

Green Behavior Model of Individual Differences, the Effect of Environment and Marketing Strategy to Green Purchase Behavior and Green Consumer Satisfaction of LCGC Users in Surabaya

I Gede Arimbawa^a, A. Machiki Mayestino^b, Adhi Muhtadi^{c*}

^a*Economic and Business Faculty, Narotama University, Indonesia*

^b*Computer Science Faculty, Narotama University, Indonesia*

^c*Engineering Faculty, Narotama University, Indonesia*

Abstract

This research is very interesting phenomenon in major cities of Indonesia. Surabaya is the one of the major cities in Indonesia have higher traffic jam intensity. On the other hand the government even issued a policy of tax incentives for products LCGC (*Low Cost Green Car*). This policy makes many people more easily buy products LCGC car and make increasingly congested roads in the city of Surabaya. LCGC is a environmentally cars but the selling prices is more economical. This research studied the influence of the variables of individual differences, environmental influences, marketing strategies towards green purchasing behavior (as an intervening variable) and green consumer satisfaction. The concept of the theory used in this research is the approach consumer behavior published by Engell, Blackwell and Miniard (2007), the concept of green purchasing described by Manieri et.al (1997) and the concept of customer green satisfaction with proposed by Chang and Fong (2010). The type of research is descriptive and verification. The sampling method used non-probabilistic sampling, purposive sampling, and the number of questionnaires as much as 100 respondents. The result of this study shows there is a simultaneous significant influence of the variables of individual differences, environmental influences and marketing strategies of the Green Purchasing Behavior and also to the green consumer satisfaction. But partially, not all of the studied variables affect significantly.

© 2015 The Authors. Published by Narotama University Press.

Peer-review under responsibility of organizing committee of The Narotama International Conference on Civil Engineering 2015 (NICCE-2015).

Keywords: individual differences, environmental influences, marketing strategies, green purchasing behavior and green consumer satisfaction

1. Introduction

The phenomenon of Low Cost Green Car (LCGC) is very interesting topic research. Stakeholders of LCGC cars broadly divided into three: the government, the auto industry and users. The Government adopted a policy of granting tax incentives to LCGC products that can be purchased by the people of Indonesia. However, in major cities in Indonesia congestion level is high, so that the policy will directly increase the level of congestion, especially in Surabaya. Therefore, researchers are interested in the phenomenon of what actually interests of the Indonesian people to buy LCGC. Are the people of Indonesia are already well aware of the importance of using eco-friendly products or influenced by other variables like individual differences, environmental influences, and marketing strategies. From the three variables above, which variables are influencing green purchase behavior and green consumer satisfaction.

This research seeks to follow up the results Laroche, Borgeron and Forleo in 2001 and the results of Walker and Li in 2006. Research conducted Laroche, Borgeron and Forleo generate action that

* Corresponding author. *E-mail address:* Adhi.Muhtadi@narotama.ac.id

the purchase of environmentally friendly products is influenced by demographic variables, environmental knowledge, values, attitudes, and behaviors in environmental care activity. While research Walker and Li (2006) stated that the actions of purchase of products with premium prices is influenced by lifestyle with AIO (activity, interest and opinion) approaches. Based on the introduction above, the problem statement to be studied are as follows:

1. Is there any influence of individual difference variables (X_1), environmental influences (X_2), and marketing strategies (X_3) to green purchasing behavior variable (Y_1) partially, and which variable greatest influence?
2. Is there any influence of individual difference variables (X_1), environmental influences (X_2), marketing strategy (X_3) to green purchasing behavior variable (Y_1) simultaneously?
3. Is there any influence of individual difference variables (X_1), environmental influences (X_2), the marketing strategy (X_3) to green consumer satisfaction variable (Y_2) through an green purchasing behavior as intervening variable (Y_1) partially?
4. Is there any influence of individual difference variables (X_1), environmental influences (X_2), marketing strategy (X_3) to green consumer satisfaction variable (Y_2) through green purchasing behavior variables (Y_1) simultaneously?

2. Review of Literature

2.1 Consumer Behavior

Critical approach in this study is the approach of the consumer side. During this time consumer behavior based on theories that there are internal and external approach consumers. Internal approach through cognitive and affective aspects of consumers. Cognitive aspects of learning is information processing by consumer, consumer perception and consumer knowledge. While affective consumer from the viewpoint of private consumers themselves are composed of attitudes, lifestyle, personal, and personality.

While the external aspects of consumer behavior in the social environment consists of a macro (consumer culture, sub-cultures and demographics, and social class) and micro social environment (family influence, reference groups, and marketing strategy) and the physical environment of consumers. The following is an approach to consumer behavior according to Engel, Blackwell and Miniard (2001).

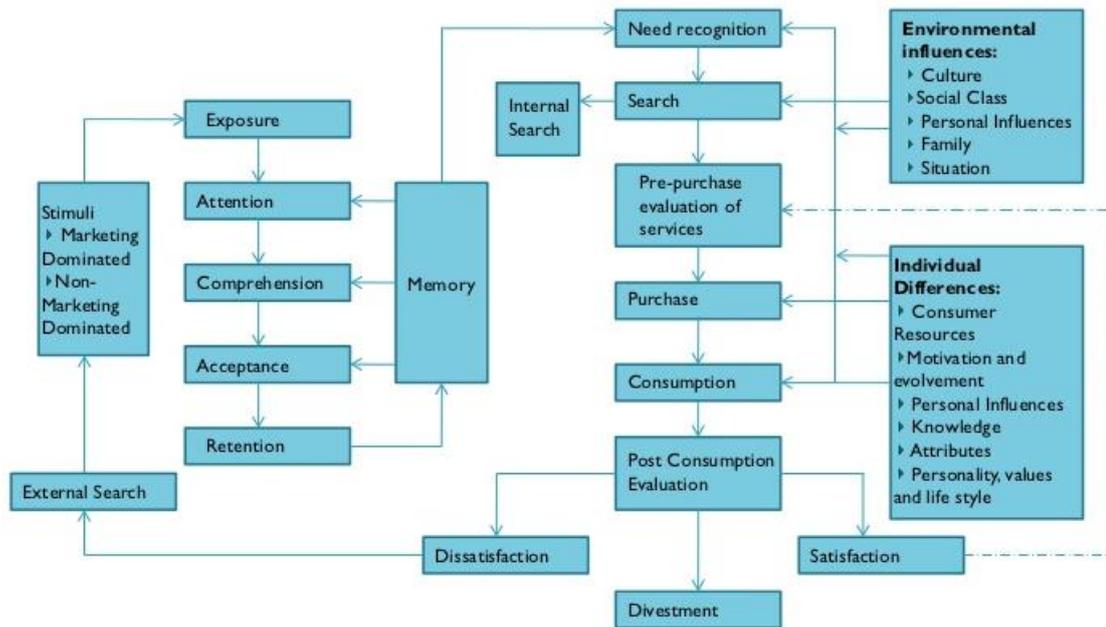


Fig. 1. Consumer Behavior Model by Engel - Blackwell - Miniard (2001)

2.2 Green Consumers Profile

Efforts to identify consumers an environmentally friendly or green consumers was first explored in 1975 (Laroche, Bergeron, and Forleo, 2001). Referring to some previous research and literature review, there are several factors can influence the purchasing behavior environmentally friendly products. Laroche, Bergeron, and Forleo (2001) propose some research variables in predicting the level of consumers' willingness to pay more for environmentally friendly products :

Demographics include age, gender, income, education level, employment status, property ownership, marital status, and family size.

- Environmental knowledge (eco-literacy).
- Consumer values, including individualism, collectivism, security, and fun / enjoyment.
- Attitude towards environmental issues and green products.
- Behavior in environmentally conscious activities.

2.3 Green Purchasing Decison of Environmentally Friendly Products

Green purchasing is purchasing decisions based on environmental principles. Green purchasing is also the practice of applying environmental criteria in the selection of products or services to be purchased. Green purchasing behavior is the behavior of the consumption of products that are beneficial to the environment, which can be recycled or can be conserved, and responsive to ecological problems (Mostafa, 2006).

2.4 Green Consumer Satisfaction

Green Consumer satisfaction is feeling happy customer after consuming products that are environmentally sound with a performance that meet or exceed customer requirements, the requirements of environmental regulations, and expectations of sustainable communities (Chang and Fong, 2010). Indicators of consumer satisfaction: satisfaction towards environmentally friendly products, feeling happy to buy environmentally friendly products, belief in the decision of purchasing environmentally friendly products, was also involved in a program of environmental

awareness and would buy environmentally friendly products other although at a premium price (Chang & Fong, 2010).

2.5 Research Framework

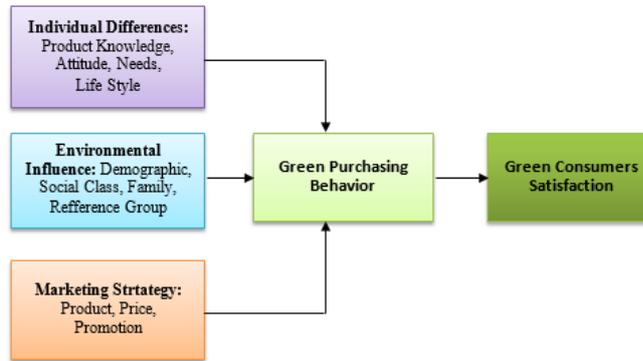


Fig. 2.2 Concept Framework Research

3. Research Method

3.1 Research Approach

Based on the objectives, the type of research is descriptive and verification that aims to get an overview of the research characteristics include: individual differences variable, environmental influences and marketing strategies to green purchase behavior and green consumer satisfaction for low cost green car (LCGC) users.

While research verikatif basically wanted to test the hypothesis that carried out through field data collection, which in this study examined the influence of individual difference variables, environmental influences and marketing strategies to green purchase behavior and green consumer satisfaction low cost green car (LCGC) users.

3.2 Sampling Method and Data Collection

The sampling method used in this research is nonprobabilistic sampling that every element in the population do not have the same probability to be sampled (Sekaran, 2002). Determination of the sampling techniques used in this research is purposive sampling that women or men aged 17 years and over and make LCGC purchase decision. In this research distributed 100 copies of questionnaires to LCGC users in Surabaya.

3.3 Operational Variable Definition

The variables in this reserch consisted of three independent variables (exogenous), which is variable Individual Differences (X_1), Environment Influence (X_2), and Marketing Strategy (X_3) and two dependent variables (endogenous), the Green Purchasing Behavior (Y_1) and Green Consumers Satisfaction (Y_2).

Table 3.1 Research Instruments Design

VARIABLE	INDICATOR
----------	-----------

Individual Differences	1.	Product Knowledge
	2.	Atitude
	3.	Needs
	4.	Life Style

Environmental Influence	1.	Demographic
	2.	Social Class
	3.	Family
	4.	Refference Group

Marketing Strtategy	1.	Product
	2.	Price
	3.	Promotion

<i>Green Purchasing Behavior</i>	1.	Ecofriendly Product
	2.	Product Specification
	3.	Product Quality
	4.	Premium Price Choice

<i>Green Consumers Satisfaction</i> (Chang & Fong, 2010)	1.	Satisfaction about the Product
	2.	Feeling happy to buy products
	3.	Feeling engaged in environmental programs
	4.	Recommending products

3.4 Analysis Techniques

3.4.1 Research Instrument Testing

- Validity Test
- Reliability Test

3.4.2 Test Assumptions Assumption Classical

- Normality Test
- Heterokedasticity Test
- Multicollinearity Test
- Autocorrelation Test

3.4.3 Path Analysis

According to Rutherford (1993), path analysis is a technique for analyzing the causal relationships that occur in multiple regression if the independent variables affect the dependent variable not only directly, but also indirectly.

4. Discussion of Results

1. a. The influence of individual difference variables to Green Purchasing Behavior = $X_1 \rightarrow Y_1 = 0.217$
- b. Environment variables influence to Green Purchasing Behavior = $X_2 \rightarrow Y_1 = -0.053$
- c. marketing strategy influence to Green Purchasing Behavior = $X_3 \rightarrow Y_1 = 0.291$.

The greatest influence on green purchasing behavior is marketing strategy

2. Effect of individual difference variables (X_1), Environmental Influence (X_2) and Marketing Strategy (X_3) to Green Purchasing Behavior (Y_1) is simultaneously. F count $10\ 266 > F$ table at 2.47, with a significance level of $0.000 > 0.05$, meaning that there is a simultaneous significant influence of individual difference variables, environmental influences, and marketing strategies to Green Purchasing Behavior.

3. a. The influence of individual difference variables to Green Consumers Satisfaction through Green Purchasing

$$\text{Behavior} = X_1 \rightarrow Y_1 \rightarrow Y_2 = (0,147 + 0,203) = 0,530$$

- b. Environment influence to the Green Consumers Satisfaction through Green Purchasing Behavior =

$$X_2 \rightarrow Y_1 \rightarrow Y_2 = (0,111 + 0,203) = 0,314$$

- c. influence the marketing strategy to Green Consumers Satisfaction through Green Purchasing

$$\text{Behavior} = X_3 \rightarrow Y_1 \rightarrow Y_2 = (0,396 + 0,203) = 0,599$$

4. There Influence of Individual Differences (X_1), Environmental Influence (X_2), Marketing Strategy (X_3) and Green Purchasing Behavior (Y_1) to variable Green Consumers Satisfaction (Y_2) simultaneously

Based on the results of the data obtained magnitude pengelohan Fcount $8682 > F$ table of 2.47, with a significance level of $0.000 > 0.05$, meaning that there is a simultaneous effect of variables influence of individual, environmental influences, and marketing strategies, Green Purchasing Behavior as Intervening variable to Green Consumers Satisfaction.

5. Conclusions and Recommendations

5.1 Conclusion

- 1) There are influence individual differences (X_1), environmental influences (X_2), and marketing strategies (X_3) to green purchasing behavior (Y_1) partially, and the variables that influence is greatest variable marketing strategy (X_3) which is equal to 0.291
- 2) There is a significant influence of the individual difference (X_1), environmental influences (X_2), the marketing strategy (X_3) to green purchasing behavior (Y_1) simultaneously.

3) There is the influence of individual difference (X_1), environmental influence (X_2), marketing strategy (X_3) to Green Consumers Satisfaction (Y_2) partially and the biggest variable effect is marketing strategies, namely 0599.

4) there is a simultaneous effect of variables influence individual (X_1), environmental influences (X_2), and marketing strategies (X_3) to green consumer satisfaction with green purchasing behavior as intervening variable.

5.2 Suggestions

Further research needs to be done in the future of the relationship as follows:

- The variables of individual differences on green purchasing behavior, this is because the t value of 1.580 and t table amounted to 1,984 with significance level of $0.117 > 0.05$, meaning that there are no partial effect of individual difference variables to green purchasing behavior and not significant.
- Variable influence of environment on green purchasing behavior, this is because the value of 1,199 $t < t$ table 1,984, with a significance level of 0.233 of < 0.05 means that there are no partial effect of variable environmental differences to green purchasing behavior and not significant
- Variable influence of environment on the green customer satisfaction, this is because the t value -0.573 $< t$ table 1,984, with a significance level of 0.568 means that there are no partial effect and insignificant.

6. References

- [1] Blackwell, Miniard, and Engel (2001), Consumer Behavior (9th ed), Harcourt College Publishers
- [2] Chang, N.J.; Fong, C.M. (2010), Green product quality, green corporate image, green customer satisfaction, and green customer loyalty, African Journal of Business Management, 4(13), 2836-2844.
- [3] Laroche, Borgeron and Forleo (2001), Targeting consumers who are willing to pay more for environmentally friendly products, Journal of Consumer Marketing, ISSN: 0736-3761
- [4] Mostafa, M.M. (2006) 'Antecedents of Egyptian Consumers' Green Purchase Intentions' Journal of International Consumer Marketing. 19(2) pp.97-126.
- [5] Walker and J. Li (2006), Latent Lifestyle Preferences and Household Location Decisions. Forthcoming in Geographical Systems.