

# Economic Behavior Changes On Organic Food Consumption In Pandalungan Community

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## Abstract

The districts of Situbondo, Bondowoso and Jember are the centers of residence for the Pandalungan community. Pandalungan community is a society with mixed cultures, namely Java and Madura. Most of them live in urban areas. Like other community entities, some of these communities have not consumed organic food plants, given the scarcity of information about organic plants. The objectives of this study were: (1) to determine the effect of plant organic food product attributes as healthier food plants, and the discomfort caused by organic food plants on the motivation to shift consumption through the attitude of shifting non-organic food plant products to organic food plants. ; (2) to determine the effect of moderating motivation to elaborate information on the effect of product attributes and discomfort on product switching attitudes. The analytical method used is Structural Equation Modeling (SEM) with AMOS applications, the research sample of 250 respondents selected from the three research areas, with proportional random sampling method. The results of the study show that product attributes have a positive and significant effect on product switching attitudes, as well as their influence on the motivation to shift consumption to organic food crops. Meanwhile, discomfort has a significant negative effect both on product switching attitudes and on motivation for shifting consumption. Product switching attitude has a positive and significant effect on the motivation to shift in consumption. The moderating effect of motivation on elaborating information strengthens the effect of product attributes on product switching attitudes, but the moderating effect of motivation on elaborating information through discomfort is proven insignificant. The interactive structural equation function mathematically can be written as follows: (1)  $SK = 1,420 AT - 0.773 KN + 0.278 ATml - 0.198 KNml + e3$ ; and (2)  $NI = 1.366 AT - 1.466 KN + 0.768 SK + 0.425 ATml - 0.787 KNml + 0.570 SKml + e4$ . shows that product attribute improvements can be widely and continuously informed to the public so that people will know and be able to make comparisons with competitors' products. This will motivate more wisely towards product switching. This finding related to the limited alternative product choices; product constraints are difficult to find, high prices (Zanoli & Naspetti; 2002, and Chinnici, and friends; 2002). Low availability in the market (Kalafatis, and friends;., 2009; Magnusson, and friends; 2012, Vindigni, and friends; 2002, Tarlanen & Sundqvist; 2005, Chen; 2009); and the minimum number of alternative options (Chinnici, and friends; 2002) as well as the cost of switching (Anton, and friends; 2007).

**Keywords:** Product attribute, discomfort, product switching attitude, motivation to elaborate on information and motivation to shift consumption.

## I. INTRODUCTION

Economic growth depends on the availability of the factors of production: population, labor, capital accumulation and the rate of technological progress. The analysis of this theory is based on the assumptions of the classical theory, namely that the economy is at the full employment level and the full utilization level of its

production factors. This model explains that the technology used determines the amount of goods produced from a certain amount of capital and labor. The neoclassical economic theory of homo oeconomicus is a rational being [1], meaning that the actions taken are always based on the desire to obtain the maximum benefit (maximizing utility). The phenomenon of the low proportion of people who have the motivation to change consumption from non-organic to organic consumption, one of which is due to the higher price of organic food and its scarce availability [2, 3, 4]. The high price difference [5, 6] and limited availability [7] are one of the obstacles for consumers to shift to organic food, because to get these alternative products they need additional effort and cost [8]. The higher the public's perception of differences in discomfort in product search, the lower the positive attitude to motivate changes in consumption of non-organic to organic food,

Associated with public perceptions of differences in product attributes and the phenomenon of lack of information about organic products, it is estimated that it will affect people's motivation to make changes to their consumption of these products. Theoretically, that in addition to having an effect on changing product attitudes, it also directly affects the motivation for changes in consumption. Related to the difference in discomfort, the phenomenon that can be explained is that apart from having an effect on changing product attitudes, it also directly affects the motivation for changing consumption. The condition that can be described is that if there is a high motivation to elaborate on information, it will increase community involvement in understanding and evaluating product attributes [9, 10]. The purpose of this study was to examine the effect of independent variables on attitudes and motivations for changing consumption to organic food, which can be explained as follows:

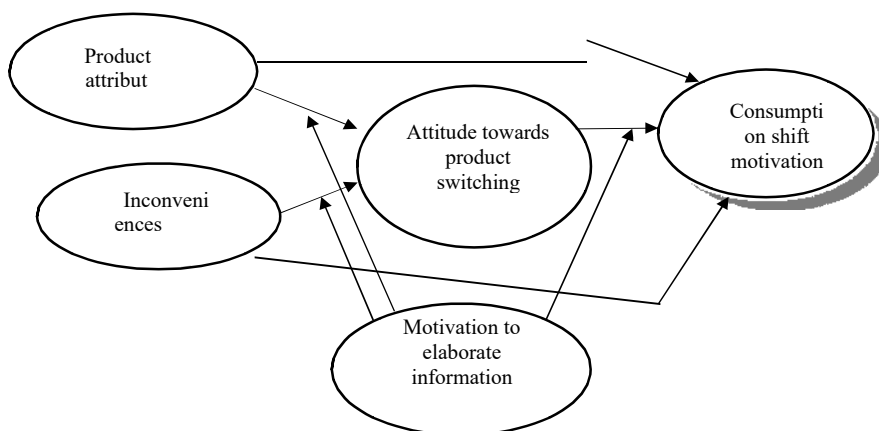
1. Making the effect of product attributes and discomfort motivation of organic food as more healthful food on organic food consumption.
2. Identify the influence of motivation Elaboration of information on product attributes and discomfort on the attitude of switching organic food products.
3. Finding factors influencing motivation Elaboration of information on product switching attitudes towards shifts in organic food consumption.

## II. METHODS

Preliminary research was carried out using a focused group discussion (FGD) technique. The use of FGD techniques allows researchers to obtain broader and deeper information from participants' interactions with certain topics in order to understand the behavior or way of thinking of the discussion participants [11]. Participants in this preliminary study were selected from elements of the Situbondo, Bondowoso and Jember District Governments with the consideration that this research focuses on the aspects of how humans process information and make decisions in general. This condition allows researchers to determine participants with the following criteria: (1)

The participants vary from gender aspect; (2) The participants varied from the aspect of age; (3) The participant has ever consumed organic plants. With these criteria, the researchers obtained FGD participants as many as six participants. This research was conducted in Situbondo, Bondowoso and Jember Regencies, East Java Province. The population in this study is the Pandalong community from various levels of income, occupation, gender, and age. The sample size was adjusted to the requirements of the SEM analysis, namely 250 respondents who were selected by proportional random sampling based on the number of Pandalong communities in the district. The structural equation model (SEM) developed in this study is:

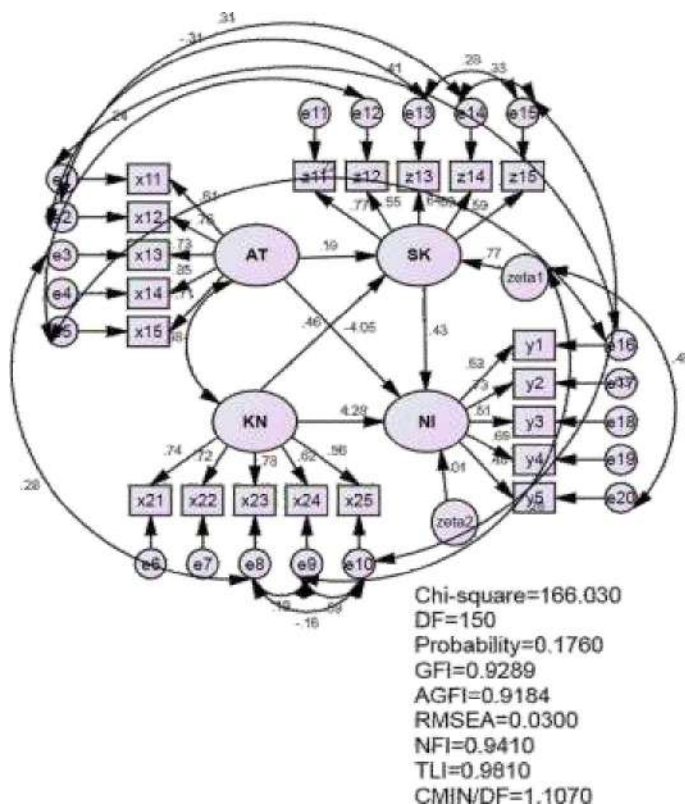
**Fig 1.** Structural Equation Confirmation Model Concept



H1 : The higher the public's understanding of differences in product attributes, the higher the motivation for shifting consumption; and the higher the consumer's understanding of the inconvenience of obtaining the product, the lower the motivation for shifting consumption; either directly or indirectly through attitudes towards product switching.

H2: The motivation to elaborate information strengthens the effect of product attributes and the effect of discomfort on attitudes towards product switching to organic food crops.

H3: The motivation to elaborate on the information strengthens the influence of attitudes towards product switching to the motivation to shift consumption to organic food crops. SEM analysis in this study consists of an analysis of the basic model (base structural model) or called Model-1, and an interactive model (moderating structural model) or called Model-2. The base structural model is a model with exogenous variables: product attributes (AT) and



discomfort (KN), intervening variables: attitudes towards product switching (SK), and endogenous variables: consumption shift motivation (NI). While the interactive model is the base model with the interaction of moderator variables (MI) with exogenous variables (AT and KN) and intervening variables (SK).

**Fig 2.** Model-1 Explicit

From Figure 2 above, the standardized explicit structural equation can be written as follows:

$$SK = 0.19 AT - 0.46 KN + e1$$

$$NI = 4.05AT - 4.28 KN + 0.43 SK + e2$$

### III. RESULT AND DISCUSSION

**Table 1.** Results of the Base Structural Model Suitability Test

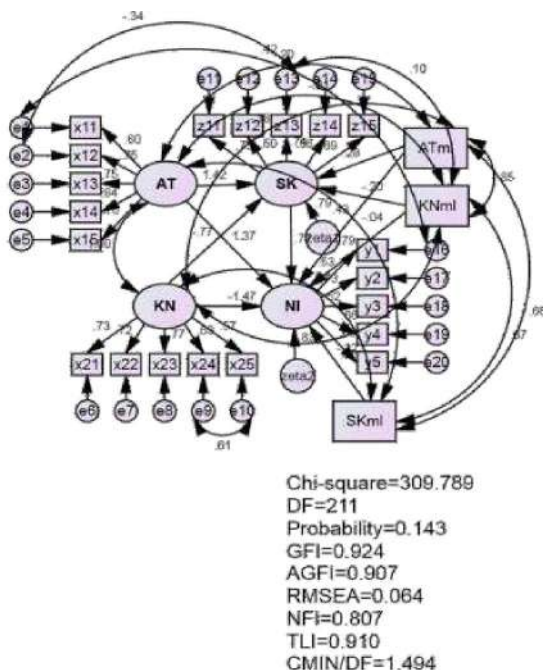
No.	GOF	Mark	Category
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1	<i>Chi-Square Statistics (2)</i>	166.030	Marginal
2	<i>probability (2)</i>	0.176	Good
3	<i>Goodness of Fit Index (GFI)</i>	0.922	Good
4	<i>RMSEA</i>	0.030	Good
5	<i>Tucker-Lewis Index (TLI)</i>	0.981	Good
6	<i>Adjusted Goodness of Fit Index (AGFI)</i>	0.904	Good
7	<i>Norman Chi Square (2/df)</i>	1,107	Good
8	<i>Comparative Fit Index (CFI)</i>	0.985	Good
9	<i>Normal Fit Index (NFI)</i>	0.921	Good

Source: AMOS Result Printout, Appendix 4 processed.

All GOF elements show that the basic structural model The resulting model meets the criteria for model suitability, except for the relative value of 2 big. Thus, in terms of the general suitability of the model, the resulting base structural model is categorized as marginal, not very perfect. The influence of exogenous and intervening variables is indicated to be significant, then the analysis model can be developed into an interactive structural model, involving a moderator variable, namely the motivation to elaborate on information (ML). The ML variable is measured through five indicators, the interaction process is by developing new indicators that reflect the moderating role of the influence of the AT, KN and SK variables on the endogenous variable, NI.

The new interaction variables with the involvement of ML moderator variables are: ATML, KNml and SKml. ATml is the interaction variable between the AT variable and the ML variable, with the indicator of the result of multiplication between the indicators of the two variables concerned. KNml is the interaction variable between the KN variable and the ML variable, with the indicator of the result of multiplication between the indicators of the two variables concerned. SKml is an interaction variable between the SK variable and the ML variable, with the indicator of the result of multiplication between the indicators of the two variables concerned. The three interaction variables are still in the form of latent variables. To be involved in the further analysis process, the three variables were calculated factor scores using Confirmatory Factor Analysis (CFA). CFA produces interaction variables with categories as observed variables (observed variables) which are described in the form of boxes in the interactive structural model (Figure 4.3). Furthermore, the AMOS Program Version 24.0 application generates an explicit interactive structural model as follows:



**Figure 3 Explicit Interactive Structural Model, Model-2** (Source: AMOS Result Printout, Appendix 5 processed).

From Figure 3 above, the standardized explicit structural equation can be written as follows:

$$SK = 1,420 AT - 0,773 KN + 0,278 ATml - 0,198 KNml + e3$$

$$NI = 1,366 AT - 1,466 KN + 0,768 SK + 0,425 ATml - 0,787 KNml + 0,570 SKml + e4$$

The results of the evaluation of Model-2 as the final model in this study are:

**Table 2.** Results of the Interactive Structural Model Conformity Test

No.	GOF	Mark	Category
1	Chi-Square Statistics (2)	309,789	Marginal
2	probability (2)	0.143	Good
3	Goodness of Fit Index (GFI)	0.924	Good
4	RMSEA	0.064	Good
5	Tucker-Lewis Index (TLI)	0.910	Good
6	Adjusted Goodness of Fit Index (AGFI)	0.907	Good
7	Norman Chi Square (2/df)	1,494	Good
8	Comparative Fit Index (CFI)	0.985	Good
9	Normal Fit Index (NFI)	0.807	Good

Source: AMOS Result Printout, Appendix 5 processed.

The discussion focused on the interactive structural model, as the main model

that was developed after the base structural model proved to be a good model. What is meant as a good model is if the 'structural coefficients of the exogenous and intervening variables to be moderated by the moderator variables prove significant'. This requirement is important, because if the base structural model is not proven to be significant, then the involvement of moderator variables does not give any meaning.

### **1. The Effect of Product Attributes on Attitudes towards Product**

#### **Switching**

The effect of product attributes on attitudes towards product switching is significantly positive. Product attributes of organic food plants which are stated by most respondents to be better than non-organic food crops in terms of being more durable, free of pesticides, and better nutritional content; will change attitudes towards product switching for the better. Most of the respondents have a favorable attitude towards product switching; especially in terms of obtaining nutrients from organic food plants, the importance of consuming organic food plants for health and consuming organic food plants is a characteristic of modern society. Respondents' perceptions of the important indicators of these two variables have a good match and lead to a significant positive influence relationship pattern. This finding supports the research results of [12, 13, 14] also states that improvement of product attributes can be widely and continuously informed to the public so that the public knows and can make comparisons with competing products. This will lead to a wiser motivation in attitude towards product switching.

### **2. The Effect of Discomfort on Attitudes towards Product Switching**

The Effect of Discomfort on Attitudes towards Product Switching, is significantly negative. The discomfort in obtaining organic food crops for consumption was felt high by most of the respondents; especially the level of difficulty in obtaining, limited supply, uncompetitive prices, and limited alternative product choices. Organic food plant products have not been well distributed in traditional markets, except in some modern supermarkets. These things cause attitudes towards product switching to be negative. Someone will think there is no need to switch products because the inconvenience factors are quite high. This finding supports the results of [15] research, relating to the limited choice of product alternatives; product constraints are difficult to find, high prices [16]. Low availability in the market; and the lack of alternative choices and the cost of switching.

### **3. The Effect of Attitude on Product Switching to Consumption Shift**

#### **Motivation**

The effect of attitude on product switching to consumption shift motivation is positive and significant. That is, if attitudes towards product switching can be pursued positively, then the motivation to shift consumption can increase. Currently, the Pandalungan community has a tendency to be increasingly interested in food labeled organic. This means that there is a motivation to shift consumption to organic food

crops. It's not even just food today, the phenomenon has shown that everything labeled organic is always selling well and being sought after by people in the market; for example: organic rice, organic fruit and vegetables, organic cosmetics, organic shampoo and even organic bags and clothes are being hunted and trending in the community.

The Pandalungan community, who mostly live in urban areas, The motivation for shifting consumption among the people can be categorized as 'good enough', this is indicated by the desire, ability and belief to shift consumption to organic food crops. Doubts to shift consumption to organic food crops can be considered small. Attitudes towards product switching among the public can be categorized as 'very positive', indicated by the awareness of the importance of the decision to obtain food crops that are nutritionally good, good for health, and the assumption that consuming organic food crops is a characteristic of modern society. Consumption shift motivation and attitude towards product switching have similar tendencies, so that the relationship between them is positive and significant.

#### **4. Moderation Effect of Motivation Elaborating Information**

The motivation to elaborate information strengthens the effect of product attributes on attitudes towards product switching. This can be explained as follows: with high motivation to elaborate on information, it has inadvertently increased positive attitudes towards the idea of product switching. The information sought is not only about the attributes of organic plant products, but also competitor products, production processes, product quality, and where the market is.

The motivation to elaborate information has no significant moderating effect on the effect of discomfort. That is, discomfort is a condition that is felt by the community and does not easily subside because of the motivation to elaborate on the information. Because the level of public education is also a fairly strong obstacle in the process of elaborating the information. Someone who knows information, sometimes his rationality remains illogical considering his education level, level of belief in old products, or even his economic condition. Things like this cause the moderating effect of information elaboration on the attitude of switching the product can not be explained. This finding has never been stated by empirical studies that are the reference in this study.

#### **IV. CONCLUSION**

Product attributes and discomfort have a significant effect on the motivation for shifting consumption, either directly or indirectly through attitudes towards switching organic food products. Product attributes have a positive effect, while discomfort has a negative effect. The motivation to elaborate information strengthens the effect of product attributes on attitudes towards the transition of organic food products; being to the effect of discomfort, the moderating effect cannot be explained, considering that it



is not significant. The motivation to elaborate on the information strengthens the influence of attitude towards product switching to the motivation to shift consumption of non-organic food to organic food.

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