# The Effect of Green Advertising and Personal Norms on Ecological Attitude for Students

## Agus Sukarno<sup>1</sup>, Dyah Sugandini<sup>2</sup>, Mohamad Irhas Effendi<sup>3</sup>, Muhamad Kudarto<sup>4</sup>, Rahajeng Arundati<sup>5</sup>, Bunga Alfausta Amallia<sup>6</sup>

Universitas Pembangunan Nasional Veteran Yogyakarta, E-mail address agus\_sukarno@upnyk.ac.id; E-mail address dini@upnyk.ac.id, E-mail address m\_irhaseffendi@upnyk.ac.id, E-mail address mkudarto@gmail.com, E-mail address ajeng.arundaty@gmail.com, E-mail address bungaalfaustaamllia@gmail.com

#### Abstract

The environment has recently been of concern because it has been damaged. This is very much influenced by human life, thus encouraging changes in consumer behavior to become more aware of the environment. This study aims to analyze the effect of green advertising and personal values on the development of individual beliefs about the environment. The need for consumer preservation and green products is increasingly increasing consumer demand. This study examines the Green Advertising variables and personal norms that affect the ecological attitude. This study used student respondents from UPN "Veteran" Yogyakarta, who were already pro-environment. The number of samples is 100 people. The data that has been collected is then analyzed by several tests, namely the validity test using Convergent Validity and Discriminant Validity, and the reliability test using the Average Variance Extracted (AVE). While the data analysis technique used to answer the hypothesis is descriptive statistical analysis and Partial Least Square (PLS) using the SmartPLS 3.2.8 software program. The results showed that the variables of green advertising and personal norms had an effect on ecological attitude.

Keywords: Green Advancement, Personal Norms, and Ecological Attitude



This is an open access article under the CC-BY-NC license.

# I. INTRODUCTION

The environment has recently been concerning because it has been damaged. It is very much influenced by human life. One of the reasons is because humans throw away garbage, which is difficult to recycle. Most of the waste comes from the plastic product packaging sector, namely as much as 146 tons per year (Our World in Data, 2015). Based on Research by McKinsey (2015), Indonesia is the second-largest producer of plastic waste after China. The problem of the current situation gives rise to Green Consumerism, where consumers show a preference for environmentally friendly products and environmental concerns, and many actions have been taken by governments, non-governmental organizations, businesses, and individuals to protect the environment. The form of action taken by the government is the existence of Law of the Republic of Indonesia Number 32 of 2009 regarding the prohibition on environmental protection and management, which includes the prohibition of conducting pollution, introducing hazardous and toxic objects (B3), entering waste into environmental media, clearing land by burning, and so on.

According to Research by Lakatos et al. (2016), consumer attitudes affect the environment and protection of the environment and protection of the environment in Romania. This Research shows that the environment in Romania is not positive for environmental awareness, but this attitude is not in line with the real situation. However, these activities should be continued to help increase consumer and SMEs awareness. Globalization makes sharing of knowledge about environmental problems that occur, but attitudes and behavior towards the environment are still different depending on the culture of each country (Laroche et al., 2001). It is necessary to discover environmental values and personal norms that show a general relationship to understand the differences between cultures (Zyglidopoulos, 2002)

Previous Research has increased consumer interest in green products, and the pro-environmental attitude must pay attention to the factors that influence green purchase intention. According to Rahmi et al. (2017), green purchase intention is influenced by green brand awareness, green brand image, green advertising, and eco knowledge. The role of norms or moral values in encouraging potential consumers to purchase organic food has always been a debate among researchers. However, many studies argue that personal norms affect consumer attitudes (Klöckner and Ohms, 2009) and, according to Lakatos et al. (2016), show that, although Romanian consumers show positive attitudes regarding environmental protection, their sustainable consumption behavior is in stark contrast to their recognized environmental care.

# **II. LITERATURE REVIEW**

## Theory of Green Marketing

Green Marketing is considered as a process, and activity is taken by companies by sending environmentally friendly goods or services to create consumer satisfaction (Soonthonsmai, 2007). Green marketing is a marketing activity that seeks to reduce the social and environmental impacts that occur from products or services that do not damage the environment. Usually, companies that adopt green marketing face many challenges, such as variability in demand, unfavorable consumer perceptions, and high production costs (Gurau and Ranchhod, 2005). According to Yan and Yazdanifard (2014), Green marketing consists of various business activities aimed at meeting consumer needs and desires, although reduce the negative impact on the environment. Green marketing, in its application in companies, adopts the four elements of the conventional marketing mix. Green marketing is a way for companies to take advantage of the environment of a product to promote sales (Chen, 2010).

## **Ecological attitude**

According to Simamora (2004), attitude is an expression of feelings, which reflects whether someone is happy or displeased, likes or dislikes, and agrees or disagrees with objects and is the most important concept in the study of consumer behavior, by influencing the attitude of consumer marketers hoping to influence consumer buying behavior. Schultz et al. (2004) stated that environmental attitudes are a collection of beliefs, influences, and intentions that a person has related to environmental activities. This individual considers himself part of the environment. Most environmental sociologists argue that the attitude towards the natural environment is a concern for the environment.

#### **Green Advertising**

According to Chan (2004) defines that environmentally friendly advertising is a claim that the advertised product or production process has shown that it cares for the environment and protects the environment. Environmental advertisements or green advertisements will provide product

information that does not damage the environment so as to attract pro-environmental consumers to buy and use these products (Prastiyo, 2016). Advertising aims to communicate indirectly to consumers to provide information about the advantages of the product so that it will lead to an attitude to make a purchase. Green advertising is one way to influence pro-environmental attitudes by displaying advertisements in order to attract buying green products that do not pollute the environment (Delafrooz et al., 2014).

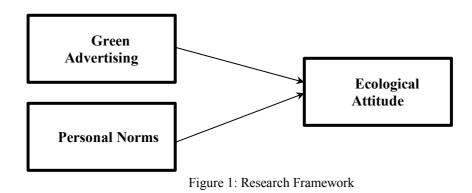
# H1: Green Advertising has an effect on the ecological attitude of pro-environmental students

#### Personal Norms (PN)

Personal Norms are an obligation and moral to act with the personal value system itself (Schwartz, 1977). Someone will have a pro attitude towards the environment if they seem to have an obligation to protect the environment in general. Belief in morals causes a person to realize the consequences of their behavior on the environment and to accept responsibility for protecting the environment. The VBN theory found by Stren (2000) proposes that personal values will influence the development of their belief in the environment. This belief causes them to become aware that deviating from their personal norms will make them feel guilty, and they realize that their behavior can damage the environment. Personal norms and values will make a person aware of the actions to prevent their negative behavior towards nature and make them aware that, in fact, human actions can affect nature positively or negatively. The role of moral values in influencing someone to buy green products is a debate among experts. However, many experts argue that the moral value of personal norms has a positive and significant effect on consumer attitudes (Klöckner & Ohms, 2009). From the explanation above, the hypothesis of this research is:

#### H2: Personal norms affect the ecological attitude of pro-environmental students

#### Thinking Framework



# **III. RESEARCH METHODOLOGY**

This Research was conducted to test the hypothesis. The population of this study was proenvironmental students of UPN 'Veteran' Yogyakarta Indonesia. The sample in this study was UPN 'Veteran' Yogyakarta students who have behaved environmentally friendly. Sampling was using a non-probability sampling method. The criteria for respondents are individuals who have been or have been involved in environmental conservation activities. Respondents can act as initiators, influencers, users, or decision-makers. The number of samples taken was 100 respondents.

The data collection procedure in this study used a list of questions or a questionnaire. The data in this study were obtained by providing a list of questions or questionnaires to respondents online, using this study using a structural equation analysis model that explains the relationship between variables. The data analysis tool used in this study was Smart PLS 3.2.8. PLS can analyze latent variables, indicators, and measurement errors directly. PLS can be used with a small number of samples and can be applied at all data scales. PLS analysis uses a two-step approach, (1) the evaluation model is the external measurement model used for instrument testing, and (2) the inner model is used to test the hypothesis of the path analysis proposed in the study.

Variables	Indicator	Source
GA		
GA	1. Environmental advertising increases my knowledge about	(Agustiningsih,
	environmentally friendly products environmental	2016) and
	2.advertising shows the company represents public aspirations about	(Delafrooz <i>et al.</i> ,
	environmental issues	2014)
	3. I'll pay more for products/services advertised as green products	
	4. I trust more products in green advertising versus product in	
	commercial advertising.	
	5. I am more loyal to products/services made by companies that make	
	green advertising.	
	6. I enjoy watching environmental commercials and helping make	
	informed purchasing decisions	
PN	1. I feel a moral obligation to take care of nature.	(Činjarević et al.,
	2. When I buy food, environmental protection is important to me	2018) and
	3. I would prefer organic food over conventional food	(Bronfman et al.,
	4. I feel I have to protect the environment.	2015)
	5. I will feel guilty when wasting water and energy	,
	6. I feel that I have to protect the environment in my daily life	
EA	1. I am worried that the food I eat contains chemicals	(Chan and Lau,
	2. I am angry at the government's ignorance of helping control	2000 and Nguyen
	environmental pollution.	<i>et al.</i> , 2016)
	3. I feel uncomfortable when looking at the environmental damage	<i>ci ui.</i> , 2010)
	4. The number of industries that cause environmental pollution makes	
	me worried	
	5. The whole problem of air pollution makes me annoyed	
	5. The whole problem of all pollution makes the annoyed	

# **IV. FINDING AND DISCUSSION**

In data analysis and This discussion explains about analyzing Green Advertising variables and personal norms that affect an Ecological attitude. This study uses student respondents who are proenvironment. The number of samples is 100 people.

## **Descriptive Analysis of Respondents**

Characteristics of Respondents	%
Age	
18-21Years	30%
22-25 Years	67%
26-29 Years	-
30-33 Years	3%
> 33 Years	
Income / Allowance per Month	
(IDR)	65%
≤1,000,000	31%
> 1,000,000- 3,000,000	-
> 3,000,000 - 5,000,000	1%
> 5,000,000- 7,000,000	3%
> 7,000,000	
STUDENTS	
S1	74%
S2	20%
S3	6 %

## Table 1. Characteristics of Respondents

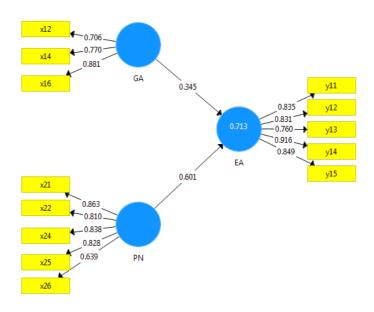
#### **Quantitative Analysis of Respondents**

#### **Testing Results Outer Model**

The result of the measurement model test is carried out to assess the validity and reliability of the model, as previously described. Because the indicators are reflective, assessments through convergent validity, discriminant validity, composite reliability, Cronbach alpha, and AVE, the previous data shows that green advertising variables meet the requirements, so they must remove several indicators so that the data presented in tables 2 and 3. The data above shows each variable indicator has a value of > 0.7. All indicators are declared feasible or valid, as seen from tables 2 and 3. The results have met the validity and reliability values.

<b>Construct Reliability and Validity</b>					
	AVE				
EA	0.894	0.897	0.922	0.705	
GA	0.704	0.779	0.831	0.623	
PN	0.856	0.864	0.898	0.640	

Table 2.						
<b>Construct Reliability and Validity</b>						
Cronbach's	rho_A	Composite				



## Figure 3 - *Algorithm* (OuterModel)

	EA	GA	PN
X12	0.434	0.706	0.329
X14	0.409	0.770	0.272
X16	0.700	0.881	0.632
X21	0.681	0.424	0.863
X22	0.648	0.691	0.810
X24	0.592	0.491	0.838
X25	0.690	0.477	0.828
X26	0.549	0.123	0.639
Y11	0.835	0.643	0.594
Y12	0.831	0.692	0.682
Y13	0.760	0.299	0.770
Y14	0.916	0.663	0.672
Y15	0.849	0.540	0.615

#### Table 3 Cross Loading

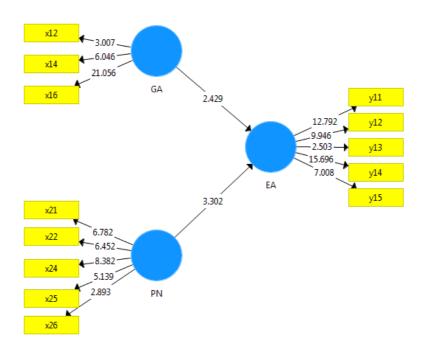
## 1)

Structural Model Testing Results (Inner Model) The

following are the inner model test results:

## Table 4. Inner Model

Testing	Results	Criteria
<b>The Coefficient of Determination (R-square)</b> EA	0.713	High. The percentage of ecological attitude can be explained through the green advertising variable and personal norms of 71.3%.
Predictive Relevance (Q-square) $Q^2 = 1 - (1 - R1^2) (1 - R2^2) \dots (1 - Rp2)$ $Q^2 = 0.428$	0.508	well, it means that the observed values of the reconstructed well by providing relevant predictive
the Goodness of Fit (GoF) GoF = $\sqrt{average \ AVE \ x \ average \ R^2}$ = $\sqrt{0567 \ x \ 0.29}$ = $\sqrt{0, 16443}$ = 0.405499	47%	Large. The results of the GoF value are above 0.36, so it can be said that the model used is very fit.







		(O)	(M)	(STDEV)	T Statistics	P Values
GA EA	->	0.345	0.383	0.142	2.429	0.015
PN EA	->	0.601	0.548	0.182	3.302	0.001

## DISCUSSION

## Green Advertising and Ecological Attitude

Based on the path coefficient table, there is an effect of green advertising on an ecological attitude of 0.345, and it is significant because the T-statistic is 2.429 > 1.96, and the P-value is 0.015 < 0.05. Thus, it can be stated that the higher the green advertising, which shows concern for the environment, the level of consumer awareness of environmental conservation, the better the behavior to preserve the environment. Green advertising is used by companies as a way to communicate indirectly with consumers who provide information about the benefits of advertised products and their relationship with the environment so that it can affect a person's attitude to be happier and happier with environmental care activities. The results of this study support research by Delafrooz et al. (2014) argued that green advertising is a way to influence consumer attitudes.

## Personal Norms and Ecological Attitude. Based

on the path coefficient table, there is an effect of green advertising on an ecological attitude of 0.601, and it is significant because of the T-statistic. 3.302 > 1.96 and a P value of 0.001 < 0.05. Personal norms show awareness that their behavior can prevent activities that can damage the environment and realize that the higher the morale a person has, the greater the attitude of concern for the environment. Awareness that individual actions affect nature positively or negatively. The results of the study support research conducted by Shaw et al. (2015), showing that consumers have moral obligations to act prudently in communities and environments that are vulnerable to their activities have an influence on their attitudes to behave in protecting their environment.

# V. CONCLUSION AND FURTHER RESEARCH

This study uses data obtained by 100 respondents by survey using google-form. Respondents are pro-environmental students. Based on the data analysis carried out in this study, the conclusions that can be presented from the results of this study are as follows: green advertising and personal norms have a significant and positive effect on ecological attitude. The results of this study are expected to be an able reference for future researchers who examine the influence of green advertising, personal norms, and ecological attitude. The results of this study can be used as information and consideration for companies and governments in determining steps and actions to implement green marketing and social marketing practices related to increasing consumer care for the environment. This Research can also provide direction for companies and governments to prioritize environmental-based advertising in product campaigning.

The results showed that green advertising and personal norms have a significant and positive influence on ecological attitudes, and personal norms had the strongest influence in increasing ecological attitude. So it is suggested that any marketer who displays environmental advertisements is more attractive to consumers. In addition, the norm or environmental responsibility of consumers is concerned about the environment so that consumers can behave in an environmentally friendly

manner. Thus, consumer behavior towards environmental preservation behavior can also be improved, and environmental conservation efforts made by the government, companies, and communities can be achieved. This Research can only be generalized to the scope of Research that has certain criteria for subjects and research objects. Research is limited to the scope of green consumer students in the Special Region of Yogyakarta. For the next Research, it is hoped that the research setting is not only in the Special Region of Yogyakarta and uses variables but many other factors that can actually be used to predict the effect of ecological attitude. Further Research needs to develop questionnaire questions to measure green advertising, personal norms, and ecological attitude.

## REFERENCES

- Agustiningsih, Wulandari, dan Isroah. (2016). "Pengaruh Penerapan E-filling, Tingkat Pemahaman Perpajakan dan Kesadaran Wajib Pajak terhadap Kepatuhan Wajib Pajak di KPP Pratama Yogyakarta". ISSN 2502-5430, 5 (2): 107-122.Bronfman, N. C., Cisternas, P. C., Lopez-Vazquez, E., DelaMaza, C., &Oyanedel, J. (2015). UnderstandingAttitudesand Pro-EnvironmentalBehaviors in a ChileanCommunity . Sustainability, 7(10), 14133-14152. http://dx.doi.org/10.3390/su71014133
- Chan, R. (2001). Determinants of Chinese Consumers Green Purchasing Behaviour. Psychology and Marketing, 18(4)
- Chan, R. Y. K., & Lau, L.B.Y (2000), "Antecedents of Green Purchases: A Survey in China," Journal of Consumer Marketing, Vol 17, No. 4. Pp 338-357
- Chen, Y. (2010). "The drivers of green brand equity: green brand image, green satisfaction, and green trust." Journal of Business Ethics. Vol. 93,(2), 307-319Činjarević et al.,2018)
- Delafrooz, N., Taleghani, M., & Nouri, B. (2014). Effect of green marketing on consumer purchase behavior. QScience Connect, 5, 1-9.
- Gurau, C., and Ranchhod, A. (2005). International green marketing: a comparative study of British and Romanian firms. International Marketing Review, Vol. 22 No. 5, pp. 547-561.
- Klöckner, C.A., Ohms, S., (2009), "The importance of personal norms for purchasing organic milk," British Food Journal, Vol. 111 Iss 11 pp. 1173 – 1187.
- Lakatos, E.S., Dan, V., Cioca, L.I., Bacali, L., & Ciobanu, A.M. (2016). "How supportive are Romanian consumers of the circular economy concept: A survey." Sustainability. 8 (8), 789.https://doi.org/10.3390/su8080789
- Laroche, M. Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. Journal of Consumer Marketing, 18(6), 503-520. doi 10.1108/eum000000006155
- McKinsey (2015) Stemming the Tide: Land-based strategies for a plastic-free ocean, McKinsey & Company and Ocean Conservancy, September 2015
- Nguyen, T.N., Lobo, A., Nguyen, H. L., Phan, T.T.H and Cao, T.K, "Determinants Influencing Conservation Behaviour: Perceptions of Vietnamese Consumers," Journal Of Consumer Behaviour. 15: 560–570. Published Online 18 July 2016 In Wiley Online Library (Wileyonlinelibrary.Com) Doi: 10.1002/Cb.1594
- Prastiyo, Y. (2016). Pengaruh Green Marketing Tools terhadap Perilaku Pembelian Konsumen. E-Jurnal Manajemen Unud, 5 (6), 3449- 3475.
- Rahmi, D.Y, Yolanda R, Dessy N.C, Qisthina A, Ranti P.L (2017). "Green Brand Image, Green Awareness, Green Advertisement, And Ecological Knowledge In Improving Green Purchase

Intention And Green Purchase Behavior On Creative Industry Products." Journal of Economics, Business, and Accountancy Ventura Vol. 20, No. 2, August – November 2017, pages 177 – 186

Schultz, P. W., Shriver, C., Tabanico, J. J., and Khazian, A. M. (2004), "Implicit Connections with Nature." Journal of Environmental Psychology, 24(4),31–42.

Schwartz, S. H. (1977), "Normative Influences on Altruism," In L. Berkowitz(Ed.), Advances in Experimental Social Psychology (Vol. 10, pp. 221–279). San Diego, CA: Academic Press.

Shaw D, McMaster R, Newholm T. 2015. Care and commitment to ethical consumption: an exploration of the 'attitude-behavior gap.' Journal of Business Ethics 1–15

Simamora, (2004), Manajeman Sumber Daya Manusia , Yogyakarta, Edisi III, Aditama Media

Soonthonsmai, V. (2007). Environmental and green marketing as a global competitive edge: Concept, synthesis, and implication. Proceedingofthe EABR (business) and ETLC (teaching). Venice, Italy.

Stern P.C. (2000). Towards a coherent theory of environmentally significant behavior, Journal of social issues, 56, 3, 407-424.

Yan, Yeow Kar, and Rashad Yazdanifard. (, 2014). The Concept of Green Marketing and Green Product Development on Consumer Buying Approach. Global Journal of Commerce and Management Perspective, Vol. 3, No. 2, pp 33-38.

Zyglidopoulos, S. (2002). The social and environmental responsibilities of multinationals: Evidence from the Brent Spar case. Journal of Business Ethics, 36(1-2), 141-151.