

ANALYSIS OF ATTITUDE AND INTEREST IN PURCHASING ORGANIC FOOD: STUDY USING THEORY OF PLANED BEHAVIOR

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ABSTRACT

Healthy life awareness reflected in people lifestyle and consumption patterns. Choosing a lifestyle based on an organic diet seems to be a growing trend recently. People prefer organic products than non-organic ones. The purpose of this study was to determine the relationship between health awareness, subjective norms, and control behavior on attitude and to determine the effect of attitude on buying intention. Data were collected in East Java, Indonesia among people who shop for organic food and or vegetables at supermarkets. Structured questionnaire consisting of 15 items was adapted and modified based on previous research and distribute to all respondents. The result analyzed using the Partial Least Square (PLS) approach supported by Smart PLS 3.0 using the maximum likelihood estimation method. It shows that health awareness and subjective norms do not have an effect on attitude, while control behavior has a positive effect on attitude, and attitude also affects buying intention.

Key words: organic product, health awareness, subjective norms, control behavior, attitude, buying intention.

INTRODUCTION

The current food paradigm has changed, not only delicious but also healthy. Public awareness of healthy food patterns is reflected in the increasing number of choices in consuming foods such as fruits and vegetables. Those are produced naturally without the use of chemicals and genetic engineering. People choice of healthy diet means a lot more than just feeding the right type of nutrition into one's body. The aim of this particular study was to further explore the intention to buy of a healthy product choice based upon an organic food.

Given the growing demand for organic food purchases, several studies have identified consumer motivations in buying organic food and in general have shown a positive picture of strong demand. As mentioned by Chinnici et al (2002), there has been an increase in consumer demand for agricultural products produced by environmentally friendly processes, especially those produced organically. Further (Michaelidou and Hasan, 2008) states that conscious consumers motivated to improve to be the health and increase quality of life looked in healthy behavior and health-conscious. Whereas (Phong, 2006) states that consumer health awareness influence their attitude towards organic food. In other studies show the reason consumers in buying organic food is because of consumer belief that organic food is healthier than non-organic (Chinnici et al, 2002). This difference in perception is based on the level of consumer knowledge and awareness, shopping habits or patterns and factors of the existence or existence of organic food in the community.

THEORY OF PLANNED BEHAVIOR

Theory of planned behavior (TPB) is a further development of the theory of Reasoned Action (TRA). It is a framework of thinking that aims to explain the determinants of certain behaviors. According to Ajzen (1991), a central factor of individual behavior is influenced by individual intentions towards certain behaviors. The intention to behave is influenced by three components, namely attitude, subjective norm, and perception behavioral control. All of factors in Theory Planned Behavior have a significant positive influence on intention to buy. It has a significant positive influence on actual behavior (Marija et al, 2018).

A person is able to have various kinds of beliefs about a behavior, but when faced with certain events, only a few of these beliefs will arise to influence behavior. These few beliefs are prominent in influencing individual behavior (Ajzen, 1991). These prominent beliefs can be divided into behavioral beliefs, namely individual belief that will affect attitudes toward behavior. The second is normative belief, which expectations of others to become his references such as family and friends, as well as motivation to achieve these expectations. The third is control belief, which is an individual's belief about the existence of things that support or hinder his behavior and his perception of how strongly it influences his behavior. In Theory of Planned Behavior, attitudes, subjective norms and perception of control are determined through key beliefs. This theory is based on the assumption that humans are rational creatures and use information that is possible for them systematically (Achmat, 2010). People think of the implications of their actions before they decide to do it or not.

Attitude

Sumarwan (2003) states that attitude is an expression of consumers' feelings about an object whether it is liked or not, and attitude can also illustrate consumer confidence in the attributes and benefits of the object. Attitude is an expression of one's feelings that reflects his likes or dislikes towards an object. A person's attitude is the result of a psychological process, therefore attitudes cannot be observed directly, but must be inferred from what is said or done (Suprapti, 2010)

Chatzisarantis et al (2005) states that attitude is the most important antecedent or as a predictor of intentions for physical activity and behavior. Consumer attitude is the most important factor right influence consumer decisions. The concept of attitude is related to the concepts of trust and behavior (Sumarwan, 2004). Furthermore Arunkumar (2013) states that there is a strong and significant relationship between attitude and interest in objects. Attitude is also called the most specific and indispensable concept in contemporary social psychology. Attitude is also one of the most important concepts used by marketing to understand consumers (Setiadi, 2013).

Allport (2010) suggests that attitude is a predisposition that is learned to respond to an object or group of objects in a way that is pleasant or not consistently applied. The consumer's attitude toward an object is in the form of a tendency or tendency that he likes to evaluate the object in a way that is pleasant or not consistent, that is his evaluation of the object as a whole from the worst to the best.

Subjective Norm

Subjective norms are individual beliefs about the influence expectations of people around them. To understand one's intention, it is also necessary to measure subjective norms that affect his intention to act. Subjective norms of adaptation measure assessing consumers' feelings, which is relevant to their role models (such as family, friends or office relatives) who will approve or not certain actions taken (Suprati, 2010).

Subjective norms are assumed as a function of beliefs that specifically someone agrees or not to display a behavior (Achmat, 2010). According to Ajzen (2001), subjective norms are individual beliefs about norms, those around him and individual motivation to follow these norms. Marselius (2002) also explained that subjective norms are social pressures that are perceived to do or not do a behavior. Subjective norm, attitude towards organic food have indirect effects on consumer intention to purchase organic food (Jasmina et al, 2017)

Perceived Behavior Control (Perception of Behavior Control)

Behavioral control perception describes a person's sense of self-efficacy in performing a behavior. According to Teo and Lee (2010), perceived behavioral control refers to perceptions of ease or difficulty in carrying out a behavior and a number of one's control over achieving the goals of the behavior. Dharmmesta (1998) states the perception of behavioral control is a condition where people believe that an action is easy or difficult to do, including past experience in addition to the existing obstacles that are considered by that person. Behavioral control problems can only occur within the bounds of certain actions and other actions occur because of the influence of factors in someone's control curve. Control of perceived behavior can affect intentions or directly on the behavior itself.

Perception of behavioral control is a belief about whether or not the factors that facilitates and hinders the individual from performing a behavior. Behavioral control perception is determined by the individual's past experience and also the individual's estimate of how difficult or easy it is to conduct a behavior. In the model of Theory of Planned Behavior, Perceived behavioral control refers to a person's perception of whether or not to implement tough desired action associated with the belief will provided or absence of resources and opportunities necessary to achieve a particular behavior (Ajzen, 2005).

Behavioral control perception shows the degree to which an individual feels being performed is under his control. People tend not to form a strong intention to display a certain behavior if he believes that he does not have the source or opportunity to do so even though he has a positive attitude and he believes that other people who are important to him will approve it.

Buying Intention

Buying interest is part of the behavioral component in the consuming attitude. According to Kinnear and Taylor, buying interest is part of the consumer behavior component in every consumption, the tendency of respondents to act before a buying decision is actually made. There is a difference between actual buying and buying interest. If the actual purchase is a purchase that really made by the consumer, then the buying interest is the intention to make a purchase in the future will come.

Consumer purchasing behavior is influenced by a lot of stimuli from outside himself; these stimuli can be in the form of marketing activity or the surrounding environment. After obtaining a stimulus, it will be processed accordance with his own characteristics, after that a purchase decision will be taken. Therefore the process of being attracted to a product or service will be experienced by every consumer before a purchasing decision is made.

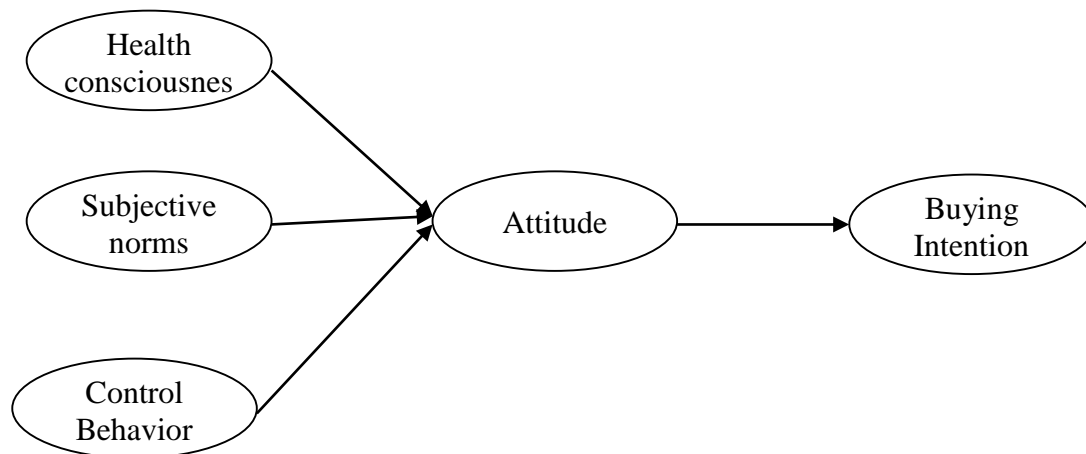
Organic Food

In the history of human life every food that is created through an agricultural process can be called organic. But in the 20th century began to be known synthetic substances used in producing food. This type of production is called conventional food production. While organic production, all does not involve synthetic for example non-organic pesticides, non-organic insecticides and others. Ridlo (2010) states that organic food is basically all types of food derived from living organisms (animals or plants), which use limitedly pesticides and artificial fertilizers. Organic food is created according to all predetermined production standards.

According to McKeith (2009) organic food is food that is free of chemicals. Meanwhile, Astawan (2009) said that organic food is all food products that are produced with as little as possible or free from chemical elements in the form of fertilizers, pesticides, hormones and medicines. Organic food only uses local seeds, and only uses fertilizers derived from nature in the form of animal dung and stoves. Organic food must also meet specified international requirements, for example do not contain GMO seeds (genetically modified organisms) and do not utilize radiation technology to preserve the product. Thus, all processes are carried out naturally (minimum use of external inputs), starting from the cultivation aspect to the way it is processed (from the farm to the table). Health concern has a direct and positive effect on the purchasing behavior of organic products (Bahri-Ammaru et al, 2015).

Attributes of Organic Food

Organic food attributes are difficult to identify by eyes, mostly consumers buy organic products due to the perception of organic food products. This kind of food has unique attributes compared to other conventional products (Vindigni et al, 2002). Based on research Magnusson et al (2002) learn that the most important criteria in food are taste, health, endurance, and quality in the product. A survey conducted at the European Community, Wandel & Bugge's (1997) shows the taste, freshness, appearance and nutritional value is very important in choosing vegetables and fruits. Verbeke (2001) demonstrated that the five most important attributes for fresh meat are freshness, quality, taste, health and hormone-free. Furthermore, Schifferstein and Oude-Ophuis (1997) argue food quality, chemical content, impact on the environment and better taste quality are the most important factors influencing the demand for organic food. While Wolf (2002), said the attributes of organic food that consumers really want are fresh, high quality, affordable prices, healthy, highly nutritious and free of pesticides.



RESEARCH METHODOLOGY

This section contains data collection and sampling procedures. It describes construct measurements and a description of data analysis techniques.

Sample and procedures

The sample consisted of people from two cities (Malang and Surabaya) in the province of East Java who shop for organic food and or vegetables at supermarkets specializing in organic food and vegetables. The rationale for selecting people who shop for organic food and / or vegetables at supermarkets for organic foods and vegetables is based on the belief that respondents who shop at supermarkets specializing in organic food and vegetables will be very aware and familiar with the concept of organic food. Respondents came from various demographics in terms of age, gender, income, and education. The questionnaire was distributed to respondents using simple random sampling techniques. A total of 258 usable questionnaires were obtained during the six-week data collection period in October-November 2019.

Measurement

To measure health awareness, subjective norms, control behavior, attitudes and purchase intentions, a structured questionnaire consisting of 15 items was adapted and modified based on previous research (Chen, 2009; Al-Swidi et al., 2014; Lockie et al., 2004). A five-point Likert scale is used to measure all items ranging from "Total Disagreement (1)" to "Total Agreement (5)."

Statistical analysis techniques

The hypothesized model of this study was tested using the Partial Least Square (PLS) approach supported by SmartPLS 3.0 using the maximum likelihood estimation method. Measurement models are evaluated before examining structural models. Confirmatory factor analysis (CFA) was carried out to establish construct validity at the measurement model stage. After verifying the construct validity, the structural model is examined to test the hypothesis and the corresponding model.

RESULTS

This section describes the results of data processing, which informed the indication of hypothesis that has been formulated could be accepted or not

Analysis of Characteristics of Respondents

The results of the analysis of the characteristics of respondents can be shown in the following table

Characteristics of Respondents		
Characteristics of Respondents	amount	Percentage
Gender		
Boy	97	38%
Girl	161	62%
Age of Respondents		
18-20 years	15	6%
21-30 years	46	18%
31-40 years old	54	21%
41-50 years old	70	27%
> 50 years old	73	28%
Work		
Student / Student	19	7%
Civil servants	27	10%
Private employees	71	28%
Health workers	33	13%
Lecturer / Teacher	36	14%
Entrepreneur	40	16%
Others	32	12%

Based on the above table it can be explained that based on the sex of the largest respondents in this study were women by 62%, while based on the age of respondents dominated by age between 31 years to more than 50 years, the work of respondents in this study was dominated by Private Employees and Entrepreneurs.

Testing the Outer Model

This research model will be analyzed using the Partial Least Square (PLS) method and assisted with Smart PLS 3.0 software. PLS is an alternative method of Structural Equation Modeling (SEM) that can be done to overcome problems in the relationship between very complex variables even with small data sample sizes (30-100 samples) and has non-parametric assumptions, meaning that the data does not refer to one particular distribution (Yamin and Kurniawan, 2009).

Convergent Validity

Convergent Validity based on the loading factor value of reliability item. Loading factor is a number that shows the correlation between the score of a question item with the indicator score of a variable that measures that variable. A loading factor value greater than 0.7 is said to be valid. However, according to Hair et al. (1998) for the initial inspection of the loading factor matrix is approximately 0.3 considered to have met the minimum level, and for loading factors of approximately 0.4 is considered better, and for loading factors greater than 0.5 are generally considered significant. In this study the loading factor limit used was 0.7. After processing the data using Smart PLS 3.0 the results of loading factors can be shown as in the following table:

Loading Factor Value Table

Variable	Indicator	Outer Loading
Health Awareness	KK1	0.711
	KK2	0.849
	KK3	0.899
Subjective Norms	SN1	.952
	SN2	0.869
	SN3	.778
Behavior Control	CB1	.888
	CB2	0.921
	CB3	0.793
Attitude	ATT1	.891
	ATT2	0.914
	ATT3	.908
Buying Intention	BI1	0.899
	BI2	.907
	BI3	0.839

From the results of data processing with Smart PLS shown in the table above, that the majority of the indicators in each variable in this study have a loading factor value greater than 0.70 and are said to be valid.

Discriminant Validity

Discriminant Validity based on the value of cross loading variable measurements. The cross loading value shows the magnitude of the correlation between each variable with its indicators and indicators of other block variables. A measurement model has good discriminant validity if the correlation between variables and indicators is higher than the correlation with indicators of other block variables. After processing the data using Smart PLS 3.0 the results of cross loading can be shown in the following table:

Cross Loading Results Table

	Attitude	Buying Intention	Behavior	Awareness	Subjective Norms
ATT1	.891	.276	0.285	.201	0.199
ATT2	0.914	0.252	.228	.192	0.212
ATT3	.908	0.275	.201	.178	.193
BI1	.292	0.899	0.504	.348	0.322
BI2	.282	.907	0.512	.382	.279
BI3	.192	0.839	0.529	.359	.279
CB1	0.231	0.526	.888	.346	.354
CB2	.272	.471	0.921	.344	.444
CB3	.171	0.541	0.793	0.288	0.325
KK1	.133	.391	.369	0.711	0.315
KK2	.131	0.288	0.305	0.849	.286
KK3	.228	0.345	0.288	0.899	.365
SN1	.273	0.325	0.399	.400	.952
SN2	.101	0.299	.393	.341	0.869
SN3	0.089	.226	0.375	0.239	.778

From the results of cross loading in the table above shows that the correlation value of the variable with the indicator is greater than the value of the correlation with other variables. Thus, all latent variables have good discriminant validity, where the indicators on the indicator block are better than the indicators on other blocks.

The next evaluation, namely by comparing the AVE root value with the correlation between variables. The recommended result is the root value of AVE must be higher than the correlation between variables (Yamin and Kurniawan, 2011). The model has better discriminant validity if the AVE square root for each variable is greater than the correlation between the two variables in the model. A good AVE value is required to have a value greater than 0.50. In this study, the value of AVE and AVE square root for each variable can be shown in the table below.

Table Value of AVE and Square Root AVE

Variable	AVE	Square Roots AVE
Health Awareness	.678	0.823
Subjective Norms	0.755	0.869
Behavior Control	0.755	0.869
Attitude	0.818	.904
Buying Intention	.778	0.882

Based on above table all variables show AVE values greater than 0.50, with the smallest value of 0.678 for the Health Awareness variable and the largest 0.818 for the Attitude variable. This value meets the requirements in accordance with the specified AVE minimum threshold of 0.50. After knowing the square root value of AVE for each variable, the next step is comparing the square root AVE with the correlation between variables in the model. In this study the results of the correlation between variables with AVE square root values can be shown in below table:

Table Correlation value between variables with the value of the square root AVE

	Attitude	Buying Intention	Control Behavior	Awareness Health	Norm Subjective
Attitude	.904				
Buying Intention	.296	0.882			
Behavior Control	0.265	0.579	0.869		
Health Awareness	0.211	0.410	.377	0.824	
Subjective Norms	.223	.333	0.437	.396	0.869

The table above shows that the AVE square value for each variable is greater than the correlation value so that the variables in this research model can still be said to have good discriminant validity.

Composite Reliability

In addition to the outer model measured by assessing convergent validity and discriminant validity can also be done by looking at the reliability of the variable or latent variable measured by the value of composite reliability. The variable is declared reliable if the composite reliability has a value > 0.7, then the variable is declared reliable. The results of Smart PLS output for composite reliability values can be shown in the following table:

Composite Reliability Value Table	Composite Reliability
Attitude	0.931
Buying Intention	0.913
Behavior Control	.902
Health Awareness	0.862
Subjective Norms	.902

From the results of Smart PLS output in above table shows the composite reliability value for all variables is above the value of 0.70. With the resulting value, all variables have good reliability in accordance with the required drinking value limit.

Inner Model Testing (Structural Model)

After testing the outer model that has fulfilled, the next is testing the inner model (structural model). The inner model can be evaluated by looking at the r-square (indicator reliability) for the dependent construct and the t-statistic value from the path coefficient test. The higher the r-square value means the better the prediction model from the proposed research model. Path coefficients indicate the level of significance in hypothesis testing.

Variation Analysis (R²) or Test of Determination

Analysis of variant (R²) or determination test is to determine the influence of the independent variable on the dependent variable, the value of the coefficient of determination can be shown in the table below:

Table R-square value

Variable	R Square
Attitude	0.093
Buying Intention	0.088

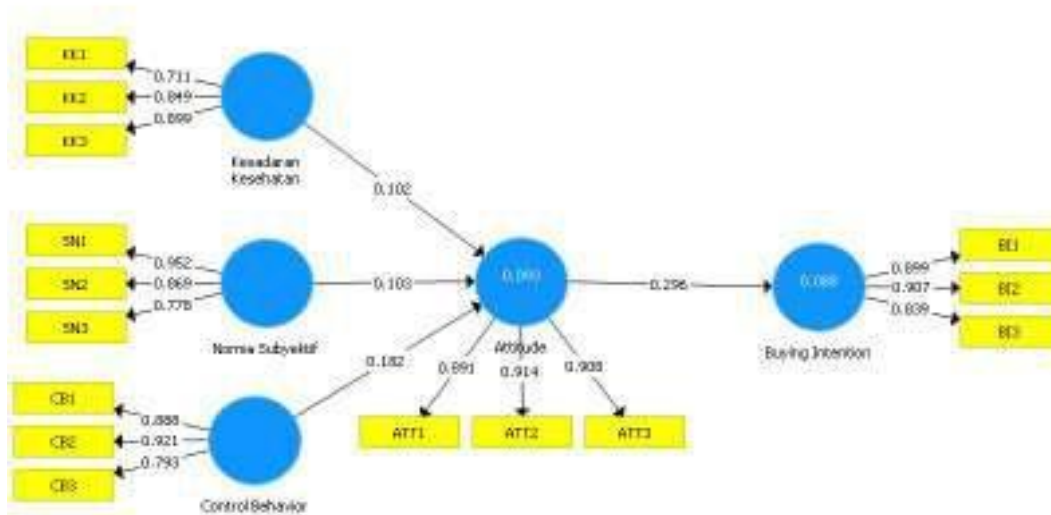
Based on the r-square value in this table shows that health awareness, subjective norms and control behavior are able to explain the variability of attitude variables of 9.3%, and the remaining 90.7% are explained by other variables beyond those examined in

this study. While attitude is able to explain the variability of buying intention variables of 8.8%, and the remaining 91.2% is explained by other variables beyond those examined in this study.

Hypothesis test

Hypothesis testing is based on the results of the Inner Model test (structural model) which includes r-square output, parameter coefficients and t-statistics. To see whether a hypothesis can be accepted or rejected including by considering the significance of the values between the constructs, t-statistics, and p-values. Testing the hypothesis of this study was carried out with the help of Smart PLS (Partial Least Square) 3.0 software. These values can be seen from the results of bootstrapping. The rules of thumb used in this study are t-statistics > 1.96 with a significance level of p-value 0.05 (5%) and a positive beta coefficient. The value of testing this research hypothesis can be shown in the previous table and for the results of this research model can be described as shown in the following figure:

Figure Drawing Results Mode



Path Coefficient Results Table

Iyphotesis	Original Sample (O)	Sample Mean (M)	Standard	T Statistics (O / STDEV)	P Values
			Deviation (STDEV)		
A -> BI	.296	0.301	0.075	3,956	0,000
CB -> A	.182	.179	0.087	2,093	0.037
KK -> A	.102	0.099	0.063	1,624	.105
NS -> A	.103	.116	0.084	1,233	0.218

The first hypothesis tests whether health awareness (KK) positively influences Attitude (A). The test results show that there is no significant effect (P Values > 0.05), so the first hypothesis is rejected. This proves that health awareness has not been proven to have a positive influence on attitude. The second hypothesis tests whether subjective norms (NS) positively affect Attitude (A). The test results show that there is no significant effect (P Values > 0.05), so the second hypothesis is rejected. This proves that subjective norms are not proven to have a positive influence on attitude. The third hypothesis tests whether control behavior (CB) positively influences Attitude (A). The test results show that there is a significant influence (P Values < 0.05), so the third hypothesis is accepted. This proves that control behavior has a positive influence on attitude. The fourth hypothesis tests whether attitude (A) positively influences buying intention (BI). The test results show that there is a significant effect (P Values < 0.05), so the fourth hypothesis is accepted. This proves that attitude has a positive influence on buying intention. A summary of the results of hypothesis testing can be seen in below table:

Summary Table of Hypothesis Testing Results

Hypothesis		Results	Information
H1	Health Awareness influences positive and significant towards Attitude	There is no influence that significant	Rejected
H2	Subjective Norms have a positive effect and significant to Attitude	There is no influence that significant	Rejected
H3	Control Behavior has a positive effect and significant to Attitude	Koef.Beta = 0.182 T-Statistics = 2,093 P-value = 0.037	Be accepted
H4	Attitude has a positive effect and significant on Buying Intention	Koef.Beta = 0.296 T-Statistics = 3,956 P-value = 0,000	Be accepted

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