Determinants of Organic Food Purchase Intention

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Abstract. To live longer, health awareness is increasing among young consumers, however, studies on the determinants of organic food purchasing behavior are limited. To address this gap, this study examines the role of organic knowledge, environmental concern, attitude towards organic food, and environmental attitude in determining organic food purchase intention. A survey was conducted to collect the data and Partial Least Square Structural Equation Modeling was used to test the hypotheses.

Keywords:O*rganic knowledge, environmental concern, attitude, purchase Intention.*

1. INTRODUCTION

Study (Chu, 2018) provides insight into the attitudes of Chinese consumers towards organic food and evaluates the impact of purchase intention as a mediator in the relationship between external and internal factors interested in purchasing. This case study is based on inquiries on Google using a sample of 1421 Chinese consumers. The results showed that there was a positive attitude on the part of consumers towards organic food which would further strengthen their purchase intentions, whereas, there was no significant impact of marketing and communication prices on consumer attitudes towards organic food.

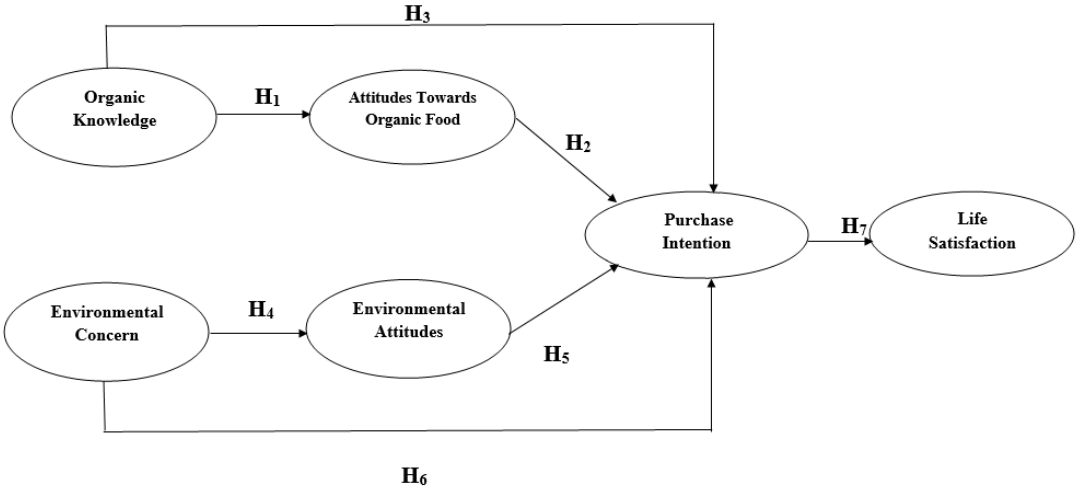
The population of the younger generation in Indonesia is increasing with the productive age in 2020 which is projected to reach 68.75 percent of the total population. One of the young generations with different characteristics from the previous generation is their lifestyle. The younger generation thinks that health is a new lifestyle that is more important. The healthy lifestyle chosen by the younger generation is a healthy or clean diet. Public awareness of a healthy diet is reflected in the increasing number of choices in consuming foods such as fruits and vegetables. This is in line with the increasing awareness and need for a healthy life by consuming healthy foods that are naturally produced without the use of chemicals and genetic engineering such as organically produced fruits and vegetables. This trend has created the rapid growth of organic products.

Organic fruit and vegetables in Indonesia are still low in production, although many organic crop products, such as rice and organic vegetables, have emerged in supermarkets in big cities. A special agency in Indonesia that certifies organic products, one of which is Biocert, so as to ensure that organic fruit and vegetable products are on the market and are increasingly affordable. The growing public awareness of healthy

lifestyles has made organic food ingredients on the rise. Many business actors take advantage of this by producing processed organic foods with high nutritional value.

2. LITERATURE REVIEW

The conceptual framework of this research will be presented in Figure 1 as follows:



2.1 Relationship between Organic Knowledge and Attitudes Towards Organic Food

Consumers who have high product knowledge look at intrinsic product characteristics to assess product quality and function. In contrast, consumers with low product knowledge tend to evaluate products based on price and brand (Ghazali et al., 2017). Organic food information perceived by consumers is an important issue in the organic food market because it is the only instrument by which consumers must identify the attributes of organic food products from conventional ones, and build positive attitudes towards organic food (De Magistris & Gracia, 2008). Moreover, (Yiridoe et al., 2005), in their literature review, stated that organic knowledge of organic food products can influence consumer organic purchasing decisions for two reasons. The first, lack of knowledge, is considered the main reason why consumers don't buy organic food. The second reason is that consumers who do not perceive that organic food products have sufficiently detailed information cannot clearly recognize the unique attributes of organic from conventionally grown alternatives. According to these findings, the first hypothesis can be stated as follows:

> H_1 : *Organic knowledge* has a significant positive effect on *attitude towards organic food*

2.2 Relationship between Attitudes Towards Organic Food and Purchase Intention

According to (Ajzen, 1991) when a person's attitude towards a certain behavior is beneficial, they are more likely to engage in that behavior. Several studies have supported the attitude relationship in the context of organic products. These studies show that the more favorable the attitude, the greater the purchase intention (Ghazali et al., 2017). For example, in their study of Done consumers using the TPB model, it was shown that consumer attitudes can predict the intention to buy organic food. Another study by (Van Loo et al., 2013) also shows a positive relationship between attitudes and frequency of purchasing and organic consumption. Therefore, the following hypothesis appears:

> H_2 : *Attitude towards organic food* has a significant positive effect on *purchase intention*

2.3 Relationship between Organic knowledge and Purchase Intention

Product knowledge is a major factor in the consumer decision-making process and the purchase of organic products (Hill & Lynchehaun, 2002). In the context of organic

food, many studies support the view that product knowledge has a positive influence on consumers' attitudes towards these foods and directly determines their decisions or intentions, thereby increasing consumption of organic food purchases (Padel & Foster, 2005). (De Magistris & Gracia, 2008) observed that organic knowledge that can influence attitudes will not only increase the likelihood of buying organic food, but will also increase the level of consumption among existing consumers. revealed that consumer attitudes towards different attributes of organic food (human health, safety, etc.) and towards the environment are the most important factors explaining consumer decision-making processes for organic food products. So that the hypothesis arises:

H_3 : *Organic knowledge* has a significant positive effect on *purchase intention*

2.4 *Relationship between Environmental Concern and Environmental Attitude*

Consumption of environmentally friendly products (referred to as green products in this study) can be one way to reduce environmental impact. Eco-friendly products refer to products that are safe to buy, and of good quality, and are produced based on the principles of sustainable development (Maichum et al., 2016). (Paul et al., 2016) refer to environmental concern as the extent to which people are aware of problems about the environment and support efforts to solve them and or indicate a willingness to contribute personally and provide solutions. So that the hypothesis appears:

H_4 : *Environmental Concern* has a significant positive effect on *Environmental Attitude*

2.5 Relationship between Environmental Attitude and Purchase Intention

(De Magistris & Gracia, 2008) analyzed environmental attitudes and their relationship with purchasing decisions. They concluded that positive attitudes towards environmental problems are positively correlated with purchasing and purchase frequency. (Hsu et al., 2019) found that the higher the environmental concern of consumers, the higher the attitude and purchase intention. Environmental attitude has been found to be very useful in predicting consumer purchase intention and behavior in various fields (Yadav & Pathak, 2016). With the hypothesis:

H_5 : *Environmental Attitude has a significant positive effect on purchase intention*

2.6 Relationship between Environmental Concern and Purchase Intention

The study (Hsu et al., 2019) assumes that the higher the environmental concern of consumers along with higher CSR, the more consumers tend to buy organic food. (Janssen, 2018) also observed that consumer concern for environmentally friendly products was identified as a driver for organic food consumption. This increases awareness of and interest in environmental concerns. This is thought to influence consumer purchasing decisions. And make a hypothesis:

H_6 : *Environmental concern has a significant positive effect on purchase intention*

2.7 Relationship between Purchase Intention and life satisfaction

Life satisfaction is often used synonymously with subjective well-being, quality of life or happiness (Daig et al., 2009). Individuals with higher levels of awareness show greater well-being on various indices including happiness, lower depression and greater positive effects (Drake et al., 2008). Generating attention is an important factor in achieving greater mutual life satisfaction. with a lifestyle that is more sustainable and less materialistic at the same time. (Dhandra, 2019). (De Magistris & Gracia, 2008) in their research concluded that consumers buy organic food products because they think they are better for health. By making purchase intention of organic food, it is hoped that it can increase life satisfaction. So that the hypothesis appears:

H_7 : Purchase intention has a significant positive effect on life satisfaction

3. RESEARCH METHODS/METHODOLOGY

3.1 Research Design

This research used a quantitative approach, namely an explanatory research type that would explain the relationship between the variables formulated in advance. The research instrument used was in the form of questionnaires containing statements distributed to respondents to get their responses. Based on the framework prepared, the variables used as a guideline for discussion in this study are as follows: Determinants of Organic Food Purchase Intention. The data measurement technique used a five-scales

of Likert, ranging from the lowest value, representing strongly disagree, to the highest value, representing strongly agree.

The measurement of the variable organic knowledge, according to Ghazali et. al (2017). Variable environmental concern according to Yadav Rambalak & Pathak Govind Swaroop (2016). Meanwhile, the variable purchase intention was measured through attitude toward organic food and environmental attitude (KChih-Ching Teng, Yu-Mei Wang, (2015). SmartPLS was used for the analysis.

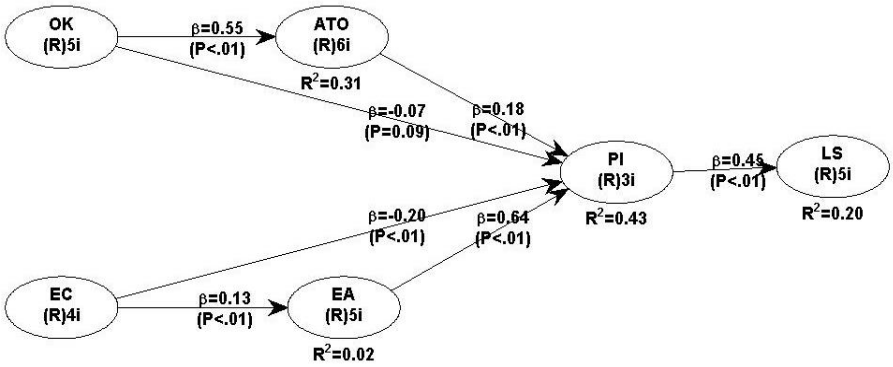
3.2 Population and Sample

A research population is all research subjects in the form of a group of individuals with specific qualities and characteristics that have been determined in advance. The population in this study were young costumer in Surabaya area. The technique used for sampling was non-probability sampling. The sampling technique used purposive sampling based on the following criteria: (1) over 18 -24 years old; (2) ave a minimum education of junior high school. ; (3)Live in Surabaya. The sample size in the Structural Equation Model (SEM), which uses the maximum likelihood estimation (MLE) estimation model, is 100-200 (Hair *et al.* 2017) or as much as 5 - 10 times the number of indicators tested. In this study used 350 respondents.

4. RESULTS AND DISCUSSION

4.1 Outer Model

The outer model is used to test the validity and reliability where the validity test is to determine whether a research instrument is valid or not and the reliability test examines the accuracy and consistency of the measuring instrument. According to Solimun *et al*. (2018) the validity of the questionnaire measures something to be measured according to actual conditions and reliability shows the extent to which the questionnaire is able to measure consistently.



4.2 Convergent Validity

Convergent validity aims to test the correlation between indicators and latent variables that will be assessed based on the loading factor. Convergent validity testing is said to be valid if all indicator values have a loading factor greater than or equal to 0.50 to 0.60 (Solimun *et al*. 2018). The value of the rule of thumb used is ≥ 0.60.

Table 1. Loading Factor Value

Variable	Loading Factor	p-value	Note
OK 1	0.871	<0.001	**Valid**
OK 2	0.873	<0.001	**Valid**
OK 3	0.184	<0.001	**Valid**
OK 4	0.636	<0.001	**Valid**
OK 5	0.483	<0.001	**Valid**
ATO 1	0.460	<0.001	**Valid**
ATO 2	0.810	<0.001	**Valid**
ATO 3	0.584	<0.001	**Valid**
ATO 4	0.745	<0.001	**Valid**

ATO 5	0.624	<0.001	**Valid**
ATO 6	0.990	<0.001	**Valid**
EC 1	0.870	<0.001	**Valid**
EC 2	0.900	<0.001	**Valid**
EC 3	0.762	<0.001	**Valid**
EC 4	0.277	<0.001	**Valid**
EA 1	0.452	<0.001	**Valid**
EA 2	0.605	<0.001	**Valid**
EA 3	0.655	<0.001	**Valid**
EA 4	0.699	<0.001	**Valid**
EA 5	0.691	<0.001	**Valid**
PI 1	0.846	<0.001	**Valid**
PI 2	0.776	<0.001	**Valid**
PI 3	0.841	<0.001	**Valid**
LS 1	0.731	<0.001	**Valid**
LS 2	0.423	<0.001	**Valid**
LS 3	0.831	<0.001	**Valid**
LS 4	0.883	<0.001	**Valid**
LS 5	0.805	<0.001	**Valid**

Source: processed data (2020)

Table 1 shows that all indicators are able to explain their respective latent variables with outer loading values> 0.001. Thus, it can be said to be valid.

4.3 Discriminant Validity

Discriminant validity aims to determine the principle of measuring different constructs that should not be highly correlated. The discriminant validity measurement test is assessed by looking at the cross loading of the measurement with the construct. Each indicator will be said to be able to explain the variable compared to other variables if the cross loading value between indicators and the latent variable is greater than the cross loading value between indicators and other latent variables.

Table 2. AVE

Variable	AVE	Decision
OK	0.439	Acceptable
EC	0.556	Acceptable
ATO	0.284	Acceptable
EA	0.391	Acceptable
PI	0.662	Acceptable
LS	0.566	Acceptable

Source: processed data (2020)

In addition, assessing discriminant validity can be done by the AVE values. Table 2 explains the role of thumbs requirement for discriminant validity is valid.

4.3 Reliability Test

The reliability test uses two approaches, namely Composite Reliability and Cronbach's Alpha, with the requirements that each construct variable has a value of more than 0.7 and 0.6, which concludes that the data has met the element of reliability (Solimun *et al*. 2018).

Table 3. Composite Realibility and Cronbach's Alpha

Variabel	Composite Realibility	Cronbach's Alpha
OK	0.678	0.629
EC	0.617	0.693
ATO	0.670	0.647
EA	0.562	0.611
PI	0.584	0.744
LS	0.682	0.793

Source: Processed data (2020)

Based on Table 3, the composite reliability value is above 0.70, and Cronbach's alpha is more than 0.60, so that the reliability test criteria have been met. Thus, it can be said that the instrument used to measure latent variables in this study is reliable.

4.3 Structural Model Testing

Inner model testing aims to see the relationship between constructs, significance value, and R-square of the research model. In principle, the inner model measurement tests the effect of one latent variable with other latent ones. The purpose of this test is to see the path value in interpreting if the effect is significant or not by looking at the *t*-value of the path value. Besides, it also looks at the percentage of R^2 for endogenous latent variables that are modeled; how much exogenous latent variables influence them.

R-square is used to evaluate the fit of the model in the structural model test between latent variables. According to Chin in Ghozali and Latan (2014), the role of thumbs from the fit of the model is if the R2 value is 0.67, the model is categ orized as "good"; if it is 0.3, the model is categorized as "moderate"; and if it is 0.19, the model is categorized as "weak."

Table 4. R-Square value

Variable	R-Square
OK	0.306
EC	
ATO	
EA	0.016
PI	0.432
LS	0.204

Source: Processed data (2020)

In the output display, the R-Square value is 0.306, representing a moderate model. The value of 0.306 shows that the farmer satisfaction variable can be explained by relationship marketing, corporate image, and service quality by 30.60%, while the rest, 59.04%, is influenced by other constructs that are not examined.

Significance testing in research is carried out in order to accept or reject the proposed hypotheses. A hypothesis will be accepted at the alpha degree level (0.05) if the *t*-statistic value> table (1.96) or the *p*-value <0.05. In addition, it is also to see the results of the path coefficients between latent variables, whether they are positive or negative.

Tabel 5. Path Coefficients

	Path Coeficient	*p*-values	Conclusion
OK → ATO	0.533	<0.001	Supported
EC → EA	0.128	0.007	Supported
ATO → PI	0.177	<0.001	Supported
EA → PI	0.637	<0.001	Supported
PI → LS	0.451	<0.001	Supported

Source: Processed data (2020)

Table 5 shows the results that the p-value of the influence of organic knowledge with attitude toward organic food is 0.533 with a *p*-value <0.001. From these results, it can be concluded that relationship organic knowledge with attitude toward organic food has a positive and significant influence. Besides, it is also shown that the *p*-value of the influence of environmental concern on environmental attitude is 0.128 with a *p*-value 0.007. Thus, it is concluded that the environmental concern variable has a positive and significant influence on environmental attitude. Meanwhile, the relationship between attitude of organic knowledge and purchase intention has a value of 0.177 with a *p*-value <0.001. When viewed from the comparison value on the path coefficient, it was found that the path coefficient of environmental attitude to purchase intention was 0.637. That is, to increase the purchase intention of organic food in Surabaya area, the variable environmental attitude has a more significant influence than the variables organic knowledge, attitude toward organic food and environmrntal concern. Environmental attitude has a significant positive effect on purcahse intention. Variable purcahse intention to variable life satisfaction with path coefitient 0.431. The results of this study indicated that purchase intention has a significant positive effect on purcahse intention.

CONCLUSION

The The aim of this paper is to analyse life satisfaction of consumers' organic decision-making process for young consumer in Surabaya area. The results provide evidence on factors that determine the intention to purchase organic food, extending the existing evidence to young consumers, and to promote the future development of the demand for organic food products in the Surabaya area. Main results show that consumers' attitudes towards organic food, in particular towards the health attribute and towards the environment are the most important factors that explain consumers' decision-making process for organic food products. Moreover, the predominant motives for buying organic food are the attitudes towards organic food products because they have a greater influence on the intention to purchase organic food products than environmental attitudes.

In particular, results indicate that those consumers who highly believe that organic food products are healthier, and of higher quality than conventional ones will have a higher intention to purchase organic food products. Moreover, those consumers who are more concerned on the environmental damage (they highly believe that the environment is being destroyed and this damage will be irreversible) and more involved on environmental practices (through recycling activities and conservation initiatives), will be more willing to buy organic food products.

In order to encourage consumers' willingness to buy organic foods, a useful strategy might be to use some health claims for marketing communication campaigns, specially stressing more the properties of organic food products such as healthiness, and quality than environmental protection. However, such campaigns must be designed with care because there is not scientific evidence that organic food products are healthier or more nutritious than conventional food. However, what it is true is that organic foods are produced without the use of synthetic chemicals, pesticides, fertilizers, or additives and do not contain genetically modified substances, what may induce some consumers to perceive them as healthier than conventional. Then, organic food

products should be marketed pointing out his different production method from the conventional ones.

On the other hand, consumers with higher knowledge on organic food products present more positive attitudes towards the organic food products because they believe to a greater extent that organic foods are healthier, and of higher quality.

Finally, consumers who try to follow a healthy diet and balanced life are likely to have more positive attitudes towards organic food products and towards the environment inducing a more likely intention to purchase organic foods.

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