

ATTITUDE TOWARD GREEN PRODUCT, WILLINGNESS TO PAY AND INTENTION TO PURCHASE

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ABSTRACT

This study proposes a conceptual framework to investigate the antecedents of attitude toward green product and its effect on willingness to pay and intention to purchase green product. To test our conceptual framework, Structural Equation Modelling is employed to analyze the data collected from 200 respondents consist of women who characterized as young adult, educated, having children, having interest to purchase of green product and having income independently. The antecedents we addressed in this research are health consciousness, environmental attitude, and value orientation. The results indicate that health consciousness, environmental attitude, and value orientation have significant and positive effect on attitude toward green product and then attitude toward green product affects the willingness to pay. The willingness to pay then will drive the customer's purchase intention.

Keywords: Green product; Health consciousness; Environmental attitude; Value orientation; Attitude toward green product; Willingness to pay and intention to purchase

1. INTRODUCTION

The issues of green marketing and green products are growing rapidly in the recent years. Environmental conditions, climate change as well as global warming have forced business stakeholders to be wise in making use of the natural resource for their business and creating environmental-friendly product.

Along with the critical condition of global environment, the healthy lifestyle campaign and the movement of environmental-friendly business become much more prominent in the global business. Regulation and legal environment has encouraged the business operation to put more concern on natural resources. These phenomena lead to a situation for the formation of new pattern of consumer group that call themselves green consumers. The positive impact of green consumer movement is not only in the day-to-day consumption patterns, but also become the significant factor in decision making of product manager, government's policies, and green consumers boycott movement for non-environmentally friendly product (Chan, 2000).

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Ryan (2006) defines green product consumers as those who have following characteristics: having strong commitment to green products, critical and concerned about the environment, searching for companies that produce green products, reflecting wise behavior in daily life, always eager to environmental issues. They tend to care for the environment and the fulfillment of their needs is by seeking for products that are environmentally friendly. Laroche, Bergeron, and Barbaro-Forleo (2001) explain that the willingness of consumers to buy green products is influenced by certain characteristics possessed by consumer's demographics, knowledge, values, attitudes, and behaviors.

Previous studies indicate some limitations for different objects and settings. It becomes an opportunity to design an alternative research model that represents the phenomena that occur in the city of Solo, an Indonesian city which has rich of cultural traditions but various and modern products available to the residences. Our study aims to investigate the influence of health consciousness, environmental attitude, and value orientation on attitude toward green products. This study also investigates the influence of attitude toward green products on the willingness to pay green products and the influence of willingness to pay on purchase intention.

2. THEORITICAL BACKGROUND

2.1. A. Health Consciousness

Rozin, Lowery, Imada, and Haidt (1999) suggests consumers will show an interest in issues related to healthy food when they are aware of the risk of poor quality and unguaranteed food safety. Public concern of health maintenance or improvement of health, or health consciousness, is the main reason to buy green products (Schifferstein & Oude Ophuis, 1998). Many consumers believe that organic food are safer and provide greater health benefits (Jolly, Schutz, Johal, & Knauf, 1989). Health awareness is the predictor of consumer attitudes towards organic food. Health consciousness is a construct that can be used to reflect a person's readiness to do something for his or her own health (Schifferstein & Oude Ophuis, 1998).

2.2. Environmental Attitude

Indonesian public awareness of environment issues is still relatively low. This is evidenced by the behavior of people who are still throwing garbage in the river, illegal logging, and the indiscretion use of water, plastic, and paper. Therefore, the natural resources are exhausted faster than the renewal of its natural resources. Olli, Grendstad, and Wollebaek (2001) found a relationship between environmental concern and environmental behavior. Environmental awareness is a variable forming the purchase of green products (Schifferstein & Oude Ophuis, 1998) and environmental attitude is forming a positive effect on the attitude toward green products (Chen, 2009).

2.3. Value Orientation

Value orientation is defined as the tendency of individuals to achieve the desired goal, vary based on the level of importance, and directing principles in people's lives (Laroche et al., 2001). This value makes sense intuitively that directs the behavior of individuals. Values are grouped into

dimensions, namely individualist and collectivist. Individualist will compete with other people to achieve something for the sake of his own status. Collectivism emphasis on cohesiveness among individuals and prioritization of the group over self. Collectivism tend to be more oriented behavior in the interests of the environment. Consumer groups that have collectivist values tend to support environmentally friendly programs (Laroche et al., 2001).

2.4. Attitude toward Green Product

Attitude is a psychological tendency which is expressed by evaluating a particular object with some favorable or unfavorable considerations (Eagly & Chaiken, 1995). Beliefs and evaluations are the elements that make up attitudes (Assael, 1998). A person may hold some beliefs in an object, and subsequent conviction are evaluated together to form attitudes. Previous study suggests that causality flows in the order: values-attitude-behavior (Thøgersen & Ölander, 2002). This means that the values have an impact on attitudes, which in turn affects a person's behavior. The most commonly held beliefs about green products are that these products are healthier and promising protection to a better environment. Awareness of personal hygiene or health consciousness, the attitude of care for the environment or environmental attitude, and perceived quality are believed to form attitudes towards green products.

2.5. Willingness to Pay

Economic value is defined the measurement of the maximum amount a person's willingness to sacrifice for the sake of obtaining goods and services (Hartono & Harahap, 2007). Formally, this concept is called willingness to pay of someone for goods and services produced. Willingness to pay can be used to describe the attitude of willingness to pay more. In this study, willingness to pay is a variable that measures the level of a person's willingness to pay the price difference that exists between non-green products and green products.

2.6. Characteristics of Green Consumers

Marketers use demographic variables to identify target groups for their product category. Demographic descriptions can help marketers in selecting the proper media, advertising, and product development. Consumers who have concerned about the environment are characterized as; adult female, higher education levels, and below average socioeconomic status (McIntyre, Meloche, & Lewis, 1993). Other study finds that men are willing to pay more for air pollution control (Laroche et al., 2001).

Other studies have suggested that high-income consumers who have higher education levels and more involved in efforts to preserve the environment and are more sensitive to environmental issues (Laroche et al., 2001). Consumers with below average level of income and education are also very concerned about the environmental aspects. Although the findings of the influence of demographic characteristics is in a contradiction, most researchers agree that the demographics are less influential than knowledge, values, and attitudes in explaining environmentally friendly behavior (Chan, 2000).

2.7. *Research Hypotheses*

Consumers believe that foods produced organically with concern to environmental are safer and more profitable than conventional product. Health awareness makes them have a positive attitude toward green products (Jolly et al., 1989).

H₁: Health consciousness has a positive effect on the attitude toward green products

Consumer demand for eco-friendly product is currently increasing. The use of environmentally friendly products is a representation of awareness to reduce damage to the environment compare to conventional products (Schifferstein & Oude Ophuis, 1998). Environmental attitude allegedly has positive effect on the attitude toward green products (Chen, 2009).

H₂: Environmental attitude has a positive effect on the attitude toward green products

Expected value orientation has a positive effect on attitudes toward green products. This relationship refers to the study by Laroche et al. (2001) which indicates that the higher the value orientation, the higher the attitudes toward green products.

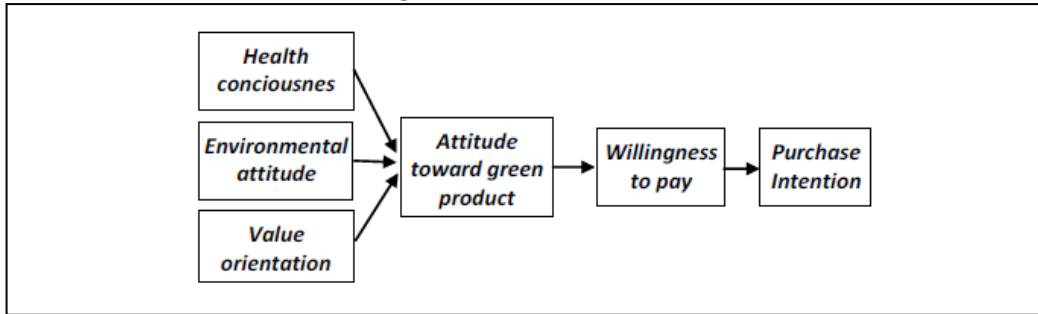
H₃: Value orientation has a positive effect on consumer attitudes toward green products.

Research by Aryal, Chaudhary, Pandit, and Sharma (2009) shows a positive and significant effect of attitude toward organic foods on a willingness to pay. The more positive consumer attitudes towards green products, the higher the willingness to pay higher prices on green products should be.

H₄: Attitude toward green products has a positive effect on willingness to pay

The actual purchase of green products is the dependent variable in this study. This variable indicated by purchasing behavior of environmentally friendly products in everyday life (Chan, 2000). The higher the consumer's willingness to pay, the higher prices on green products, the higher the probability individual's intention to do actual purchase of green products.

H₅: Willingness to pay more for green products has a positive effect on purchase intention of the product.

Figure 1: Research Model

3. METHODOLOGY

We study those who consume green products in the city of Surakarta. Our sample consists of 200 adult women in childbearing age. They should also have children, having independent income, at least having diploma degree, and having interest towards green products, and as residence of Surakarta City. We employ Structural Equation Modeling (SEM) to empirically test our model.

We use different range scale and statements for measuring the variables. Health consciousness is measured by seven items; maintaining health, very concern on health, adjusting the diet to be healthy, more health proportion, understand how to eat healthy, adopting a healthy lifestyle, and strive to maintain health, as this is following the work of Schifferstein and Oude Ophuis (1998). According to Gil, Gracia, and Sánchez (2000), environmental attitude is measured by four items; holds on existing development, more likely to consume recycled products, classify waste before dumping it, do not take part in the preservation of the environment. Value orientation is measured with statement about collectivism, safety, comfort, and individualism with the measurements; (1) collectivism constructs measured by statement about compassion, helping others, and warm relationships with others, (2) safety is measured by a sense of security, (3) comfort measured by the interest and convenience of a comfortable life, and (4) individualism is measured by achievement, self- esteem, self-fulfillment, and self-reliance.

We measure attitude toward organic foods using six items; green product more healthy, green products have superior quality, green products better, green products more attractive, green products don't have harmful effects, and green products are in demand (Gil et al., 2000). Willingness to pay was measured by three item; willingness to pay more for the sake of getting a green product; the willingness to pay a little more expensive to get a green product, willingness to spend more money to get eco-friendly food, and willingness to pay a little more expensive to get food that does not harm the environment (Hartono & Harahap, 2007). Purchase intention is measured using four items; the replacement of the non-green product to green products, the frequency of green product selection, the frequency of purchase of green products, and the consumption frequency of green products (Chan, 2000).

4. RESULT AND DISCUSSION

4.1. Profile of Samples

We collected the response of 200 respondents. The composition is dominated by 34.5% respondent with age group of 40-49 years, 78.5% graduate education, 49.5% worked as a civil servant, and 41.5 % has a monthly income below IDR1,500,000 or about \$150. This shows that the compositions of respondents who have awareness to green products are those that have seen fairly mature adult and highly educated.

4.2. Descriptive Statistics

The descriptive statistics¹ indicate that each item in the questionnaire has a high response. The higher the response means more favorable response. Environmental attitude, health consciousness, and willingness to pay have an average response more than 4. While attitude toward green product, and purchase intention on average have a score more than 3. Only value orientation which has an average value of the response varied from 2 to 5.

Table 1: Respondent Profile

Groups`	N	Pct (%)	Pct Cum (%)
Age			
20-29 year	48	24.0	24.0
30-39 year	49	24.5	48.5
40-49 year	69	34.5	83.0
>50 year	34	17.0	100.0
Level of Education			
High School	23	11.5	11.5
Diploma	16	8.0	19.5
Graduate	157	78.5	98.0
Postgraduate	4	2.0	100.0
Occupation			
Civil Servant	99	49.5	49.5
Private Company staffs	65	32.5	82.0
Entrepreneur	36	18.0	100.0
Salary (Million IDR)			
1.5	83	41.5	41.5
1.5 - 2.5	38	19.0	60.5
2.5 - 3.5	57	28.5	89.0
>3.5	22	11.0	100.0

¹ The tables are not presented here, but available upon request

4.3. *Validity and Reliability and Evaluation of Goodness of Fit*

The items of health consciousness, environmental attitude, attitude toward green product, willingness to pay, and purchase intention, show factor loading more than 0.5 which means that all the items have a good measurement capabilities. In the value orientation variable, the items 1, 8, and 13 show factor loading of less than 0.5 and invalid in measuring the value orientation variables. Therefore they are omitted in subsequent analyses. The reliability test results show that the overall variables have a Cronbach's alpha exceeds 0.8 which mean all variables are reliable.

The evaluation of compliance goodness of fit assumptions and the suitability of the model required by SEM based on some goodness of fit criteria. Some evaluation criteria used are Chi-square, RMSEA, GFI, AGFI, cmin/df, NFI, CFI, NFI, and TLI. The test for goodness of fit produces Chi-Square value of 374.96 and significant, while the other value is still below the expected value of each criterion. However, if one of the criteria is met, then the model is quite feasible for further analysis.

4.4. *The Relationship between Variables*

Estimated values of the relationship between variables in Table 2 show that the value of critical ratio exceeds 2.58 which means the relationship are statistically significant. Our three antecedent variables which are health consciousness, environmental attitude, value oriented positively influence attitude toward green products. Attitude toward green products also impact on willingness to pay. Ultimately, willingness to pay affects purchase intention.

Table 2: The estimated value of relationship between variables

Relationship	Estimated Value	Standard Error	Critical Ratio
EA => ATGP	0,377	0,061	6,208
HC => ATGP	0,399	0,092	4,321
VO => ATGP	0,450	0,106	4,256
ATGP => WTP	0,375	0,067	5,595
WTP => PI	0,499	0,081	6,150

As shown in Table 2, the first hypothesis is supported. Consumers' health awareness has positive effect on attitudes toward green products. This is consistent with the findings of Jolly et al. (1989). Consumers believe that foods produced organically and environmentally are safer and more profitable than conventionally produced health.

The second results show a positive effect of environmental attitude on attitude toward green products. The use of green products is a representation of awareness to reduce damage to the environment, increasing consumer awareness of environmental concerns impact on improving their positive attitudes towards products that are environmentally friendly.

Value orientation has a positive effect on attitudes toward green products. These results are consistent with studies conducted Laroche et al. (2001). The higher the higher the value orientation the higher the attitudes toward green products. In accordance with the results of Aryal

et al. (2009), this study also shows a significant positive influence of the attitude toward organic foods on willingness to pay. The more positive consumer attitude towards green product is, the higher the consumer's willingness to pay a green product.

The last result of the process of consumer attitudes toward green products is indicated by the positive effect of the influence of consumers' willingness to pay on purchase intention. The higher the consumer's willingness to pay higher prices on green products, the higher the probability they do the actual purchase of green products.

5. CONCLUSION

Our findings indicate that health awareness, attitudes towards the environment, and value orientation have positive effects on attitudes toward green products. The higher consumer awareness to their own health, the more positive consumer awareness to the environment, and the higher the value orientation of consumers subsequently the attitude towards environmentally friendly products would be more positive. Positive attitudes towards environmentally friendly products have an impact on consumer willingness to pay the price environmentally friendly products and ultimately the intention to buy green products should also increase. More involvement in green product is necessarily to be taken into account in the future studies.

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