Influence of Green Marketing toward Purchase Intention of Green Products through Attitude: Survey on Indonesian and Taiwanese Students

Sentot Suciarto A., Wen-Shai Hung, Shu-Hsun Ho, and Posmaria S.Sitohang

Abstract—The purpose of this study was to know the responses of the youths on green marketing towards purchase intention on green products. Sample of 240 students were selected by purposive sampling. Analysis used was path analysis. The result was green marketing positively and significantly influence attitude toward green products. The consumer attitude positively and significantly influence the purchase intention toward green products. The green marketing significantly influence purchase intention through attitude toward green products. The attitude toward green product was actually the choice of the respondents. Promotional tools should not only advertise the existence of green product, but give positive affirmation to the consumer attitude toward green product.

Keywords— attitude, green marketing, green product, purchase intention

I. INTRODUCTION

THE green business becomes trending topics nowadays and green marketing is one of green business efforts in line with sustainable business paradigm. According to Ottman et al (2006) [1], green marketing has transformed from emphasis on environmental stressing to the added values offered by green products. Green consumer is not only a lifestyle statement, but is becoming mainstream decision based on selecting qualified products. Environmental friendly products offer the benefits sought after by the mass market consumer. Avoiding green marketing myopia is to improve environmental quality and customer satisfaction.

The green business is trending topic for advanced or developed countries, but for emerging or developing countries should be researched. Youth segments of green products researched in Semarang Indonesia had concerned on this (Suciarto and Retnowati, 2011). [2]

Sentot Suciarto Athanasius, Management Department, Faculty of Economics and Business, Soegijapranata Catholic University, Semarang, Indonesia (mobile phone: +62 81 829 1204; e-mail: sentot.sa@unika.ac.id).

Wen Shai Hung. Department of Business Administration, Providence University, Taichung, Taiwan. (Mobile: +886 919 094720, e-mail: wshung@pu.edu.tw).

Shu-Hsun Ho. Department of Business Administration, Providence University, Taichung Taiwan. (Phone: +886-4-2632-8001 x. 13030, 13319 Fax: +886-4-2631-1187. e-mail: ho.shuhsun@gmail.com).

Posmaria Setiasiwi Sitohang, Management Department, Faculty of Economics and Business, Soegijapranata Catholic University, Semarang, Indonesia (phone: +62 24 8441555; e-mail: posmariasetiasiwisitohang@gmail.com

Youth segments still not prefer green products because of the higher price and not efficient for them. So their attitude is good but their behavior is not good to green products. This research wants to know if youth segments in Asia also like this. If the youths reject to buy and use green products, it will troubled the environmental trend for the next decade. Then the green business trend will diminish and vanish. But if the youth segment received the ideas of green product, they will be hope for the future of businesses that green product can be the good future businesses.

Strategically there is marketing strategy to appeal and promote green products. Is the youth segment aware of and receive to green promotion? If the youths' attitudes and behavior are good enough to receive green products, then green marketing effort can be developed for this segment. In terms of marketing mix, what are the green product, green pricing, green distribution and green promotion should be developed by green business.

The research problems to be tested in this research are: the influence of green marketing toward consumer attitude; influence of consumer attitude toward purchase intention; and the green marketing influence purchase intention through attitude toward green products.

II. REVIEW LITERATURE

A. Green Marketing

Green marketing in 1990s becomes the subject observed and researched (Polonsky,1994). [3] The term green marketing can be used in consumer goods, industrial goods and even services. According to Polonsky (1994), green or environmental marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment. Green marketing comprise of green products, green packaging, green prices; green communication and green distribution called as green marketing mix (Khan and Khan, 2012: 5-6). [4]

The green product claims that is 'less harmful to the environment', or 'environmentally friendly'. While Ottman (1997) [5] noted that green product in business means product that protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, polution, and waste. Polonsky (1994) also mentioned some businesses which concern on the green product. There were McDonald packaging which replaced polystyrene packaging with waxed paper; and Xerox copy

used paper of 'high quality" recycled paper. Other factors influencing the green businesses are social responsibility, governmental pressure, competitive pressure and cost profit issues though some products cannot survive for no longer preferred by consumers (Ottman et al, 2006: 24-26). [6]

The green marketing issues sometimes is confronted with the green washing and green marketing myopia activities. Consumers should be aware of companies activities on 'whitewashing – coordinated attempt to hide unpleasant facts' (Torque Customer Strategy, 2008); and also green marketing myopia – which focus on greenness over the broader expectations of consumers (Ottman et al, 2006: 24). Not only focusing on the product features, functions and efficient production but to meet customer needs, expectation and future desires. There are 3Cs for green marketing encompassing consumer value positioning, calibration of consumer knowledge, and credibility of product claims (Ottman, 2006: 34).Consumer value positioning is the design enviromentally product, promote and deliver the consumer-desired value, broaden mainstream appeal by bundling or adding value to the green product. Calibration of consumer knowledge includes educate consumer with environmental marketing messages (e.g. "pesticide free is healthier"), enviromental product attributes as better solution (e.g. "rechargeable batteries offer longer performance"), and create engaging and educational internet sites about green products' desired value. Credibility of product claims encompasses employ meaningful-specific-unpretentious and qualified green product and consumer benefit claims, endorsemenets or eco certifications, and encourage consumer evangelism through internet with compelling-interesting and entertaining about the product.

There is market and non market contect which can influence the green marketing like government policy and society or culture, but the firm should make good policy and strategy in green marketing. Responses to marketing communications are important for consumer behavior because expenditures on marketing communications tend to be high. There are responses to sales promotions and advertising. Positive attitudes toward coupons are influenced by familiarity with coupons, like in Taiwan and not in Malaysia (Mooij, 2011: 292). Responses to advertising depend on various aspects such as the purppose of advertising, general acceptance of advertising, consumer's relationships with the media, the spesific advertising appeal and executional styles. In Taiwanese consumer list more thoughts related to the aesthetic qualities of an advertisement, while the Americans more thought of product related claims (Mooij, 2011: 292).

B. Behaviosr and Attitude

Consumer behavior is activities of the people in obtaining, consuming and disposing products and services. It is a field of study about why people buy, why and how people consume (Blackwell et al, 2001: 6-7) [7]. Obtanining activities encompass the activities leading up to and including the purchase or receipt of a product and service. While consuming is about how, where, when, and under what circumstances consume use products. Disposing includes how consumer get rid of products and packaging.

There are many influences on consumer behavior, including two groups of consumer influences (individual determinants) and organizational influences (environmental influences). The individual determinants of consumer influences include demographics, psychographic, personality, motivation, knowledge, consumer intentions, attitude, beliefs and feelings. The environmental influences consist of many sources like culture, ethnicity, social class, family and household influences, group and personal influence (Blackwell et al., 2001).

Attitudes represent what we like and dislike (Blackwell et al 2001: 289); or something favorable or unfavorable for us (Azjen, 1991:188). Some people intend to consume if they like the product. Attitude also can be defined as a learned tendency to respond to an object in a consistently favorable or unfavorable way (Blythe, 2008: 138). Attitude has several characteristics including it is learned and not instinctive, it is a predisposition towards a particular behavior, implies a relationship between a person and an object, fairly stable, and is not neutral or neutral means not have attitude toward the object (Blythe, 2008: 138-139).

The attitude formation is depended on the antecedents, processing, and consequences. The antecedents are the consumer needs (both practical/utilitarian and emotinal/expressive), motivation and exposure to the processing of information/advertising, ability and opportunity to process information about product or brand. The processing includes attention and ability of consumer to process the information. The consequences are result of processing including the cognitive and emotional responses, which make attitude toward brand (Blythe, 2008: 142; McInnis and Jaworski, 1989). In the cognitive process, there are salient beliefs namely the consumers think as the most important which are used by the consumer to make judgment (Blythe, 2008: 143).

There are measurements of attitude composing the Rosenberg Model (includes perceived instrumentality and value importance) and Fishbein Model (including belief of particular characteristics and evaluation of desirable characteristics) (Blythe, 2008: 144). Favorable attitude is not automatically translated into favorable purchase intentions. Preference represent attitude toward one object in relation to another. In research it is distinguished between attitude toward the object (Ao) and attitude toward the behavior (Ab). Ao represents an evaluation of the attitude object such as a product. Ab represents an evaluation of performing a particular behavior involving the attitude object such as buying the product.

Attitude is formed by beliefs and evaluation. Evaluation is measured by ranging from very good to very bad. Belief is measured by very likely and very unlikely (Blackwell et al, 2001: 291). Combining the Rosenberg Model and the Fishbein model, there are three distinct aspects of the importance of attitude namely perceived instrumentality, evaluative aspect (affect) and value importance (Blythe, 2008: 144).[8] Example: I believe the Ford Mondeo is the most comfortable car in its class, I like comfort, Comfort is very important to me.

In the individualistic cultures, individuals want tend to be consistent between their personal attitudes and behaviors. In collectivistic cultures, where situational factors can influence the various elements of attitude and behavior, the practice may

work the same. In 1998 Eurobarometer survey of safe product to be consumed of the European Union showed that more confidence in safe products tend to be consumed more (Mooij, 2011: 134).[9]

C. Purchase Intention

According to Aaker (2001: 274) [10], intention refers to a person's expectations of future behavior toward an object. Intention depends on someone's buying habit and planning horizon. It includes willingness to pay. Purchase intention is an individual's conscious plan to make an effort to purchase. (Spears and Singh, 2004) [11].

There are planned purchase and unplanned purchase. Planned purchase consisted of two generally used construct for viewing consumer's disposition to buy, namely purchase intention and purchase probability (Berkman and Gilson, 1986: 497) [12]. An intention to buy or purchase is formed after some degree of problem solving deliberation or known as planned purchase. Intention to buy measured by willingness to buy or sentences like definitely will buy, or probably will buy.

The research framework is that green marketing efforts try to influence attitude of the consumer to buy green products. The activities of green marketing encompass several efforts including creating green product, green promotion, green pricing, and green distribution (Polonsky, 1994:1;Khan and Khan, 2012:6). The attitude may not always translate into actual behaviors so the firms can influence in many ways through its policy and strategy to influence the consumer conducting purchase (Prakash, 2002:1) [13]. It will be researched if the green marketing activities can influence the attitude and the attitude influence the purchasing intention (Azjen, 1991:182 [14];Ramayah, Lee, and Mohamad, 2010:1423 [15]; Atilgan-Inan and Karaca, 2011:3).[16]

The hypotheses for this research are as follows: green marketing of green products influence attitude toward green products. The consumer attitude influence purchase intention toward green products. The green marketing influence purchase intention through consumer attitude.

III. RESEARCH METHOD

The research was conducted in Soegijapranata Catholic University Semarang Indonesia and in Providence University Taichung Taiwan. The students of Faculty of Economics and Business were taken because they knew already what is green product and green marketing in their classes. The sample used was non probability sampling, using convenience sampling and data collected by self administered survey. Sample from each university was 90 students. A self-administered survey is a data collection technique which the representatives of the researcher hand-delivers survey forms and the respondent reads survey questions and records his or her own responses, then pick-up by the researcher's representatives (Hair et al, 2010: 111). [17]

Green marketing is the green marketing activities on green products to influence consumer, includes the activities on green product, the advertisement and promotion, the marketing channel, pricing green product. Consumer attitude is the attitude toward green products, including likeness, prefer, positive thinking, and follow good ideas from others.

Purchase Intention is the consumer willingness to buy on green products, including intend, willingness, plan, somewhat to buy, recommend to others.

The questionnaire consisted of item of questions on consumer identity, consumer perception on green marketing, consumer attitudes toward green product, and consumer purchase intention. The measurement is using Likert Scale 5 scores which varies from 1 = strongly disagree until 5 = strongly agree. This questionnaire is based on items of some researches on consumer attitudes and behavior (Atilgan-Inan and Karaca, 2011: 532-533; Johri and Sahasakmontri, 1998: 275 [18]; Ramayah et al, 2010:1424). After data validity and reliability test by SPSS software, the data gathered were analyzed using Path Analysis.

IV. RESULTS AND DISCUSSION

The respondent perception on green marketing efforts is included in the neutral category. It means that the respondents do not give attention on green marketing of green products. They see the green marketing efforts like green advertising as usual advertisement, or green packaging just as ordinary package to wrap a product. Some items on the questionnaires show on agree category, it means that the respondents pay attention and know that it is a green marketing way and they are aware of and respond to it.

The attitude toward green products is included on agree category. It means that the respondents have positive attitude toward and receive green products. They prefer green product as their choice. Some items on the questionnaires show on neutral category, it means that the respondents do not care or take no account to items of the green products. They prefer reused product but for their concern on green product though for selected product.

The perception on purchase intention on the average includes in the category on agree. It means that the respondents see if they intend to purchase on green products. The items on each question are on the agree category too, it shows that the respodents are also intend and want to purchase green products for fulfiling their needs.

The influence of green marketing toward attitude is positive and significant. The equation is as follows:

Attitude = 22.056 + 0.585 Green marketing

It means that the higher effort of green marketing will influence positive attitude of the respondents. The relationship between green marketing and consumer attitude R is 0.576. There is positive relationship although not too strong relationship. The influence R square is 33.10 percent, it means 33.10 percent influence of consumer attitude comes from green marketing and 67.90 percent comes from other influence. So the hypothesis 1 that green marketing of green products influenced the attitude is accepted and proved to be significant.

The influence of consumer attitude toward purchase intention is positive and significant. The equation is as follows:

Purchase Intention = 4.400 + 0.486Attitude

It means that the higher effort of green marketing will influence positive attitude of the respondents. The relationship between purchase intention and consumer attitude R is 0.751,

there is positive and strong relationship. The positive attitude will tend to increase purchase intention. The influence R square is 56.40 percent, it means 56.40 percent influence of purchase intention comes from consumer attitude and 43.60 percent comes from other factors. So the hypothesis 2 that the consumer attitude toward green products influenced the purchase intention toward green products is accepted and proved to be significant.

The hypothesis that green marketing influence purchase intention through attitude using the path analysis
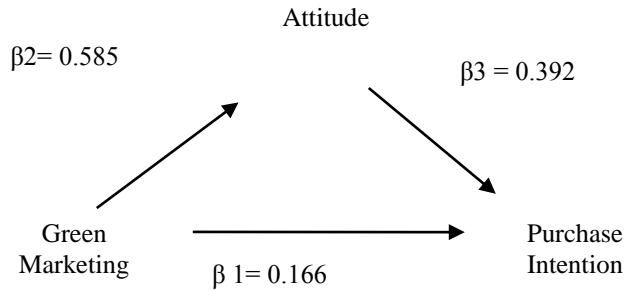
Attitude

$\beta2 = 0.585$

$\beta3 = 0.392$

Green Marketing

$\beta1 = 0.166$

Purchase Intention

Fig. 1 Path Diagram Influence of Green Marketing toward Purchase Intention through Attitude

The role of mediating variable can be classified into to two groups : Partial Mediation and Full Mediation. The partial mediation happens if after the computation the regression coefficient is decreasing but still significant. The full mediation happens if after the computation the regression coefficient increases and becomes significant. Before computation the regression coefficient of green marketing to purchase intention is 0.166, and after computation including the attitude the regression coefficient becomes 0.2293 so there is full mediation.

The coefficient value coefficient value of $\beta1$ 0.166 is smaller than coefficient value of $\beta2$ times coefficient value of $\beta3$ 0.2293, and every relationship is significant. So there is influence of Green Marketing toward Purchase Intention through Attitude. This result is consistent with the research result by Ajzen & Fishbein, 1991 [19]; Davis, 1993:482. [20]

V. CONCLUSION

Based on the analysis, Green Marketing variable positively and significantly influence Attitude toward respondent's perception on Green Products. The consumer Attitude positively and significantly influences the Purchase Intention toward green products. The Green Marketing significantly influence Purchase Intention through Attitude toward green products.

The recommendations based on some findings in the analysis are the producers and sellers of green product should add marketing channels and specify as the green channels. The attitude toward green product actually the choice of the respondents. It is good to affirm good attitude, and can be promotional tools, not only advertise the green product, but give affirmation to the consumer of green product.

APPENDIX

THE RELIABILITY TEST CONDUCTED USING CRONCBACH ALPHA METHOD WITH THE GUIDANCE OF REJECTION UNDER CRONBACH ALPHA 0.6 IS AS FOLLOWING:

Variable	Cronbach Alpha Reliability Score	Comment
Green Marketing	0.816	Reliable
Attitude	0.821	Reliable
Purchase Intention	0.847	Reliable

The validity test using Product Moment Correlation, for the total sampel 180 the correlation table is 0.148. The criteria for validity is the item total correlation should be over 0.148.

THE VALIDITY TEST FOR GREEN MARKETING VARIABLE

No	Questionnaires	R counted	R table	Result
1	Product which is less harmful, or not destructive to the environment, good for my health is the green product I want.	0.422	0.148	valid
2	I prefer the function and usage of product rather than its less energy and not polluted.	0.256	0.148	valid
3	I choose the green product packaging which is degradable, reusable or can be recycled.	0.396	0.148	valid
4	I prefer product which the firm or industry will not cause the global warming rather than other same products.	0.498	0.148	valid
5	The advertisements give me information about the green product.	0.446	0.148	valid
6	I am impressed by the words in green product advertisement.	0.534	0.148	valid
7	The promotion of green products drive me to buy green products.	0.501	0.148	valid
8	The spokespersons or the stars in the green product advertising are very interesting for me.	0.416	0.148	valid
9	I can easily find green product at the stores or sellers.	0.487	0.148	valid
10	There are many green product distributors/retailers which help me easily looking for green products.	0.478	0.148	valid
11	I prefer to buy green product at special green product store or seller.	0.503	0.148	valid
12	The price of green product impulse me to buy.	0.458	0.148	valid
13	The price of green product is too high for me to buy.	0.284	0.148	valid
14	I think that low price is good for pricing the green product.	0.471	0.148	valid
15	The price of green products are affordable to buy for me.	0.323	0.148	valid

Validity Test for Attitude Variable

No	Questionnaires	R counted	R table	Result
1	I like products which preserve the environment.	0.679	0.148	valid
2	I prefer to get products which make me healthier.	0.626	0.148	valid
3	I prefer to use products which will not cause pollution	0.638	0.148	valid
4	I like products which can be reused, degradable or recycled.	0.612	0.148	valid
5	I prefer to buy product which consumes less energy or saving the energy.	0.609	0.148	valid

6	It is good for me to use products which do not harm the environment.	0.708	0.148	valid
7	I will follow my intention to get green products which make me healthy.	0.523	0.148	valid
8	Using non polluted products is a better idea for my consumption.	0.618	0.148	valid
9	It is not my choice to use reused or recycled products.	0.202	0.148	valid
10	It is not good to use less energy or energy saving products.	0.322	0.148	valid
11	Most of my family and teachers who are important to me, suggest me to use green products.	0.262	0.148	valid
12	Most people of my school friends and close friends whose opinions I follow, would approve me to use green products.	0.385	0.148	valid
13	I am afraid if many people will not support or give critics on me for using green product.	0.158	0.148	valid
14	All people I know, are suggesting me to use product which will preserve nature and save for the world.	0.339	0.148	valid

Validity Test for Purchase Intention

No	Questionnaires	R counted	R table	Result
1	I intend to purchase product which is less harmful to the environment.	0.606	0.148	valid
2	If buying a product, I will purchase product which is less polluting.	0.617	0.148	valid
3	If buying a product, I am going to purchase product with less energy consumption.	0.553	0.148	valid
4	I prefer to buy product which can be degradable or recycled.	0.680	0.148	valid
5	If buying a product, I prefer to buy reused product.	0.632	0.148	valid
6	I will purchase product which is healthy product, not only because of low price product.	0.480	0.148	valid
7	I will ask friends to use product which will not cause harm to the environment.	0.589	0.148	valid
8	I will recommend other people to buy product which is green for the environment.	0.521	0.148	valid

REFERENCES

[1] Ottman, Jacquelyn A., Edwin R. Stafford and Cathy L. Hartman, 2006, Avoiding Green Marketing Myopia: ways to improve consumer appeal for environmentally preferable products, in Journal Environment: Science, and Policy for Sustainable Development, Volume 48, Number 5, June 2006.

[2] Suciarto, Sentot and Berta Bekti Retnowati, 2011, Green Product Menurut Pasar Kaum Muda: Pemahaman, Persepsi dan Peluang Pasar, Research Article presented at National Seminar, Workshop and Call for Paper: Living Green: Sinergizing Life, Making Sustainability, at Petra Christian University, May 26, 2011, Surabaya Indonesia.

[3] Polonsky, Michael Jay, 1994, An Introduction to Green Marketing, in Electronic Green Journal 1 (2). UCLA Library, UC Los Angeles, p.1-10.

[4] Khan, Anna and Mohammed Naved Khan, 2012, Analysis of Barriers and Strategies for Promoting Green Marketing, in the International Journal of Business and Management Tomorrow, Vol.2, No.8, August 2012,p.1-8

[5] Ottman, Jacquelin. 1997. Green Marketing Opportunity for Innovation. Lincolnwood, Chicago: NTC, Business Books.

[6] Ottman, Jacquelyn A., Edwin R. Stafford and Cathy L. Hartman,2006.Avoiding Green Marketing Myopia: ways to improve consumer appeal for environmentally preferable products in Journal Environment: Science, and Policy for Sustainable Development, Volume 48, Number 5, June 2006

[7] Blackwell, Roger D., Paul W. Miniard, and James F. Engel, 2001, Consumer Behavior, Ninth Edition, Mason, Ohio: South-Western of Thomson Learning.

[8] Blythe, Jim, 2008, Consumer Behavior, London: Thomson Learning

[9] Mooij, Marieke de, 2011, Consumer Behavior and Culture: Consequences for Global Marketing and Adversiting, 2nd Edition, Los Angeles: Sage, p.291-292

[10] Aaker, David A; V. Kumar and George S. Day, 2001. Marketing Research. New York: John Wiley & Sons, Inc.

[11] Spears, N., & Singh, S.N. 2004. Measuring attitude towards the brand and purchase intentions.Journal of Current Issues and Research in Advertising, 26(2), 53-556.

[12] Berkman,Harold W. and Christopher Gilson, 1986.Consumer Behavior: Concepts and Strategies. Third Edition. Boston: Kent Publishing Company

[13] Prakash, Aseem, 2002, Green Marketing, Public Policy and Managerial Strategies, in Journal of Business Strategy and the Environment, Vol. 11, p.285-297.

[14] Azjen, Icek, 1991, The Theory of Planned Behavior, in Journal of Organizational Behavior and Human Decision Processes, no.50, p.179-211.

[15] Ramayah, T., Jason Wai Chow Lee, and Osman Mohamad, 2010, Green Purchase Intention: Some Insight from a Developing Country, in Journal of Resources, Conservation and Recycling, Vol.54, p.1419-1427.

[16] Atilgan-Inan,Eda and Bilge Karaca, 2011, Planned Behavior of Young Consumer Shopping on the Internet in European Journal of Social Studies, Volume 19, Number 4, p.528-537.

[17] Hair, Joseph Jr., Mary F. Wolfinbarger, David J. Ortinau and Robert P. Bush., 2010, Essentials of Marketing Research, Second Edition, New York: McGraw-Hill Irwin.

[18] Johri, Lalit M. And Kanokthip Sahasakmontri, 1998, Green Marketing of Cosmetics and Toiletries in Thailand, in Journal of Consumer Marketing, Vol.15., No.3, 1998, p. 265-281, MCB University Press.

[19] Ajzen, I., 1991.The theory of planned behavior. Organizational Behavior and Human Decision Processes. 50: p.179-211

[20] Davis, Fred. 13. 1993. User Acceptance of Information Technology: System Characteristics, User Perceptions and Behavioral Impacts.in International Journal Man-Machine Studies. 38: 475-487.

.