
Subjective norm		
Purchase behavioral control		

Based on squared multiple correlation value in Table 5, it is admitted that, the variable organic knowledge has effective contribution for 5.7% toward attitude toward organic food. The variable of attitude toward organic food, of subjective norm, and of purchase behavioral control has an effective contribution of 36.1% toward purchase intention of organic food.

DISCUSSION

Consumers buy organic products because they have knowledge of the impact of consumption of products on consumers and the environment (Chan, 2001). Child and Poryzees (1998) explains that the lack of consumer knowledge about the content in functional foods will hamper the consumer confidence process. Another thing that is internal in shaping the attitude of individuals to behave is the availability of information, skills and abilities that reinforce individual motivation. Attitudes tend to change with changing knowledge levels (Aertsens et al., 2009). Organic knowledge provides information on organic foods and their benefits that reinforce the motivation of individuals in considering the purchase of organic foods.

Sufficient knowledge will encourage the formation of the consumption process (Miller and Russell, 2004). Stimulation of consumer knowledge of food products can be through food labels. According to Kim et al., (2001) food label is a communication tool used to meet information and health needs. In general, the information provided includes brands, content, ingredients, minerals, vitamins, logos for certain claims eg environmentally friendly, health claims, information suggestions and the use of healthy diets (Hingginson et al., 2002). According to the basic concept of planned behavior theory shows that attitudes are good predictors of behavioral intentions. The theory of planned behavior states that the intention is a function of the determinant attitude toward behavior, which is the basis for the establishment of intention. According to Ajzen (2008) the realization of the intention is very dependent on external and internal factors. Internal factors depend on the beliefs of the individual in behaving and the ability to behave while the external factor is a stimulus that encourages individuals to behave. The more positive the individual belief will be the result of an object of attitude, the more positive the individual's attitude towards the object of the attitude, and vice versa (Fisbein and Ajzen, 1975). Evaluation will result in an individual's judgmental behavior on each individual outcome or outcome. When displaying or not displaying certain behaviors, these evaluations or assessments may be beneficial or detrimental. Consumers who have a positive attitude toward organic food based on beliefs and evaluations will consume organic foods as they are considered beneficial to stimulate consumers' intentions of buying organic food.

Consumers in deciding the purchase of organic foods consider the model of reference and willingness to comply with the expectations of the reference norm for consuming organic food that is the recommendation of family members, colleagues and the media referred to as television and magazines. The reference group is a consumer stimulus in response to the purchase of organic food. The family is the most important consumer buying organization in the community and is the object of extensive research (Engel et al., 2005). Family members are the most influential primary reference group in purchases because they are closest to individuals, especially in Indonesia, which tend to be collective. The importance of the role of subjective norms in the context of Indonesian consumers is evidenced in this study. The Indonesian people still pay attention to the importance of the norm or to look at what people should do or expect. Expectations from the crowd

or society are crystallized in terms of decision making of organic food consumption.

Behavior control contains individual beliefs that relate to feelings of being able or incapable of controlling behavior and beliefs about the presence or absence of factors that make it difficult or difficult for individuals to behave. Two factors that determine the behavior control that is the strength of the control factors are individual beliefs about the factors that influence in realizing the behavior and the influence of the control factors, namely the influence of the control factors that determine the ease of behavior. To show the intention of buying organic food, consumers consider factors that make it easier or complicate consumers to buy organic foods such as market availability, food prices, consumer finance, and product authenticity, unlike other countries such as Europe which has legalized the validity of organic products and is widely available due to high levels of organic production and equitable distribution.

CONCLUDING COMMENTS

Conclusions that can be taken from this study are first, the model that shows the effect of organic knowledge, of attitude toward organic food, of subjective norm, and of purchase behavioral control toward purchase intention of organic food is fit to empirical data. Second, organic knowledge, attitude toward organic food, subjective norm, and purchase behavioral control has significant effect toward purchase intention of organic food. An extended model of theory planned behavior is thus proposed by this research to include consumer knowledge in addition to behavioral intentions as the main motivating factors in purchasing organic product.

This research provides marketers information that organic knowledge will be able to increase consumers' care about environment, that is able to reduce environment degradation and to increase healthy consumer. Based on the role of organic knowledge, it is necessary to knowledge investment of consumer through socialization and informal education through label. Socialization of consumer knowledge can be implanted from generation to generation through the formal level as well as non-formal education like family. China, for example, philosophy investment made by the government through agencies such as the level of formal and non-formal education through family. Necessary role of government in this regard, so that a positive attitude will grow in the consumption of organic products that have an impact on sustainable consumption patterns. Environmentally-based education need the attention from the government. Through the attention of consumer knowledge is expected to prevent or reduce environmental degradation in Indonesia. Organic food also needs to get an aspect of natural legality and information of organic food, so behavior control of consumers can be controlled. Thus, consumers are not hesitant to buy organic food.

LIMITATIONS OF THE STUDY AND FUTURE SCOPE

The product category used as the object of this research is only on organic food products that need to be processed for consumption while there are many other green products produced by manufacturers. The sampling method in this study is non-probability as a weakness in terms of generalization of the results are limited to the characteristics of the sample.

Furthermore, a rigorous testing need to be examined for the future research, for instance, product categories are used as the object of this study is only on organic food products that need to be processed for consumption, while there are many other green products such as cosmetics, recycled products, and electronics. Subsequent research can use other objects to make green products as well as a comparison of results with the results of this study. Based on the limitations of the sampling methods, further research can use probability samples.

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