DETERMINANT FACTORS OF PURCHASE INTENTION ON GREEN PRODUCT

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Abstract: This research aimed to examine a model which presents effects of man-nature orientation, of healthy consumption lifestyle, of attitude toward a green product, of subjective norm and of purchase behavioural control toward purchase intention of green product. Data collection method of this research used questionnaire, which was arranged through an exploration study based on planned behaviour theory. The sample of this research was housewives as last consumers. In addition, this research was conducted in Yogyakarta, Indonesia. The result showed that man-nature orientation and healthy consumption lifestyle are a predictor for the purchase intention of green product. Man-nature orientation, healthy consumption lifestyle, subjective norm, attitude toward green product and purchase behavioural control give positive contribution for purchase intention of green product. All of the hypothesis in this research were fully supported.

Keywords: green product, man-nature orientation, healthy consumption lifestyle, purchase intention

The environmental problem in Indonesia shows a tendency of occurrence of environmental quality degradation (Junaedi, 2006). A revolution of environment-friendly products happens because it is proved that 30% until 40% of environmental degradation is caused by household consumption activity (Chan, 2001). An understanding of an environment of all societies in a consumer context needs to be improved in order to solve those problems. That cause consumers will be more aware of the importance of green product and be willing to pay environment-friendly product, such as organic food, with a better price. (Junaedi, 2007; Vlosky, et al., 1999; Laroche, et al., 2001).

A research conducted by Junaedi (2007) and Sihombing (2007) indicated the fact that purchase behavior of green product as environment-friendly product is still low. Therefore, the factors which contribute to explain purchase behavior of the environment-friendly product, especially green product, still need to be further explored. The understanding of factors which contribute to explain purchase behavior of green product is expected to be able to reduce environmental degradation through consumption aspect, or in economics law usually known as demand aspect. High demand increase of green product will trigger the growth of green product or from economics aspects called as an offering.

Some studies on consumer behavior try to identify factors whose contribution is essential to consumer behavior of green product (Aertsens, et
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An antecedent research on green product purchase that was ever conducted in Indonesia, show different perspectives. Junaedi (2007) in his research found that purchase intention of the green product is determined by value orientation, principally collectivist. Sihombing (2007) tested orientation relationship of human natural value, ecological effect, purchase intention, and purchase of the green actual product through hierarchy way. That research has not been yet conducted comprehensively in conformity with planned behavior model that considers the role of lifestyle, of subjective norm, and of behavior control.

The general objective of this research is to test model of green product purchase intention as well as factors that affect it. Specifically, the objective of this research is to test both stimulant and partial effect from predictor variable analyzed toward purchase intention of a green product; those are a variable effect of healthy lifestyle, man-nature orientation, attitude toward a green product, subjective norm, and purchase behavior control concerned with purchase intention of green product.

REVIEW OF RELATED LITERATURE

An ecology problem is rooted from human activity, consumption pattern and human production, so it requires people’s care, and especially society’s care in maintaining environmental quality. Behavior in maintaining ecology quality extremely depends on the level of knowledge, on attitude, and on value had by a consumer, known as mankind (Said, 2003). Based on those arguments, it can be said that knowledge, attitude, and value will easily establish concern, attention, and consumer-friendly behavior to the environment. A concept of a green product has social value because personal choice is affected by personal values and by values admitted by social environment (Fotopolus & Krystallis, 2002). Value and lifestyle are psychographic variables that become company orientation in identifying consumer segmentation on an environment-friendly product (Fraj & Martinez, 2006). Value and lifestyle are often used to identify the behavior of environment-friendly consumer for marketing purpose. Values are considered as an essential variable in understanding consumer behavior. It is because value presents fundamental purpose looked by a consumer and finally it is used to their segment satisfaction (Divine & Lepisto, 2005). The growth of health product demand, such as green product, is encouraged by the growth of consumer segment directed to a healthy lifestyle (Divine & Lepisto, 2005). Some research show that there is a positive relation between value and lifestyle with purchase behavior of green product (Fraj & Martinez, 2006).

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With reference to the objectives of this study outlined previously, the following discussion will specify the research hypotheses in these research.

Attitude, Subjective Norms, and Behavior of Control

The planned behavior theory mentions that intention is the function of three basic determinants. Attitude toward behavior consists of two main aspects, which are an individual’s belief that either performing or not performing certain behavior will create certain effects or results and the aspect of an individual opinion that has certainly not fit yet to reality. The more an individual belief caused by an object attitude, the more positive individual attitude toward the object, and vice versa (Fisbein & Ajzen, 1975). An evaluation will have an effect on judging attitude given by an individual toward every effect or toward the result obtained by an individual. When either performing or not performing a certain behavior, this evaluation or this judging can be either beneficial or harmful. Some results of research showed attitude concerned with purchase intention of green product such as organic food (Chan, 1999; Chan & Lau, 2000;
Dispoto, 1997; Ling-Yee, 1997; Maloney & Ward, 1973; Gracia & Magistris, 2007; Kalafatis, et al., 1999; Chiou, 1998; Aertens, et al., 2009, Tarkiainen & Sundqvist, 2005; Lodorfos & Dennis, 2008). A consumer who has a positive attitude toward a green product based on belief and on evaluation will consume green product because it is considered beneficial for them.

The more positive of individual belief caused by an object attitude, the more positive of individual attitude toward the object, and vice versa (Fishein & Ajzen, 1975). An evaluation will impact on judging attitude given by an individual to every impact or to every result obtained by an individual. When either performing or not performing a certain behavior, this evaluation or this judging can be either beneficial or harmful. The higher of attitude score toward a green product, the higher of purchase intention of green product.

The result showed that there is a positive relation between attitude toward green product and purchase intention (Chan, 1999; Chan & Lau, 2000; Dispoto, 1997; Ling-yee, 1997; Maloney & Ward, 1973; Wijaya, 2009; Gracia & Magistris, 2007; Kalafatis, et al., 1999; Chiou, 1998; Aertens, et al., 2009). An analysis study shows that there is a relation between attitude toward green product and purchase intention for 0.497. A researcher, in an introductory study, operationally finds evaluation and consumer’s belief toward a green product based on health, on safety, on natural, on freshness, and on a negative respond that is an insect or pest a disturbance.

Normative belief and subjective norm, which are individual’s belief toward the norm, surrounded people, and individual motivation to follow the norm. Subjective norm consists of two main aspects. They are the expectation of reference norm, that is other parties’ point of view considered important by an individual who suggests an individual either to perform or not to perform certain behavior and motivation of individual’s willingness either to do or not to do other parties’ opinion or thought considered important that an individual either must or must not behave. The role of subjective norm toward intention by Fishbein and Ajzen (1975) used a term named motivation to comply in order to show this phenomenon which is whether an individual obeys other people’s point of view that has an effect in his life or not. The higher individual motivation to obey other people’s point of view or role, the higher intention to buy a green product. Some results showed that subjective norm has relationship with purchase behavior toward a green product. (Kalafatis, et al., 1999; Chiou, 1998; Sampson, 2009; Aertens, et al., 2009; Lodorfos & Dennis, 2008). A consumer, in deciding the green product purchase, considers the reference model and the willingness to obey the expectation of reference norm to a consumer the green product. A meta-analysis study shows that there is a relation between subjective norm and purchase intention for 0.325. A researcher, in an introductory study, operationally finds a subjective norm that plays the role of a consumer in an order to buy a green product; they are husband, magazine, friends or colleagues, relative and nutritionist.

Besides attitude and subjective norm, a felt control behavior is a condition where an individual believes that a behavior is either easy or difficult to do. It also covers past experiences besides the existence of obstacles considered by the individual. Behavior control very considers some realistic obstacles that possibly exist (Dharmmesta, 1998). Behavior control directly plays a role in attitude. Control belief and behavior control are felt. This dimension covers individual’s belief concerned with either capable feeling or incapable feeling in controlling attitude and belief about the availability or the unavailability of factors that either ease or harden an individual to behave. Two factors that determine behavior control are the power of control factors, which are an individual belief about the availability of factors that affects him to actualize behavior and the effect power of factors, which are the effect power of factors that determine whether behaving is easy or difficult to do. Some results showed that purchase behavioral control has a relationship with purchase behavior of green product (Kalafatis, et al., 1999; Chiou, 1998; Aertens, et al., 2009; Tarkiainen & Sundqvist, 2005; Lodorfos & Dennis, 2008). A meta-analysis study shows that there is a relation between behavior control and purchase intention for 0.512. A researcher, in an introductory study, operationally finds purchase behavior control that is felt by a consumer to buy a green product, namely a seller’s
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willingness (an easiness to obtain green product), product price, consumer financial aspect, and information on originality (validity) of a product. In order to perform purchase behavior of the green product, a consumer considers the factors that either ease or harden him to buy a green product. Therefore, for the present research hypothesis is formulated as follows:

H1 : Attitude toward green product has an effect on purchase intention of green product.
H2 : Subjective norm has an effect on purchase intention of green product.
H3 : Purchase behavior control has an effect on purchase intention of green product.

Consumer Value

Value also affects a consumer in behaving. Value is essential in encouraging an individual to see the world (Engel, et al., 2000; Homer & Khale, 1988). Value has a role in forming a consumer’s attitude. A consumer’s attitude, then, affects consumer’s behavior in consumption. This pattern is also called as the value-attitude-behavior hierarchy (Arnould, et al., 2004; Homer & Kahle, 1988). A literal study that compares between international or intercity stated that values in certain society have an effect on purchase behavior that considers the effect on the social environment and an individual (Chan & Lau, 2000; Fotopoulos & Krystallis, 2000). The value that is trusted by a person will determine his consumption because the value is a cognitive manifestation toward universal demands of human, such as biology, social interaction, demands of social regulation toward an individual (Schwartz & Bilsky, 1987). An individual attitude is generally based on his trusted value in order to make a relevant decision (Junaedi, 2006).

A consumer who considers environment-friendly product is expected to have orientation values toward human relation with nature, so he understands the effect of product consumption toward the environment. Consumer orientation value can be differentiated in some dimensions. They are man-nature orientation, man-himself orientation, relational orientation, past-time orientation, and activity orientation. Man-nature orientation focuses on human relation with nature. Then, hu-mans, basically, direct to a harmonic life with their environment (Chan & Lau, 2000). Value that orientates to man-nature has direct effect on attitude toward green product and also has indirect effect on purchase intention of green product. The hierarchy effect from value, attitude, and behavior can theoretically and empirically be found in discussing consumers and environment problem. Some studies tested the effect of value toward ecological attitude and behavior (see Fransson & Garling, 1999; Fulton, et al., 1996; Garling, et al., 2003; Guagnano & Kalof, 1999; Stern et al, 1995 in Milfont, et al., 2009). Green product such as organic food is element system of individual’s belief (Dembkowski & Lloyd, 1998). Specifically, Arnould, et al., (2004) and Homer and Kahle (1988) explained the relationship between value and consumer behavior through the value-attitude-behavior hierarchy. This concept is one of important factors in explaining consumer behavior. The value is relative stable compared to other factors which affect consumer behavior. Man-nature orientation consists of values which direct to human relation with nature, so a consumer tries to look for or to obtain information concerned with environmental problem. Man-nature orientation has an effect on consumer attitude (Chan & Lau, 2000; Chan, 2001; Wijaya, 2009). Therefore, a consumer who has value of man-nature orientation will be able to have attitude that supports green product consumption. A meta-analysis study shows that there is a relation to consumer value toward attitude of green product. Its amount is 0.324. Therefore, the hypothesis is formulated as follows:

H4 : Man-nature orientation has an effect on attitude toward the green product.

Consumer Lifestyle

Besides value, a healthy lifestyle also affects consumer attitude toward the green product. Bloch (1984) defined healthy consumption lifestyle as prevention orientation of health problem and maximized an individual prosperity through consumption pattern. Healthy consumption lifestyle can be defined as the definition of consumption activity that is expressed in activity, in interest, and in an opinion that orientates to health for life prosperity. The result of research done by Chen (2009) supported the effect of healthy lifestyle toward attitude on a green product.
Being seen from lifestyle category, a consumer who has an orientation toward health has fulfilled lifestyle that pays special attention to health. Plumer (1974) said that lifestyle segmentation measures human activities in a pattern of an individual who spends his time, of an individual’s interest, of an individual’s point of view toward himself and other people and of basic characteristics, such as life cycle, income, education and where people live. In predicting consumer behavior, experts argued that an individual lifestyle will determine an attitude of individual consumption (Engel, et al., 2000). Fraj & Martinez (2006), in their research, asserted that lifestyle affects a consumer’s behaving intention of the environment-friendly product. It is supported by the result was done by Magistris and Gracia (2008) that stated that healthy consumption lifestyle has a positive relation to a consumer’s attitude on the green product.

A consumer who has healthy lifestyle tends to do some efforts that are good for his body health, such as doing sports, consuming a natural product, and having a balanced life (Gil, et al., 2000) so he is able to have a positive attitude toward the green product. Besides, a consumer who has healthy lifestyle considers all activities that support health more. A consumer has a thought that every activity done by him impossibly can support their health if the activity is not adjusted with healthy consumption pattern (Chen, 2009). Thus, a green product is an object of a healthy lifestyle. Healthy consumption lifestyle forms an individual mindset to accept activity form, interest, and opinion that supports health; they are having balance of consumption pattern, avoiding synthetic product, being interested in product health issue, considering relation of consumption and health, and managing healthy consumption pattern (Baron & Kenny, 1986; Fraj & Martinez, 2006; Gil, et al., 2000; Magistris & Gracia, 2008). The higher a consumer’s tendency to do healthy consumption lifestyle, the better a consumer’s attitude toward the green product. Therefore, the hypothesis is formulated as follows:

**H5 :** Healthy consumption lifestyle has an effect on attitude toward the green product.

### RESEARCH METHOD

#### Data collection and sample of respondents

Population in this research was consumers of a green product such as an organic product in Yogyakarta. In this research, Sample technique used non-probability technique whose methodology was purposive sampling. The used assumption was purposive sampling which were; having certain characteristics or criteria, which were consumers, especially mothers who had a child, and making a decision on green product consumption, processing product or cooking to family daily consumption, and living in Yogyakarta. The choice consideration of the sample was based on the result of research done by Davies, et al. (1995) and Fotopoulos & Krystallis (2000) whose result showed that consumers who often buy green products are women who have child and have high education because they consider the quality of a product more rather than the price. Junaedi (2006), in his research, identified that characteristics of green consumers as a decision maker of purchase family food are women (82.1%) whose average age is 34.88 years old and who have a child. There were 300 questionnaires sent to respondents. The final useable sample consisted of 202 respondents (67.3% effective response rate).

#### Research Program

This research was begun through field empirical observation, which was exploration study, and also through secondary data concerned with the environment. Besides, the point that referred to the basic theory of planned behavior used an introductory survey through open interview whose respondents were women that had already had a child. Open from questions in this research covered the advantage and disadvantage from the green purchase for family consumption, from everyone who took part in taking a choice in purchase green product for family consumption and who became a reference in purchase green product, from factors that caused a consumer either to be able or not to be able to buy green product and from a consumer’s point of view concerned with environment and nature.
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The result of the open interview identified that a consumer’s attitude toward green products based on the benefit of a green product was health, safety, and natural, whereas the disadvantage, resulting from consumer perception was an insect or pest disturbance on food. The subjective norm that determined a choice in purchase green product were husbands, magazine, friends or colleagues, relatives. Then, those who were considered as a reference were nutritionists. The possible behavior controls to buy green products were seller’s willingness (an easiness to obtain product), price, a consumer’s aspect, and information on originality (validity) of green products. Respondents’ point of view toward relation between a consumer and his environment or nature was needed to understand nature, to treat nature appropriately and very well, to maintain the harmony with nature, with parts of nature and to adapt with nature.

Instrument Testing and Data Analysis Method

Validity testing is defined as an ability to correctly express something that wants to be expressed. The ability derives from construct indicator to measure a concept accurately (Hair, et al., 2006). The tested validity is factor validity through convergent validity. The regression quality value shows that critical ratio, which is bigger than twice of standard error, means all points in the research are valid toward every variable in the research. The reliability testing, using Cronbach Alpha method helped by SPSS program, was done to the collected data. Each factor in this research is reliable because it has Alpha that is bigger than 0.6. According to Nunnaly (1981), the suggested coefficient reliability value was 0.6 at the minimum. Data analysis in the research used the analysis of structural equality model (SEM) and was helped by the statistical program named AMOS.

STATISTICAL ANALYSIS AND DISCUSSION

Model Compatibility Testing

The result of model compatibility testing using chi-square, CMIN/DF, GFI, AGFI, RMSEA, TLI, and CFI shows that the model that is thoroughly planned is fit. It is because after the process of testing its compatibility on the score of GFI, AGFI, TLI, and CFI and after the process of comparing it with the score on structural equality model, the result is good. The scoring criteria of the score of p-value, of CMIN/DF, and of RMSEA is good compared with the cut-off value helped by chi-square. As a whole, the Chi-square whose probability is 0.073 > 0.05 shows the effect of man-nature orientation, of healthy consumption lifestyle, of attitude toward the green product of subjective norm, of purchase behavior control toward purchase intention of a green product that is fit to empirical data.

Model Causality Testing

The result of model causality test in this research is completely described below:
The result of regression quality between a latent variable which is often called as the estimation of loading factors or lambda value can be used to analyse the causality testing of a variable. Further explanation on the analysis of the evaluation on regression quality can be described and explained that the variable of attitude toward the green product (ATB) significantly affects purchase intention of green product (IB) whose significance level is 0.000, which is smaller than the probability value; \( \leq 0.05 \). Thus, hypothesis 1 is accepted. The variable of subjective norm (SN) significantly affects purchase intention of green product (IB) whose significance level is 0.000, which is smaller than the probability value; \( \leq 0.05 \). Thus, hypothesis 2 is accepted. The variable of purchase behavior control (PB) significantly affects purchase intention of green product (IB) whose significance level is 0.000, which is smaller than the probability value; \( \leq 0.05 \). Thus, hypothesis 3 is accepted. The variable of man-nature orientation (OAM) significantly affects attitude toward the green product (ATB) whose significance level is 0.000, which is smaller than the probability value; \( \leq 0.05 \). Thus, hypothesis 4 is accepted. The variable of healthy consumption lifestyle (GH) significantly affects attitude toward the green product (ATB) whose significance level is 0.013, which is smaller than the probability value; \( \leq 0.05 \). Thus, hypothesis 5 is accepted.

The amount of each latent variable either of a standardized direct effect, standardized indirect effect, or standardized total effect shows that man-nature orientation has a high effect, which is 0.156, toward purchase intention of a green product that has the bigger effect compared with healthy consumption lifestyle, which is 0.043. The variable that has a direct effect, bigger than other variables, toward purchase intention of a green product is the subjective norm that is 0.491. Then, the variable that has a direct effect, bigger than other variables, toward the attitude of a green product is man-nature orientation that is 0.567. Based on square multiple correlation values, it is admitted that the variable of attitude toward a green product, of subjective norm, and of purchase behavior control has a role for 34.6% toward purchase intention of green product.

CONCLUSION

Conclusions that can be taken from the findings of this research are first, the model that shows the effect of man-nature orientation, of healthy consumption life style, of attitude toward a green product, of subjective norm, and of purchase behavior control toward purchase intention of a green product is fit to empirical data. Second, attitude toward a green product, subjective norm, purchase behavior control, healthy consumption life style and man-nature orientation has significant effect toward purchase intention of green product.

These findings give an implication that purchase behavior of green product will be able to increase consumer care about the environment through friendly-environment consumption pattern that is able to reduce environment degradation and to increase health. It is expected to be able to be improved through elucidation and socialization about a green product. In organic producers’ perspective, an effort is needed to plant value that orientates to man-nature or to maintain the balance of nature in consumption and to do green product segmentation for groups of consumers who have healthy consumption life style. The green product also needs to get an aspect of natural legality and information of a green product, so behavior control of consumers can be controlled. Thus, consumers are not hesitant to buy a green product.

For a strong theoretical foundation, rigorous testing through replications and extensions need to be examined for the future research, for instance, the influence of man-nature orientation and healthy consumption life style on purchase intention of green product with large samples.

REFERENCES


