

## ANALYSIS OF SOCIAL VALUE ORIENTATION AS A MODERATING VARIABLE IN THE PROCESS OF ORGANIC FOODS PURCHASING

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### ABSTRACT

*The purpose of this study examines the role of social value orientation in moderating the effect of health consciousness, food safety concern, ecological knowledge, perceived value, attitude toward organic foods on purchase intention. Specifically, this study wants to examine whether health consciousness, food safety concern, ecological knowledge, perceived value, attitude toward organic foods as important considering in forming the purchase intention. Survey is a method conducted to collect the data. In this study, sample consist's of 300 college students who have intend to purchase organic food. Convenience technique is a method choosen to make easier in getting the sample. Reliablity and validity test was done to make ascertain the quality of data. Structural equation model is statistical method choosen to elaborate the linkage among of unobserved variabel. The result show that health consciousness have significant influence to attitude toward organic foods, food safety concern have also significant influence to attitude toward organic foods, ecological knowledge have significant influence to attitude toward organic foods, perceived value have significant influence to attitude toward organic foods, attitude toward organic foods have significant influence to purchase intention and in moderation role social value orientation is moderating health consciousness, food safety concern, ecological knowledge, perceived value, attitude toward organic foods on purchase intention. In this study, both limitation and implication are also discussed in order to give inside toward theoretical, practical and future research aspects.*

**Keyword:** *health consciousness, food safety concern, ecological knowledge, perceived value, attitude toward organic foods, social value orientation and purchase intention.*

### BACKGROUND

Purchase intention is an interesting topic to be studied because previous studies still indicate diversity of models (see Chan, 2001; Cheah and Phau, 2011; Laroche et.al., 2001; Michaelidou and Hasan, 2008; Phong, 2010; and Shaharudin et.al., 2010). The previous studies indicated limitation in application and it impacted on the difficulty to apply on the different objects and settings. This condition gives an opportunity to develop an alternative model that can explain the

phenomenon about consumer purchase intention on organic foods according to the objects and settings that will be studied in Faculty of Economics, Sebelas Maret University.

This study is based on seven variables. There are health consciousness, food safety concern, ecological knowledge, perceived value, attitude toward organic foods, social value orientation and purchase intention. Then, the purchase intention as dependent variable. These variable is adopted from previos study (see Chan, 2001; Cheah and Phau, 2011;

Laroche et.al., 2001; Michaelidou and Hasan, 2008; Phong, 2010; and Shaharudin et.al., 2010). Thus, the model is hoped to have a high prediction toward purchase intention in Indonesia.

### RESEARCH PROBLEMS

1. Does health consciousness influence attitude toward organic foods?
2. Does food safety concern influence attitude toward organic foods?
3. Does ecological knowledge influence attitude toward organic foods?
4. Does perceived value influence attitude toward organic foods?
5. Does attitude toward organic foods influence purchase intention?
6. Does social value orientation is moderating the effects of health consciousness, food safety concern, ecological knowledge, perceived value on attitude toward organic foods and attitude toward organic foods on purchase intention.?

### RESEARCH PURPOSES

This study aims to examine goodness of fit model which constructed in this study that explains consumer purchase intention toward organic foods. The constructed model relies on model from the previous study.

Specifically, this study aims to explain the influence of health consciousness on attitude toward organic foods, the influence of food safety concern on attitude toward organic foods, the influence of subjective norm on attitude toward organic foods, the influence of ecological knowledge on attitude toward organic foods, the influence of perceived value on attitude toward organic foods, the influence of attitude toward organic foods on purchase intention toward organic foods, the moderation role of social value orientation in the influence of health

consciousness, food safety concern, subjective norm, ecological knowledge, perceived value on attitude toward organic foods and attitude toward organic foods on purchase intention.

### BENEFITS OF THE RESEARCH

1. Theoretical benefit

This study has limitation in application model and hope has a uniqueness from previous study. Moreover, this model is expected to be an alternative model that can be used as reference that can give insight and knowledge for academics related in purchase intention toward organic foods.

2. Practical benefit

The constructed model in this study aims to explain factors influencing customer purchase intention toward organic foods. The result is expected to give an insight for enterprises or marketers of organic foods, so enterprises or marketers will create a stimulus that can increase consumer purchase intention.

3. Future study benefit

This study can be used as reference that can give insight for future study. Due to be held in Indonesia setting so that this study has limited application. Because of limited application from this study, future study must develop in another setting.

### VARIABLE DESCRIPTION AND HYPOTHESIS DEVELOPMENT

1. Health consciousness

Health consciousness are conceptualized as the consumer's concern for quality of life, health issues and the environment for humans and non-human species. Health consciousness is a construct that can be used to reflect a person's readiness to do things

for her own health (Oude Ophuis, 1989; Schifferstein dan Oude Ophuis, 1998). It is believed that if an individual is ready to take steps to make himself or his family healthy, the attitude towards organic products will be more positive. Health consciousness guides people to life in healthy behaviors. In the context of organic food product purchases, consumers with high health consciousness may consider whether a healthy product; therefore, they may be more seriously concerned with the types of ingredients used to make the product than are consumers with low health consciousness (Johri and Sahasakmontri, 1998). Hence, concern for quality of life has given way, in many cases, to concern about health issues, and life itself.

According to Davies et al., 1995, the most frequent motive to purchase organic food is because of consumers' perception that organic food is healthy to them. Health concern appears as the most important reason for purchasing and consuming organic food (Tregear et al., 1994; Magnusson et al, 2001). The majority of consumers believe that organic foods is more beneficial for their health than convention food and make them have a positive attitude towards organic foods. In addition health consciousness has been found to predict attitudes, purchase intention of organic food (Magnusson et al, 2001). The matter of increased health care through proper nutrition is a key factor influencing consumption choice. The following hypotheses is proposed:

H1: *health consciousness has positive effect on attitude toward organic foods.*

## 2. Food safety concern

Food safety represents consumers concern of residues in food

resulting from chemical sprays, fertilizers, artificial additives and preservatives and is often linked to farming methods (Yee et al., 2005). Henson, 1996 gives his opinion that customers are willing to pay for a value attached to the improvements of food safety. The factors that effect intention to buy for reductions in the risk of food poisoning are personal experiences of food poisoning, their attitudes towards food poisoning, perceived control over the risk of food poisoning and the individual customer characteristic itself (Shaharudin, 2010). Food safety being highlighted as a motive for purchasing organic food (Padel and Foster, 2005) its relationship with attitudes and intention to buy towards organic foods. Furthermore, Angulo et al., 2003 found that the consumers were concerned with the issue of food safety.

In this study, food safety concern has positive effect on attitude toward organic foods. It means, the higher food safety concern, the higher attitude toward organic foods. The following hypotheses is proposed:

H2: *food safety concern has positive effect on attitude toward organic foods.*

## 3. Ecological Knowledge

Ecological knowledge according to Chan (1999) can be defined as how much someone knows about the ecological issue. Thus, environmental knowledge involves what people know about the environment, relationships to environmental aspects or impacts, and collective responsibilities necessary for sustainable development. The knowledge of ecological issues is the predictor of socially responsible consumer behavior. Furthermore, an individual's ecological knowledge

were proposed as effecting his/her attitude toward organic foods.

The linkage between ecological knowledge and attitude toward organic foods, ecological knowledge has positive effect on attitude toward organic foods (Chan, 1999; Chan, 2001). The higher ecological knowledge, the higher attitude toward organic foods. The following hypotheses is proposed:

H3: *ecological knowledge has positive effect on attitude toward organic foods.*

#### 4. Perceived Value

Perceived value can be defined as the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given (Phong, 2010). Perceived value relates to the value for money consumers receive and pay for, "*what you get for what you pay*" (Phong, 2010). This definition is understood at the benefits of the products. Perceived product benefits are based on different characteristics of the products and availability of the products for buying and using purposes. However, the values were greatly dependent on the food itself, different methods, way of handling that guarantees risk minimization and etc. The consumer perceived that organic food has the value and benefits and that's why they are willing to pay more for the price.

This research uses perceived value to explain the attitude toward organic foods. When a customer recognizes perceived value, it is reflected in attitude toward organic foods. Michaelidou and Hasan (2008) showed that perceived value leads to attitude toward organic foods. Consistent with these findings, the researchers have hypothesized the following:

H4: *perceived value has positive effect on attitude toward organic foods.*

#### 5. Attitude toward organic foods

Attitude is defined as an individual's subjective evaluation of a product that includes feelings of positive/negative, like very much/dislike very much, favorable/unfavorable toward product attributes (See Sheppard *et al.*, 1988; Homer, 1990). These variables are conceptualized to demonstrate a positive attitude towards the quality of the overall product that includes a global assessment of superior or feature of a product.

The relationship between attitudes and purchase intentions have a positive and significant relationship. This phenomenon refers to the regularity of the pattern of positive relationships as proposed in previous studies that the higher the positive attitude of the higher purchase intentions. This is supported by studies in the field of environmental marketing is done by Kalafatis *et al.* (1999), and Chan (2001). Thus the hypothesis is formulated to explain the phenomenon are:

H5: *attitude toward organic foods has positive effect on purchase intention.*

#### 6. Purchase Intention

Purchase intention is a construct that is designed as the most relevant predictor variables to determine the behavior. Purchase intention is defined as the desire of individuals to buy or use a product or brand (Homer, 1990). In the context of organic foods, purchase intentions conceptualized as an individual's desire to buy organic foods. It also refers to the Kalafatis *et al* research (1999) that the intention to purchase environ-

mentally friendly products is significantly affected by attitudes.

### 7. Social Value Orientation

Social value orientation was conceptualized as a individuals tendency to achieve the desired goal, based on its importance, and directs the principles in the people lives. Social value orientation was grouped into collectivism and individualism. Individualism shows the value of individual tendency who is more oriented to herself. Individuals who are individualist will be competing with other individuals to achieve something for his own status. Collectivism is

defined as an individual orientation against the values that is more oriented to the environmental importance. Consumer groups who have collectivist values tend to support environmental friendly program (Laroche *et al.*, 2001). The following hypotheses is proposed:

H6: *Social value orientation is moderating the effects of health consciousness, food safety concern, ecological knowledge, perceived value on attitude toward organic foods and attitude toward organic foods on purchase intention.*

## THEORETICAL MODEL

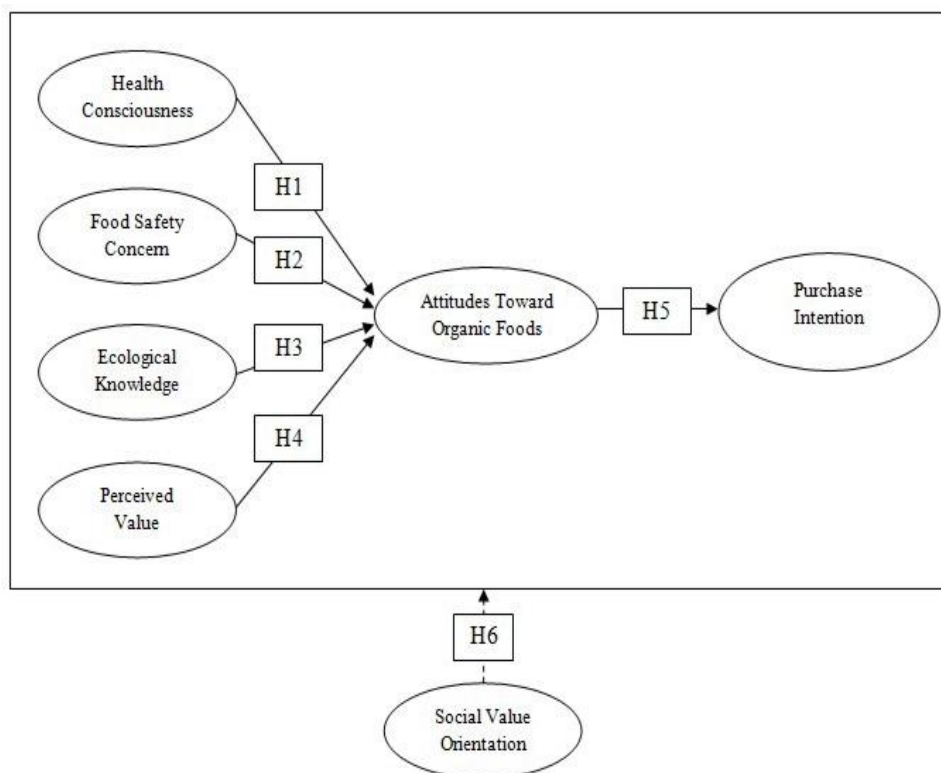


Figure 1. Theoretical Framework

From the figure 1 can explain the effect of health consciousness on attitude toward organic foods (H1), the effect of food safety concern on attitude toward

organic foods (H2), the effect of ecological knowledge on attitude toward organic foods (H3), the effect of perceived value on attitude toward organic foods (H4), the

effect of attitude toward organic foods on purchase intention (H5), the role of social value orientation in moderating the effect of health consciousness, food safety concern, ecological knowledge, perceived value on attitude toward organic foods and attitude toward organic foods on purchase intention (H6).

### **Data collection method and sample method**

The population for this study consists of college students who have purchase intention to organic foods. The number of samples required are 300 respondents. Sample taken from Economic Faculty, Sebelas Maret University. Convenience sampling was chosen in this study. It is based on a consideration that interest students are unrestricted so it is impossible to pick at random. Techniques of data collection is done through a survey to the respondent directly with the questionnaire which designed before. With these techniques the data collected was information from the real observed phenomenon because it comes from the respondents on the observed phenomena.

### **Operational definition and research instrument measurement**

#### **Health consciousness**

This variable are based on six points semantic differential scale rated from 1 to 7: (1) health reflection, (2) self concious about health, (3) health protection, (4) health awereness, (5) responsibility for health , and (6) knowing about health (See Michaelidou, 2008).

#### **Food safety concern**

This variable are based on three points semantic differential scale rated from 1 to 7: (1) contain of chemical residues, (2) preservatives in food, and (3) contain of pesticide (See Michaelidou, 2008).

### **Ecological Knowledge**

This variable are based on seven points comparative scale, consists of several four-category multiple-choice questions, with 1 point for a right answer and 0 for a wrong answer: (1) causes of soil polution, (2) causes of smog, (3) definition of ecology, (4) causes of bird and fish poisoned, (5) decomposes material, (6) causes of lead in atmospher and (7) causes of landslides (See Chan, 2001).

### **Perceived Value**

This variable are based on five points semantic differential scale rated from 1 to 7: (1) freshness, (2) taste, (3) natural, (4) vitamin and (5) nutrition (See Shaharudin, 2010).

### **Social Value Orientation**

This variable are based on seven points semantic differential scale scale rated from 1 to 7: (1) loving, (2) helpful, (3) relationships with others, (4) sense of accomplishment, (5) self-respect, (6) self-fulfillment and (7) independent (See Laroche, 2001).

### **Attitude Toward Organic Foods**

This variable are based on five points semantic differential scale rated from 1 to 7: (1) pleasure, (2) joy, (3) a positive assessment, (4) excitement, and (5) happiness (See Chan, 2001; Laroche *et al.*, 2001).

### **Purchase Intention**

This variable are based on six points semantic differential scale rated from 1 to 7: (1) seems to buy, (2) likely to buy, (3) the certainty of purchase, (4) the desire to buy, (5) a commitment to buy, (5) willingness to buy, (6) idea would be to buy (See Chan, 2001).

**Analysis Methods**

**Structural Equation Model Analysis**

Structural Equation Model Analysis (SEM) is aimed to estimate the multiple regression equation separately, but each has ties simultaneously or concurrently. In this analysis it is possible there is more than one dependent variable, and this variable becomes possible independent

variables for the other dependent variables. In principle, the structural model is aimed to test the causative relationship between variables. Hence, if one of the variables changed will be changes in other variables as well. In this research, data are processed using Analysis of Moment Structure Software (AMOS) version 18.

**Descriptive Statistic**

Table 2. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation	Measurement
GENDER	300	1.00	2.00	1.590 0	.49266	1: Man 2: Woman
HOME TOWN	300	1.00	2.00	1.560 0	.49722	1 : Solo 2 : Others
EDUCATION PROGRAM	300	1.00	2.00	1.460 0	.49923	1: S1 2 : D3
INCOME PER MONTH	300	1.00	5.00	2.716 7	1.26823	1 : < 300.000 2 : 300.000-500.000 3 : 500.001-700.000 4 : 700.001-900.000 5 : > 900.000
PARENT OCCUPATION	300	1.00	7.00	3.876 7	1.47265	1 : Teacher and Lecture 2 : PNS 3 : BUMN employee 4 : Private employee 5 : Entrepreneur 6 : Police and army 7 : Other
PARENT INCOME PER MONTH	300	1.00	5.00	3.076 7	.92754	1 : < 1.000.000 2 : 1.000.001-2.000.000 3 : 2.000.001-3.000.000 4 : 3.000.001-4.000.000 5 : 4.000.001-5.000.000 6 : > 5.000.000
Valid N (listwise)	300					

Source: Data Processed Result by Writer, 2012

Table 2 showed the composition of respondents gender were dominated with woman (mean 1.59). In home town aspect respondents were dominated with

respondents from other cities such as Jakarta, Bandung, Semarang, Salatiga, Madiun, Surabaya, Sukoharjo and Karanganyar (mean 1.56). In educational program

aspects, mean value of educational aspects is 1.46. From educational aspects, respondents were dominated with S1 education level. For respondents income per month were dominated with income range between 500.001-700.000 (mean 2.72). Descriptive statistic also reported about parents occupation. Parents occupation were dominated with private employee (mean 3.88). In parents income aspect were

dominated with income range between 2.000.001-3.000.000 (mean 3.08).

### Validity Test

This test was conducted by using Statistic Package for Social Science (SPSS) version 11.5. In this test, every item must have item factor loading > .50 (Ghozali, 2008). The result of validity testing is summarized in Table 3.

Table 3. Validity Test Result

	Component					
	1	2	3	4	5	6
HC1			,648			
HC2			,679			
HC3			,693			
HC4			,690			
HC5			,677			
HC6			,671			
FS1						,723
FS2						,773
FS3						,795
PV1					,641	
PV2					,700	
PV3					,758	
PV4					,749	
PV5					,732	
ATT1				,683		
ATT2				,766		
ATT3				,826		
ATT4				,658		
ATT5				,694		
PI1		,633				
PI2		,748				
PI3		,817				
PI4		,787				
PI5		,760				
PI6		,546				
SV1	,928					
SV2	,934					
SV3	,934					
SV4	,919					
SV5	,935					
SV6	,933					
SV7	,910					

Source: Data Processed Result by Writer, 2012



Validity test result for the research questionnaire as shown in table 3 above is valid and have perfectly extraction.

**Reliability Test**

Table 4. Reliability Test Result

Variable	Cronbach Alpha
Health Consciousness	.8150
Food Safety Concern	.7495
Perceived Value	.8072
Attitude	.8488
Purchase Intention	.8380
Social Value Orientation	.9755

Source: Data Processed Result by Writer, 2012

Table 4 above, showed that alpha point of research instrument every item were greater than .60, thus it could be concluded that the instrument of questionnaire was reliable. Cronbach’s Alpha of food safety concern was above .60 and categorize

**Normality Test**

Table 5 Normality Test Result

Variable	Min	Max	Skew	c.r.	Kurtosis	c.r.
pi6	2,000	7,000	-,347	-2,457	,508	1,796
pi5	3,000	7,000	-,331	-2,337	-,101	-,356
pi4	2,000	7,000	-,069	-,485	-,633	-2,237
pi3	3,000	7,000	-,148	-1,044	-,414	-1,463
pi2	3,000	7,000	-,338	-2,387	-,166	-5,88
pi1	3,000	7,000	,174	1,229	-,933	-3,299
att5	2,000	7,000	,330	2,337	1,237	4,372
att4	3,000	7,000	-,126	-,894	-,139	-,491
att3	3,000	7,000	-,317	-2,243	,976	3,449
att2	3,000	7,000	-,301	-2,132	,918	3,245
att1	3,000	7,000	-,312	-2,207	,326	1,153
pv1	3,000	7,000	-,204	-1,443	-,746	-2,639
pv2	3,000	7,000	-,295	-2,084	-,027	-,097
pv3	2,000	7,000	-,418	-2,956	-,127	-,451
pv4	3,000	7,000	-,308	-2,178	-,176	-,623
pv5	3,000	7,000	-,355	-2,513	-,165	-,582
ek1	,000	1,000	-,707	-5,000	-1,500	-5,303
ek2	,000	1,000	-,644	-4,556	-1,585	-5,603
ek3	,000	1,000	-,707	-5,000	-1,500	-5,303
ek4	,000	1,000	-,629	-4,447	-1,604	-5,672

moderate reliability. Cronbach’s Alpha of health conciousness, perceived value, attitude, purchase intention and social value orientation was also above .60 and categorize good reliability. Hence, the result indicated that all variables had Cronbach Alpha coefficient higher than .60, so that all variable measurements from questionnaire were reliable. Then all items from each variable were good to apply as measurement tools.

**Structural Equation Modeling Analysis  
The Sample Adequacy**

The number of respondents in this research was 300 respondents. All of questionnaires had been completely filled and could be used in this research. The number of samples met the requirement of Maximum Likelihood Estimation procedure of sampling between 100-200 samples (Ghozali, 2008).

ek5	,000	1,000	-,644	-4,556	-1,585	-5,603
ek6	,000	1,000	-,660	-4,666	-1,565	-5,531
ek7	,000	1,000	-,644	-4,556	-1,585	-5,603
fs1	3,000	7,000	-,344	-2,433	-,533	-1,886
fs2	3,000	7,000	-,330	-2,336	-,494	-1,747
fs3	3,000	7,000	-,337	-2,384	-,030	-,106
hc6	2,000	7,000	,321	2,269	1,213	4,289
hc5	2,000	7,000	,331	2,343	1,854	6,554
hc4	3,000	7,000	-,348	-2,458	,272	,961
hc3	3,000	7,000	,326	2,307	,321	1,136
hc2	3,000	7,000	,018	,131	-,310	-1,096
hc1	3,000	7,000	-,353	-2,498	-,036	-,126
Multivariate					24,416	4,533

Source: Data Processed Result by Writer, 2012

The skewness critical ratio value seen that the indicators had normal distribution because some of the value was fulfill the criteria. Kurtosis critical ratio value indicated that the data was normal because of the value was lower than 7. Therefore, the conclusion is the data distribute normal in univariate and multivariate normality.

### Outliers

In this research there were no particular reason, from 300 samples

there were two outliers i.e. number 51, and 158, so that it was decided that two outliers were not excluded from the analysis, because it would impacted on decreasing the goodness of fit value.

The numbers of indicator in this research were 32. Hence, if there was Mahalanobis distance value greater than  $\chi^2$  ( $32 \times .001$ ) = 62.48722, those values were included in multivariate outliers. The result of the observation was presented in Table 6.

Table 6. Outliers Test Observations farthest from the centroid (Mahalanobis distance)

Observation number	Mahalanobis d-squared	p1	p2
<b>51</b>	<b>71,559</b>	<b>,000</b>	<b>,022</b>
<b>158</b>	<b>64,499</b>	<b>,001</b>	<b>,013</b>
73	59,977	,002	,022
59	59,499	,002	,005
58	57,729	,004	,004
.....	.....	.....	.....
117	34,349	,356	,840
61	34,327	,357	,818

Source: Data Processed Result by Writer, 2012

### Goodness of Fit Analysis

According to Table 7 chi-square value is 1026,400 at significance level of 0,003. Probability value 0,003 less than 0,05, it was a bad indication. GFI value of 0,832 indicated of a moderate value.

Meanwhile, AGFI value of 0,805 was indicative of a moderate as well. Moreover, TLI value of 0,953 was a good indication. CFI value of 0,957 was a good indication as well. RMSEA value of 0,021 is a good indication. While the parsimony

fit index measures the value gained  $C_{min}/DF$  of 1,133 was a good indication as well.

According to Table 8 chi-square value is 1032,025 at significance level of 0,003. Probability value 0,003 less than 0,05, it was a bad indication. GFI value of 0,832 indicated of a moderate value. Meanwhile, AGFI value of 0,805 was

indicative of a moderate as well. Moreover, TLI value of 0,953 was a good indication. CFI value of 0,957 was a good indication as well. RMSEA value of 0,021 is a good indication. While the parsimony fit index measures the value gained  $C_{min}/DF$  of 1,133 was a good indication as well.

Tabel 7. *Goodness-of-Fit Unconstrained Model*

Criteria	Cut-off Value	Result
$\chi^2$ chi square	Approaching 0	1026,400
$\chi^2$ significance probability	$\geq 0,05$	0,003
GFI	$\geq 0,90$	0,832
RMSEA	$\leq 0,80$	0,021
AGFI	$\geq 0,90$	0,805
TLI	$\geq 0,90$	0,953
Comparative Fit Index (CFI)	$\geq 0,90$	0,957
Normed Chi Square (CMIN/DF)	$\leq 2,00$	1,133

Source: Data Processed Result by Writer, 2012

Tabel 8. *Goodness-of-Fit Constrained Model*

Criteria	Cut-off Value	Result
$\chi^2$ chi square	Approaching 0	1032,025
$\chi^2$ significance probability	$\geq 0,05$	0,003
GFI	$\geq 0,90$	0,832
RMSEA	$\leq 0,80$	0,021
AGFI	$\geq 0,90$	0,805
TLI	$\geq 0,90$	0,953
Comparative Fit Index (CFI)	$\geq 0,90$	0,957
Normed Chi Square (CMIN/DF)	$\leq 2,00$	1,133

Source: Data Processed Result by Writer, 2012

From all of measurement of goodness of fit of the above indicates that the model proposed in this research has not been accepted. Therefore, the researchers consider to modifying the model to establish an alternative model which has better goodness of fit.

### Modification

To obtain an acceptable criterion model, researchers estimate the correlation between the error term that did not require theoretical justification. Table 9 and Table 10 showed the result of goodness of fit model that had been modified.

Tabel 9. Goodness-of-Fit Unconstrained Model after Modifying

Criteria	Cut-off Value	Before	After
$\chi^2$ chi square	Approaching 0	1026,400	971,433
$\chi^2$ significance probability	$\geq 0,05$	0,003	0,054
GFI	$\geq 0,90$	0,832	0,841
RMSEA	$\leq 0,80$	0,021	0,016
AGFI	$\geq 0,90$	0,805	0,814
TLI	$\geq 0,90$	0,953	0,973
Comparative Fit Index (CFI)	$\geq 0,90$	0,957	0,975
Normed Chi Square (CMIN/DF)	$\leq 2,00$	1,133	1,077

Source: Data Processed Result by Writer, 2012

Tabel 10. Goodness-of-Fit Constrained Model after Modifying

Criteria	Cut-off Value	Before	After
$\chi^2$ chi square	Approaching 0	1032,025	975,600
$\chi^2$ significance probability	$\geq 0,05$	0,003	0,058
GFI	$\geq 0,90$	0,832	0,843
RMSEA	$\leq 0,80$	0,021	0,016
AGFI	$\geq 0,90$	0,805	0,816
TLI	$\geq 0,90$	0,953	0,974
Comparative Fit Index (CFI)	$\geq 0,90$	0,957	0,976
Normed Chi Square (CMIN/DF)	$\leq 2,00$	1,133	1,080

Source: Data Processed Result by Writer, 2012

According to Table 9 and Table 10 Goodness of Fit test showed it had better result than before. It means the next step of SEM analysis can be processed.

### Moderation Analysis

This study used social value orientation as a moderating variable. The way to know at the moderation role is splitting it into two categorical of the high and low. It said the high category when the semantic scale value added for 7 questions from social value orientation variable of each respondent is greater than or equal to 28. It said the low category when the semantic scale value added for 7 item questions from social value orientation variable of each respondent is less than 28.

Calculation of categorical data using the simple average formula as follows.

$$\begin{aligned}
 X &= \sum \frac{(xi)}{n} \text{ (Djarwanto and Subagyo, 2000)} \\
 &= \frac{8455}{300} \\
 &= 28,1833 \approx 28
 \end{aligned}$$

Explanation :

X = average of total answer  
 xi = value of observation  
 n = sample size

In an effort to test the effect of moderation, two structural equation models were compared using Amos 18 by separating the sample into two groups

(split sample) is based on respondents who have a collectivist orientation (high) and respondents who have individualist orientation (low). After that compare the results of the model parameter coefficients to see whether or not the influence of social value orientation variable.

From table 11, constrained model are significantly different from the unconstrained model, seen from the difference in  $\chi^2$  value is 4,167 on degree of freedom value is 1 and accepted in probability level 0,05. Hence, the variable social value orientation is significantly influence as moderating variable.

Table 11. Comparison of Goodness of Fit Constrained Model and Unconstrained Model

	Constrained Model	Unconstrained Model
<i>Chi Square</i>	975,600	971,433
<i>Degree of Freedom</i>	903	902
<i>Probability</i>	0,058	0,054
<i>Chi Square/ Degree of Freedom</i>	1,080	1,077
<i>GFI</i>	0,843	0,841
<i>AGFI</i>	0,816	0,814
<i>RMR</i>	0,046	0,046
<i>RMSEA</i>	0,016	0,021
<b>Differences of Goodness-of-Fit</b>		
<i>Chi Square</i>	975,600 – 971,433 = 4,167	
<i>Degree of Freedom</i>	903 - 902 = 1	
<i>Probability</i>	0.05	

Source: Data Processed Result by Writer, 2012

In testing moderation between high and low groups there is a difference of signification relationship between variables; for the high group results indicate a significant relationship between health consciousness and attitude toward organic food; food safety concern and attitude toward organic food; ecological knowledge and attitude toward organic food; perceived value and attitude toward

organic food; and attitude toward organic food and purchase intention. For low group the test results indicate a significant relationship between health consciousness and attitude toward organic food; perceived value and attitude toward organic food; and attitude toward organic food and purchase intention; it also indicates a significant difference (See Table 12).

Table 12. Comparison of Regression Weight High and Low Group

		High				Low			
		E	S.E.	C.R.	P	E	S.E.	C.R.	P
Attitude Toward Organic Foods	<--- Health Consciousness	*,356	,097	3,683	,000	*,361	,126	2,868	,004
Attitude Toward	<--- Food Safety Concern	*,245	,065	3,795	,000	,127	,122	1,036	,300

		High				Low				
		E	S.E.	C.R.	P	E	S.E.	C.R.	P	
Organic Foods Attitude Toward Organic Foods	<---	Ecological Knowledge	***,504	,285	1,770	,077	,656	,679	,967	,333
Organic Foods Attitude Toward Organic Foods	<---	Perceived Value	*,335	,078	4,285	,000	** ,161	,079	2,046	,041
Purchase Intention	<---	Attitude Toward Organic Foods	*,398	,115	3,461	,000	*,639	,189	3,388	,000

\* Significant at 1% level; \*\* Significant at 5% level; \*\*\* Significant at 10% level

Source: Data Processed Result by Writer, 2012

Based on this result, hypothesis 6 is accepted. Social value orientation is moderating the effects of health consciousness, food safety concern, ecological knowledge, perceived value on attitude toward organic foods and attitude toward organic foods on purchase intention. The test results provide significant support to the regularity of the phenomenon found in previous studies (See Chan, 2001; Garling, 2003; Laroche et al, 2001).

**Hypotheses testing**

Hypotheses testing were conducted by analyzing the significance level of causality between the constructs in the model based on the CR value that had higher than or equal to the z-table. In total more than 120 respondents; the z value tables for each level of significance are: (1) 1% = 2.576; (2) 5% = 1.96; (3) 10% = 1.645. Table 13 showed the regression weights of the tested variables.

Table 13. Regression Weights

			Estimate	S.E.	C.R.	P
Attitude Toward Organic Foods	<---	Health Consciousness	*,373	,078	4,766	,000
Attitude Toward Organic Foods	<---	Food Safety Concern	*,232	,061	3,771	,000
Attitude Toward Organic Foods	<---	Ecological Knowledge	***,535	,293	1,829	,067
Attitude Toward Organic Foods	<---	Perceived Value	*,257	,057	4,533	,000
Purchase Intention	<---	Attitude Toward Organic Foods	*,404	,089	4,556	,000

\* Significant at 1% level; \*\* Significant at 5% level; \*\*\* Significant at 10% level

Source: Data Processed Result by Writer; 2012.

### **Relationship between health consciousness and attitude toward organic food**

The test results indicated a significant and positive relationship between health consciousness and attitude toward organic food ( $\beta = ,373$ ; CR = 4,766; SE= ,078). This explains that the higher the health consciousness; the higher attitude toward organic food. This phenomenon shows that concerns for one's health is commonly stated factors in forming a positive attitude toward organic foods. Individuals' awareness and determination to control their own health influences their attitude toward organic foods.

Hence, the findings of this research support the hypothesis 1 that describes a significant and positive relationship between health consciousness and attitude toward organic food. Theoretically, this research also provides support for the previous research that the higher the health consciousness, the higher the attitude toward organic food as proposed by Michaelidou and Hasan (2008) and Phong (2010).

### **Relationship between food safety concern and attitude toward organic food**

The test results indicated a significant and positive relationship between food safety concern and attitude toward organic food ( $\beta = ,232$ ; CR= 3,771; SE= ,061). This explains that the higher food safety concern, the higher attitude toward organic food. This phenomenon could happen because many consumers believe that organically grown foods is safer than conventional alternatives. This reason made a positive relationship between food safety concern and attitude toward organic food.

Hence, the findings of this research support the hypothesis 2 that describes a significant and positive relationship between food safety concern and attitude

toward organic food. Theoretically, this research provides support for the previous research that the higher the food safety concern, the higher the attitude toward organic food as proposed by Michaelidou and Hasan (2008).

### **Relationship between ecological knowledge and attitude toward organic food**

The test results indicated a significant and positive relationship between ecological knowledge and attitude toward organic food ( $\beta = ,535$ ; CR= 1,829; SE= ,293). This explains that the higher ecological knowledge; the higher attitude toward organic food. This phenomenon could be happen because of people's knowledge about environment issues like a global warming issue that encourages their positive attitude toward environment and they have positive action or activity about environment protection. When they decide to do a shopping, they will consider about environment issue. This reason made a positive relationship between ecological knowledge and attitude toward organic food.

Hence, the findings of this research support the hypothesis 3 that describes a significant and positive relationship between ecological knowledge and attitude toward organic food. Theoretically, this research provides support for the previous research that the higher the ecological knowledge, the higher attitude toward organic food as proposed by Chan (2001).

### **Relationship between perceived value and attitude toward organic food**

The test results indicated a significant and positive relationship between perceived value and attitude toward organic food ( $\beta = ,257$ ; CR= 4,533; SE= ,057). This explains that the higher perceived value; the higher attitude toward organic food. Many consumers believe that organically grown foods is give more

benefit than conventional alternatives. Organic food has more nutritional value because the breeding and growth of organic food is being done naturally without involving any use of hormones and chemical. This reason made a positive relationship between perceived value and attitude toward organic food.

Hence, the findings of this research support the hypothesis 4 that describes a significant and positive relationship between perceived value and attitude toward organic food. Theoretically, this research provides support for the previous research that the higher the perceived value, the higher the attitude toward organic food as proposed by Phong (2010).

#### **Relationship between attitude toward organic food and purchase intention**

The test results indicated a significant and positive relationship between attitude toward organic food and purchase intention ( $\beta = ,404$ ;  $CR= 4,556$ ;  $SE= ,089$ ). This explains that the higher attitude toward organic food; the higher purchase intention. Improvement the quality of life can be controlled by individuals or consumers with make changes to select and use specific items that are environmental friendly. This reason made a positive relationship between attitude toward organic food and purchase intention.

Hence, the findings of this research support the hypothesis 5 that describes a significant and positive relationship between attitude toward organic food and purchase intention. Theoretically, this research provides support for the previous research that the higher the attitude toward organic foods, the higher purchase intention as proposed by Michaelidou and Hasan (2008); and Phong (2010).

#### **Conclusion**

In summary, social value orientation can influence in organic foods purchasing. This is supported by the moderation test results that present a significant difference between the two models. This result means consumers who have collectivism orientation and consumers who have individualism orientation indicate differences in behavioral intentions for organic foods purchasing.

Consumer attitudes play an important role in influencing purchase intention. In this research health consciousness, food safety concern, ecological knowledge and perceived value are significant factors influencing attitude toward organic foods. Hence, necessary efforts to improve health consciousness, food safety concern, ecological knowledge, perceived value and attitude toward organic foods.

#### **Implication**

This research is expected to provide theoretical, practical, and future research implications. Through these three aspects, it is expected to provide an understanding about scientific responsibilities in the effort to develop theories according to the field of research which are the responsibility of researchers. Moreover, the implications of this research are also expected to provide insight about the efforts that should be done related to the research problem.

#### **Theoretical Implication**

This research is expected to improve understanding of the academics associated with the concept of purchase intention. It is based on the uniqueness in this research that gives a different perspective than previous studies. The uniqueness can be known from the observations variables that being modeled and adjusted to research setting in Indonesia. Furthermore, this research is also expected to be discussed



further, and then it can be developed and tested in different research settings.

### **Practical Implication**

Based on the result from this research, it is expected to provide an understanding of the marketers associated with the concept of purchase intention toward organic foods. Understanding the purchase intention can provide a larger perspective on the marketers, which can be used to design stimuli that it is possible to gain the intention to purchase toward organic foods. This needs to be prudent because designing stimuli that are redundant may impact on the ineffectiveness of the marketing strategy developed.

### **Future Research Implication**

This research object is focused on organic foods, that impact on limitation of the model generalization. This condition gives an opportunity for further research, especially in developing the model on wider context. In addition, future research should be careful in looking on research object characteristics. It is important because this research has a limited application. Hence, it needed continuing explanation, especially on developing the measurement in another setting.

### **Limitation**

The current research has some limitations, and the recognition of these should help refine future research efforts. This research object is focused on organic foods. Therefore to apply this research into different setting, it is needed a prudent in monitoring product characteristics inherent in the objects used in the research. It is necessary in order to avoid bias in the analysis that could impact on fault in understanding the implications of the research.

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