

AMAR (Andalas Management Review)
Vol.7, No. 1 (2023) Halaman 62 - 78
The Management Institute, Faculty of Economics, Universitas Andalas
ISSN (Print) 2476-9282 | ISSN (Online) 2548-155X

Pro-Environmental Behaviour in Indonesia: What Don't We Recognize?

1st Dudi Permana^a, 2nd Fellita Irmadela Farandy^b, 3rd Hasliza Abdul Halim^c

^{a, b} Universitas Mercu Buana, ^c Universiti Sains Malaysia Email: <u>dudi.permana@mercubuana.ac.id</u>

Abstract

Global warming and increasing environmental pollution are caused by human behaviour These facts have driven consumer to change their behaviour to become more environment-friendly. This study aims to analyze how psychological factor, namely green appearance consciousness (X1), environmental consciousness (X2), and green-self identity (X3) influence pro-environmental behaviour (Y). This research belongs to causal associations research. The data were obtained from 130 people, who implemented zero-waste lifestyle. In this study we used Partial Least Square analysis method to measure relationship between variables. The result shows that green appearance consciousness (X1) and environmental consciousness (X2) have significant influences to pro-environmental, while green self-identity (X3) does not have significant influences to pro-environmental behaviour (Y).

Keywords: Green Appearance Consciousness, Environmental Consciousness, Green-Self Identity, Pro-Environmental Behaviour

1. INTRODUCTION

Global warming, natural disasters, and the extinction of several plant and animal species that have occurred in recent decades have shown an increase. The link between these phenomena and human behavior has attracted the world's attention to reconsider human behavior towards nature (Siyavooshi, Foroozanfar, & Sharifi, 2018). One of the environmental pollution caused by human behavior that is currently being discussed is the problem of plastic waste. Plastic production, which has continued to increase in recent decades, has reached

more than 200 times since 1950, and in 2015 the world plastic production figure has reached 380 million tonnes (www.ourworldindata.org)

Plastic waste generated from consumption activities continues to increase in line with the increase in human consumption activities. The production of plastic waste that continues to increase without a proper plastic waste processing process results in environmental pollution. In fact, only about 9% of the plastic waste produced is recycled, 12% is burned, and the remaining 79% is disposed of and accumulates in landfills or the natural environment (Geyer, Jambeck, & Law, 2017).

Based on research conducted by Lebreton et al (2017), it was found that 67% of plastic waste in the world is produced by countries in Asia. Indonesia is the second largest contributor of plastic waste in the world after China. Indonesia produces 3.2 million tons of plastic waste per year, while China, which is in the first place, produces 8.8 million tons of plastic waste per year (www.cnnindonesia.com).

The existence of plastic waste has destroyed habitats and killed marine and terrestrial animals around the world. Based on research published by the Secretariat of the Convention on Biodiversity in 2016, debris in the oceans has endangered more than 800 species (www.detik.com). The UN Ocean Conference in New York in 2017 stated that plastic waste in the oceans has killed 1 million seabirds, 100,000 marine mammals, sea turtles and countless fish, each year (www.detik.com). The problem of environmental damage due to plastic waste is of course a disadvantage for Indonesia, both in terms of material and non-material. Considering that Indonesia as a developing country is still very dependent on natural resource wealth and most of its territory is the ocean.

Awareness of the dangers of plastic waste that threatens life has generated motivation to make changes to human behavior that is more environmentally friendly. Therefore, proenvironmental behavior was born. Pro-environmental behavior is awareness in implementing behavior that can minimize negative impacts on the environment as a result of an action in everyday life (Dono, Webb & Richardson, 2009). The new behavior that is applied in everyday life has formed a new lifestyle in society, one of which is the zero waste lifestyle. The aim of implementing a zero waste lifestyle is to minimize the production of waste generated from household activities so that it does not end up in landfills (TPA) in an effort to preserve the environment (www.zerowasteid.com). In implementing a zero waste lifestyle, there are 5R

principles that are applied in everyday life, namely refuse, reduce, reuse, recycle, and rot (www.goingzerowaste.com).

The zero waste lifestyle that is applied has changed consumer behavior in purchasing household products. Of course this has an effect on manufacturers engaged in Fast Moving Consumer Goods (FMCG) who use plastic as the main material for product packaging. Table 1.1 shows a decrease in the purchase of Ready To Drink (RTD) products that are thought to be the impact of the zero waste lifestyle that is starting to be implemented by many Indonesians. Changes in behavior not only have an impact on purchasing decisions but also have an impact on people's perceptions of products that have a negative impact on the environment.

Based on the phenomena that have been described, the authors feel that there is a need for research on changes in behavior that occur and lifestyles that are becoming trends in society. An understanding of consumer attitudes and behavior towards the consumption of green products can contribute to the development of a sustainable environment as a whole (Kao & Tu, 2015). Consumer behavior is an important issue for discussion in environmental protection (Bator & Cialdini, 2000; Dietz et al, 2003). The pro-environmental behavior applied by consumers can encourage production that is more environmentally friendly and sustainable (Maniatis, 2015).

Unfortunately, until now, there has not been much research done to understand proenvironmental behavior in Indonesia. Several previous studies on green marketing in Indonesia were more interested in discussing from a company perspective, namely about green mix marketing and not much has been discussed from a consumer point of view. Therefore, to fill the gap in previous research, it is necessary to have research on the factors that influence pro-environmental behavior in Indonesia.

Based on empirical studies conducted in previous studies, it was found that seven variables had a significant effect on pro-environmental behavior. Purchase preferences in pro-environmental behavior are regulated by psychological and social factors (Adnan, Ahmad, & Khan, 2017). According to Maniatis (2015) psychographic factors in pro-environmental behavior can be measured by 4 combinations of variables, namely environmental consciousness, economic consciousness, reliability consciousness, and green appearance consciousness. These variables include general awareness, knowledge, and commitment possessed by individuals. General awareness, knowledge, and commitment will shape individual awareness as a whole about environmental benefits and economic benefits

derived from pro-environmental behavior, as well as awareness of the reliability and appearance of green products can influence in making product purchase decisions that support pro-environmental behavior (Maniatis, 2015). Psychographic is an important factor to research in explaining pro-environmental behavior (Khare, 2015).

In social factors, there are social influence and green self-identity variables. Social influence is the process of individuals understanding how family and friends in the social environment accept a lifestyle (Hashim et al, 2015). Individuals will accept the values and lifestyle applied by family and friends in order to be accepted by the social group. But on the other hand, in social life, individuals often have a need for uniqueness to develop and enhance their social and self-image (Tian & Barden, 2001). The uniqueness that differentiates it from other individuals or groups is considered as self-identity. In pro-environmental behavior, individual identity is known as green self-identity, which is defined as an individual's commitment to the environment and the feeling of pride they have for implementing pro-environmental behavior (Khare, 2015).

The last variable is affordability. Affordability can be measured from the dimensions of price and ease of obtaining environmentally friendly products. Affordability in price and availability of environmentally friendly products has a significant effect on proenvironmental behavior (Muzyanah, Suroso, & Najib, 2015). Prices that are not affordable by consumers' economic capabilities and difficulties in obtaining environmentally friendly products are a barrier for consumers to implement pro-environmental behavior

1.1. Pro-environmental Behaviour

Dono, Webb, & Richardson (2009) define pro-environmental behavior as an effort made to reduce or minimize the negative impact caused by a behavior on the environment and apply it in everyday life. Pro-environmental is seen as behavior that involves self-interest and concern for other people, the next generation, other species, the environment, and the entire ecosystem (Bamberg & Möser, 2007).

From the explanations of previous researchers, it can be concluded that proenvironmental behavior is environmentally friendly behavior that is applied in everyday life based on personal interest and concern for the social and the entire ecosystem. By implementing pro-environmental behavior, they hope that this behavior can minimize the negative impact of human activities on the environment. Pro-environmental behavior becomes a real action on individual concern for the interests of the survival of all living things.

Nowadays, the implementation of pro-environmental behavior continues to develop in society. This has encouraged the birth of various environmentally friendly lifestyles in the

community. Lifestyle has a role as a guide for attitudes and behavior that are applied in everyday life. One of the lifestyles that are currently developing in Indonesian society is the zero waste lifestyle.

A zero waste lifestyle is defined as an action or effort to minimize the production of household waste in everyday life, both at the point of purchase and in the home by reusing or repairing owned products rather than replacing them (Tonglet, Philips, & Bates, 2014). In simple terms, the zero waste lifestyle aims to minimize the delivery of waste generated from daily activities to landfills (TPA) (www.goingzerowaste.com). To achieve this goal, there are 5R principles which guide practitioners of the zero waste lifestyle in their behavior, namely refuse, reduce, reuse, recycle, and compost (rot) (www.goingzerowaste.com).

1.2. Green Appearance Consciousness

Green appearance consciousness or awareness of green attributes is a process of relevance between behavior and the complex interactions between awareness, knowledge, and commitment when assessing the green attributes of a product (Maniatis, 2015). Individuals apply their cognitive awareness to assess green products by looking at the appearance and green label, and apply their existing knowledge of environmental problems, solutions, labeling, and product benefits in the green product selection process.

Awareness of environmental certification will influence product selection. With the existence of certification, consumers can assess the reliability of green products and relate it to their needs. Awareness of environmental certification can overcome negative perceptions that individuals have on green products.

1.3. Environmental Consciousness

Boztepe (2012) defines environmental consciousness as a function of knowledge of environmental problems, knowledge of environmental solutions, and knowledge of the environmental benefits of green products. According to Sánchez (2010) environmental consciousness is a multidimensional concept that is oriented towards behavior (i.e., the tendency to engage in pro-environmental behavior). When understood in this way, environmental awareness can be considered the equivalent of the attitudinal (or psychological) dimension of pro-environmental behavior.

From the explanation above, it can be concluded that environmental consciousness is knowledge of environmental problems and their solutions that shape the availability of individuals to commit to protecting the environment which is manifested in the dimensions of attitudes and behavior. Environmental consciousness or awareness of the environment is the most important determining factor in determining purchasing behavior for

environmentally friendly products. (D'amico, Vita, & Monaco, 2016). The consumer's environmental consciousness has influenced their attitude towards purchasing behavior, especially on green products (Kim & Seock, 2009).

1.4. Green Self-identity

Barbarossa et al (2015) defines self-identity as a set of meanings attached to individuals who occupy a role in social structures, and is a unique way of seeing and assessing themselves in carrying out that role. Self-assessors include all aspects of the self such as physical attributes, preferences, values, personal goals, habitual behavior, personality traits and personal narratives (Gatersleben, Murthag, & Abrahamse, 2014). Meanwhile, green self-identity is defined as individual commitment to the environment (Khare, 2015).

In this study, the authors concluded that green self-identity can be interpreted as an individual's commitment to environmentally friendly behavior as a form of self-image based on personal views and values. Green self-identity is proven to be the main motivator that encourages someone to behave in an environmentally friendly manner (Barbarossa et al, 2015; Gkargkavouzi, Halkos, & Matsiori, 2019). Green self-identity affects consumer intentions directly or indirectly to engage in pro-environmental behavior (Barbarossa et al, 2015). Individuals who consider themselves environmentally friendly people are more likely to adopt environmental actions to express their feelings of green identity (Gkargkavouzi, Halkos, & Matsiori, 2019).

1.5. Hypothesis Development

In the next section explain the relationship between variable in order to hypothesis development

a. The relationship between *Green Appearance Consciousness* and *Pro-Environmental Behaviour*.

In 2018 Hashim et al conducted a study on social influence and eco-labels on the intention to buy environmentally friendly electronic products. This study shows a positive relationship between eco-labels and the intention to buy environmentally friendly electronic products. Lutfie, Syarina, & Hidayat (2017) get similar results in their research, that packaging and labeling have a significant influence on purchasing decisions.

Different results are suggested by an empirical study conducted by Joshi & Rahman (2015). It was found in two previous studies (Nittala, 2014; Rahbar & Wahid, 2011) that consumers do not trust the information provided on manufacturing, labeling, and certification procedures for green products. This shows that eco-labeling and environmentally friendly certification do not have a positive and significant effect on green purchase behavior.

The discovery of a gap in previous studies made the green appearance consciousness variable need to be re-examined. Therefore, the following hypothesis is formulated:

H1 = Green Appearance Consciousness has a positive and significant effect on proenvironmental behavior.

b. The relationship between *Environmental Consciousness* and *Pro-environmental Behaviour*.

Maniatis (2015) states that environmental consciousness affects consumer green consciousness and purchasing decision making. In its effect on purchasing decisions, environmental consciousness has made consumers willing to pay higher prices to buy environmentally friendly products (D'amico, Vita, & Monaco, 2016). The same thing was also expressed in research conducted by Mishal et al (2019) that environmental consciousness has a positive and significant effect on green behavior through the mediation of green purchase attitudes. Individuals with a high level of environmental awareness will more often buy environmentally friendly products than individuals who have a low level of environmental awareness (Kim & Seock, 2009).

However, different results were presented by Joshi & Rahman (2015) in their empirical study of green purchase behavior. From several studies that have been conducted, several studies have found no relationship between knowledge of environmental problems and purchasing green products. The existence of a gap from previous research made the writer feel the need to test the environmental consciousness factor. So that the authors formulate the following hypothesis:

H2 = Environmental Consciousness has a positive and significant effect on proenvironmental behavior.

c. The Relationship between Green Self-identity and Pro-environmental Behaviour.

The results of research conducted by Kharen (2015) suggest that there is a significant influence between green self-identity and pro-environmental behavior. The same results were found in research conducted by Dermody et al (2015) regarding the relationship of environmental self-identity to sustainable consumption behavior in consumers in China and the UK, both of which indicate a positive and significant relationship between environmental self-identity and sustainable purchasing behavior. Based on previous research, the following hypothesis was made:

H3 = Green self-identity has a positive and significant effect on pro-environmental behavior. Based on the literature review that has been carried out and the hypotheses that have been formulated, a frame of thought is made as follows:

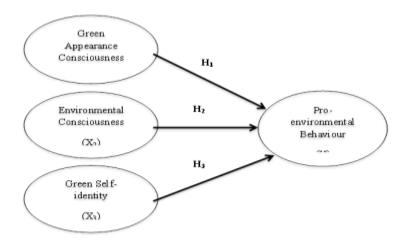


Figure 1. Research Framework

2. METHOD

The research design is a plan for data collection, measurement, and analysis, based on research questions from the study results (Sekaran and Bougie, 2014). In this study, the author aims to determine the relationship between green appearance consciousness, environmental consciousness, and green self-identity on pro-environmental behavior. From this explanation, this research can be called causal research.

Causal research is a study with the aim of explaining one or more variables (independent variables) that cause other variables (dependent variables) to change or not (Sekaran and Bougie, 2014). There is hypothesis testing regarding the relationship between variables that has been formulated by researchers in causal research. Green appearance consciousness, environmental consciousness, and green self-identity in this study act as independent variables that affect pro-environmental behavior, which is the dependent variable.

2.1. Sample and data collection

Population refers to the entire group of people, events, or interesting things that the investigating researcher wants to investigate (Sekaran and Bougie, 2017). In this study, researchers used people in Indonesia who have implemented a zero waste lifestyle as the population of research subjects.

The sample used in this research is 102 people who have implemented a zero waste lifestyle and consumed green products.

The data collection method used in this study was a questionnaire. The questionnaire is a list of pre-formulated written questions where respondents will record their answers (Sekaran and Bougie, 2017). The questionnaire is generally designed to collect quantitative data. The questionnaire data collection technique is an efficient technique if the researcher knows exactly what variables to measure and what can be expected from the respondent.

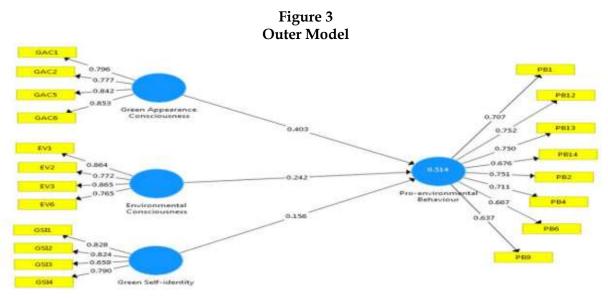
Questionnaires can be given in person, sent to respondents, or distributed electronically. In this study, researchers used a questionnaire via electronic media, namely Google Form. The advantage of using questionnaires via electronic media is that a large geographical area can be covered in the survey (Sekaran and Bougie, 2017). Therefore it is in accordance with this research which has a coverage of respondents from all over Indonesia.

3. Result and Discussion

In the PLS approach, there are 2 analysis techniques, namely the outer model and the inner model. The following are the results of the outer model and inner model tests that have been carried out in this study:

A. Outer Model

Figure 3 explains the outer model:



The process of eliminating environmental indicators of environmental consciousness and green appearance consciousness was carried out by the author which resulted in changes to the path diagram output results. Figure 3 shows the results of the path diagram output after the second modification process.

Table 3. Fornell-Larcker Criterion

Tornett Eurener Criterion						
	EV	GAC	GSI	РВ		
EV	0,818					
GAC	0,800	0,818				
GSI	0,633	0,513	0,778			
PB	0,663	0,677	0,516	0,708		

From the table above, it can be seen that the value of the indicator correlation coefficient on the green appearance consciousness and environmental behavior has changed.

The AVE value for each variable has become greater than the correlation of each construct. Therefore it can be said that all indicators have met the criteria for discriminant validity.

Composite reliability

Table 4 below explain the result of composite reliability

Table 4
Composite Reliability

	Composite Reliability
Environmental Consciousness	0,890
Green Appearance Consciousness	0,889
Green Self-identity	0,859
Pro-environmental Behaviour	0,889

Based on the table, it can be concluded that the construct has good reliability because the composite liability value of all variables has met the requirements. With good reliability in the construct, it is known that the questionnaire used is reliable and consistent.

Cronbach's Alpha

The value of Cronbach's Alpha in explained by table 3

Table 5 Cronbach's Alpha

	Cronbach's Alpha		
Environmental Consciousness	0,834		
Green Appearance Consciousness	0,834		
Green Self-identity	0,781		
Pro-environmental Behaviour	0,857		

It can be seen from the table that the Cronbach's Alpha value for each variable is more than 0.7. So it can be concluded that the construct has good reliability or the questionnaire used as a tool in this study has been reliable or consistent.

Table 6
Path Coefficient

	Pro-environmental Behaviour		
Environmental Consciousness	0,242		
Green Appearance Consciousness	0,403		
Green Self-identity	0,156		
Pro-environmental Behaviour			

The table of path coefficients above has a range of 0.156 to 0.403. It can be concluded that all values have a positive relationship because they have a value close to +1.

Structural Model

The t-statistic analysis aims to see the significance value between constructs. The hypothesis will be rejected if the t-statistic value is in the range of -1.96 and 1.96. The hypothesis will be accepted if the t-statistic value has a value greater than 1.96 (> 1.96) or less than -1.96 (<-1.96) with an error rate of 0.05 (5%).

Table 7 Hypothesis Testing

	tvalue
Environmental Consciousness -> Pro-environmental Behaviour	2,186
Green Appearance Consciousness -> Pro-environmental Behaviour	4,730
Green Self-identity -> Pro-environmental Behaviour	1,376

The table shows that environmental consciousness has a significant effect on proenvironmental behavior. It can be said to be significant because the t-statistic value that is owned is greater than 1.96, which is 2.186. So it can be concluded that the H2 hypothesis which states that environmental consciousness has a positive and significant effect on proenvironmental behavior in this study is accepted.

Similar results are also seen between green appearance consciousness and proenvironmental behavior. The t-statistic value that is owned is 4.730, it has exceeded the set limit, which is more than 1.96. Therefore, the H1 hypothesis which states that green appearance consciousness has a positive and significant effect on pro-environmental behavior is accepted.

However, green self-identity and pro-environmental behavior do not show a significant relationship. This is because the t-statistics that are owned are in the range of 1.96 and -1.96, namely 1.376. Therefore, H3 which states that green self-identity has a positive and significant relationship to pro-environmental behavior is rejected. Green self-identity has a positive but insignificant effect on pro-environmental behavior.

PLS-Predictive (Q^2)

Table 8
Predictive Relevance (Q²)

riedictive Kelevance (Q')				
	SSO	SSE	Q ² (=1-SSE/SSO)	
Environmental Consciousness	520,000	520,000		
Green Appearance Consciousness	520,000	520,000		
Green Self-identity	520,000	520,000		
Pro-environmental Behaviour	1.040,000	798,355	0,232	

The table shows that the Q² value of the model in this study is more than 0. The data shows that the model in this study has accurate predictive relevance.7

3.2. Discussion

Based on the results of the hypothesis test conducted, it was found that the green appearance consciousness variable had a t-statistic value of 4.730 and a path coefficients value of 0.403. It can be concluded that the green appearance consciousness variable has a positive and significant effect on pro-environmental behavior, so that H1 is accepted. Similar results were found in previous research conducted by Song et al (2019), Hashim et al (2018), and Lutfie et al (2017) that green-labels have a positive and significant effect on purchase behavior.

In accordance with the theory of The Planned Behavior which is used as the basis of this research, that the knowledge and awareness of the individual will shape the attitude of the individual. In this study, knowledge of environmental issues, consciousness of environmental certification, and consciousness of presence of ecological labels foster green appearance consciousness in practitioners of a zero waste lifestyle. Green appearance consciousness makes lifestyle practitioners of zero waste pay attention to green label and green certification on a product. The existence of a green label and green certification is needed by those who do the zero waste lifestyle to recognize the advantages and environmentally friendly features of green products. The information obtained about the product will be processed to make it relevant to the principles of the zero waste lifestyle.

The positive relationship between green appearance consciousness and proenvironmental behavior proves that the higher the green appearance consciousness an individual has, the higher one's pro-environmental behavior will be. When individuals have high green appearance consciousness, the higher one's ability to process information given the green label and green certification regarding the product and assess how the product is safe for the environment and does not have a negative impact. When the zero waste lifestyle actors can determine precisely the products they buy are truly safe for the environment or even provide benefits to the environment, automatically the implementation of pro-environmental behavior will increase.

However, in a different study from the results of research conducted by Nittala (2014) and Rahbar & Wahid (2011) in an empirical study conducted by Joshi & Rahman (2015), it is found that green labels have no effect on willingness to purchase green products and purchase behavior. owned by the consumer. The difference in research results can be caused by developments in communication technology. Lack of knowledge and lack of trust in green labels and green certification makes consumers not aware of green labels

and green certification (Nittala, 2014; Joshi & Rahman, 2015). Technological developments have made it easier for consumers to seek information and increase their knowledge of green labels and green certification. In addition, the existence of social media has made it easier for the zero waste lifestyle community to communicate and exchange information with all its members without being limited by geographical and time differences. The community is one of the places for zero waste lifestyle education and a reliable source of information for its members. However, to determine the level of the role of social media in influencing the lifestyle and the level of consumer confidence in the zero waste lifestyle, further research is needed. Therefore, this research cannot discuss further about the influence of social media on the zero waste lifestyle actors.

Hypothesis test results show that H2 which states "environmental consciousness has a positive and significant effect on pro-environmental behavior" is accepted. This is evidenced by the results of the hypothesis test which shows that environmental consciousness has a t-statistic value of 2.186 and a path coefficients value of 0.242. The results of this study are in accordance with research conducted by Mishal et al (2017) and D'amico et al (2016).

The environmental consciousness that is owned by actors of the zero waste lifestyle in Indonesia is formed by knowledge of ecological (green) labeling, knowledge of environmental solutions, knowledge of economic benefits and knowledge of environmental benefits. The environmental consciousness that individuals have can affect their lifestyle, purchasing behavior and habits (Filho et al, 2017). The practitioners of a zero waste lifestyle will involve their environmental consciousness in the decision-making process when shopping. They will judge the product based on the knowledge they have about how the product can provide environmental and economic benefits, and how the product can provide solutions to environmental problems.

Environmental consciousness has a positive influence with pro-environmental behavior, which means that the higher the environmental consciousness one has, the higher the level of implementation of pro-environmental behavior. The understanding that individuals have regarding the concept of how to implement a zero waste lifestyle when shopping can provide benefits to the environment and economy, as well as a solution to environmental problems that occur will increase their environmental consciousness. An increase in individual environmental consciousness will increase awareness of the zero waste lifestyle actors to choose products when shopping based on

the 5R principles of the zero waste lifestyle. With a commitment to apply the 5R principle when shopping, the application of pro-environmental behavior in life will be even higher.

From the results of the hypothesis test, it is found that green self-identity has a t-statistic value of 1.376 <1.96 and a large value of path coefficients of 0.156. It can be interpreted that green self-identity has a positive but insignificant effect on pro-environmental behavior. That way H3 is declared rejected. It can be interpreted that self-image in the social structure and the need to feel better or different from the individual are not the main reasons for individuals to live a zero waste lifestyle.

The results obtained in this study contradict research conducted by Kharen (2015) and Dermody (2015) which states that green self-identity has a positive and significant effect on environmentally friendly buying behavior. The difference in the results of this study can be caused by differences in the location of the research implementation. Each region has different beliefs, cultures and social rules that affect the values that each individual has. Differences in research results in a region were found in previous research conducted by Barbarossa et al (2015) regarding the effect of green self-identity on consumers' intention to own an electric car in three countries, namely Denmark, Italy, and Belgium, showing different results.

The results of research conducted in Italy and Denmark indicate that green self-identity has a positive and significant effect on the intention to own an electric car. In contrast to the results of research in Italian society which shows that green self-identity does not have a significant direct influence on the intention to own an electric car. Green self-identity has a significant influence on the intention to own an electric car through mediating environmental concequences in Italian society.

The explanation above proves that there is a possibility that green self-identity does not always have a direct impact on behavior (Lalot, 2019). A behavior may not only consider one value, belief, attitude and intention. Therefore, further research is needed on how the green self-identity of the zero waste lifestyle actors in Indonesia can affect pro-environmental behavior.

4. CONCLUSSION AND IMPLICATION

In the green appearance consciousness variable, respondents felt that they did not pay attention to the green certification listed on the product packaging when buying a product. This can be due to the absence of an official institution established by the Indonesian government to certify green products so that respondents feel they do not have to check the

green certification stated on the product packaging. Indeed, the purpose of establishing a certification body is to provide assurance to consumers that the green product circulating in the market is a product that is truly safe for the environment and the product has the advantages claimed by the manufacturer. With a guarantee for consumers, the level of trust in green products can increase and can affect the level of purchasing of green products.

In the environmental consciousness variable, respondents doubt that they have good knowledge about green labels. Respondents' doubt could be caused by the large number of green labels that have appeared on product packaging without supervision from the government and related organizations. Many green labels on the market make respondents feel confused about recognizing the information they are trying to give through the green label. This is a challenge for a marketer to introduce green labels on products and educate consumers. For now, what is possible is to collaborate with related organizations to educate consumers about green labels. In the future, Indonesia needs an organization or institution as a third party to monitor and filter the emergence of green labels on products to avoid greenwashing.

In the green self-identity variable, respondents feel doubtful that they have become environmentally friendly consumers. Doubt can be caused by a lack of consistency in implementing pro-environmental behavior. As we know that pro-environmental behavior is a new lifestyle, especially in Indonesia. The number of obstacles and difficulties that are felt in implementing pro-environmental behavior in Indonesia is the cause of the inconsistency of the respondent's behavior. This situation opens up new opportunities for marketers and producers to provide services and products needed by pro-environmental behavior actors. Not many giant producers serving this market could be a big opportunity for small producers.

In the pro-environmental behavior variable, it is known that respondents do not understand how to convert organic waste into compost. The government and related organizations can provide free training on how to process organic waste for the community. If the community manages organic waste independently, it can help the government in handling the waste problem. With the awareness and active role of the community, the problem of environmental pollution due to waste can be handled more effectively and efficiently.

In this study, it is known that the variable green appearance consciousness, environmental behavior and green self-identity can only explain pro-environmental behavior by 51.4%. There are 48.6% which can be explained by other variables. Future research can add demographic factors (gender, age, place of residence, education level, income level, marital status, etc.) to find out more about the factors that influence proenvironmental behavior.

Future researchers can use the same model used in this study and add demographic variables as moderating variables between psychographic factors and pro-environmental behavior. Adding demographic factors will provide an in-depth analysis of how psychographic and demographic factors influence the behavior of individuals. By knowing the factors that can affect pro-environmental behavior, the government and related organizations can improve pro-environmental activities in Indonesia effectively and efficiently.

Psychographic factors are very interesting factors to be investigated more deeply. The limitations of this study make this study unable to explain how social factors affect a person's values, beliefs, and behaviors. Therefore, it is necessary to have future research on the influence of social factors on pro-environmental behavior in Indonesia. Research on social factories can complement the existing gaps in this study.

References

- Adnan, A., Ahmad, A., & Khan, M. (2017). Examining The Role of Consumer Lifestyles on Ecological Behavior Among Young Indian Consumers. *Young Consumers*, 18(4), 348–377. DOI: 10.1108/yc-05-2017-00699
- Bamberg, S., & Möser, G. (2007). Twenty Years after Hines, Hungerford, and Tomera: A New Meta-analysis of Psycho-social Determinants of Pro-environmental Behaviour. *Journal of Environmental Psychology*, 27 (1), 14-25. DOI: 10.1016/j.jenvp.2006.12.002.
- Barbarossa, C., *et al.* (2015). A self-identity based model of electric car adoption intention: A cross-cultural comparative study. Journal of Environmental Psychology, 42, 149-160. DOI: 10.1016/j.jenvp.2015.04.001
- Bator, R. J., & Cialdini, R. B. (2000). New Ways to Promote Proenvironmental Behavior: The Application of Persuasion Theory to the Development Of Effective Proenvironmental Public Service Announcements. *Journal of Social Issues*, 56(3), 527–541. DOI:10.1111/0022-4537.00182.
- Boztepe, A. (2012). Green Marketing and Its Impact on Consumer Buying Behavior. *European Journal of Economic and Political Studies*, 5 (1). DOI: 10.1177/2319510X1200800106.
- CNN Indonesia. 2019. Jakarta Diklaim Bisa Hasilkan Rp1,75 T per Hari dari Sampah. Diunduh dari: https://www.cnnindonesia.com/teknologi/20191120160826-199-450025/jakarta-diklaim-bisa-hasilkan-rp175-t-per-hari-dari-sampah
- D'Amico, M., Di Vita, G., & Monaco, L. (2016). Exploring Environmental Consciousness and Consumer Preferences for Organic Wines Without Sulfites. *Journal of Cleaner Production*. DOI: 10.1016/j.jclepro.2016.02.014.

- Darmajati, D. (2018). Data Mengerikan soal Sampah Plastik di Lautan. Diunduh dari : https://news.detik.com/berita/d-4315147/data-mengerikan-soal-sampah-plastik-di-lautan.
- Dermody, J., Hanmer-Lloyd, S., Koenig-Lewis, N., & Zhao, A. L. (2015). Advancing Sustainable Consumption in the UK and China: The Mediating Effect of Proenvironmental Self-identity. *Journal of Marketing Management*, 31(13-14), 1472–1502. DOI:10.1080/0267257x.2015.1061039.
- Dietz, T., Ostrom, E., & Stren, P. (2003). The Struggle to Govern the Commons. *Science* 302, 1907. DOI: 10.1126/science.1091015.
- Dono, J., Webb, J., & Richardson, B. (2009). The Relationship Between Environmental Activism, Pro-environmental Behaviour and Social Identity. *Journal of Environmental Psychology*, 30, 178–186. DOI:10.1016/j.jenvp.2009.11.006.
- Eidi, F., & Shahbazi, A. (2017). Effective Factors on Consumers' Decision to Buy Green Products. *International Journal of Economic Perspectives*, 11 (1), 795-807.
- Filho, E., Cardoso, B., & Barboza, M.. (2017). Motivations behind green consumption and the influence of environmental consciousness on consumer behaviour. *International Journal Innovation and Sustainable Development*, 11 (2/3), 291 308. DOI: 10.1504/IJISD.2017.083298
- Gatersleben, B., Murthag, N., & Abrahamse, W. (2014). Values, Identity and Proenvironmental Behaviour. *Contemporary Social Science*, Vol. 9, No. 4, 374–392. DOI: 10.1080/21582041.2012.682086.
- Geyer, R., Jambeck, J. R., & Law, K. L. (2017). *Production, Use, and Fate of All PlasticsEever Made*. Science Advances, 3 (7), e1700782. DOI:10.1126/sciadv.1700782
- Gkargkavouz, A., Halkos, G., & Matsiori, S. (2019). Environmental behavior in a private-sphere context: Integrating theories of planned behavior and value belief norm, self-identity and habit. *Resources, Conservation & Recycling* 148, 145–156. DOI: 10.1016/j.resconrec.2019.01.039.
- Grankvist, G., Dahlstrand, U., & Biel, A. (2004). The Impact of Environmental Labelling on Consumer Preference: NegativeVs. Positive Labels. *Journal of Consumer Policy*, 27: 213-230. DOI:10.1023/b:copo.0000028167.54739.9
- Greenpeace Indonesia. (2018). Lebih dari 90% Merek Garam yang Disampel Secara Global Ditemukan Mengandung Mikroplastik. Diunduh dari : https://master.k8s.p4.greenpeace.org/indonesia/siaran-pers/1747/lebih-dari-90-merek-garam-yang-disampel-secara-global-ditemukan-mengandung-mikroplastik/
- Hashim, N., Yahya, W., Bakar, S., & Asrul, S. (2018). Social Influence and Eco-label Factors Towards Purchase Intention of Home Products: A PLS Approach. *Journal of Emerging Economies & Islamic Research*, 6 (3), 39–47.
- Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management*, 3, 128–143. DOI: 10.1016/j.ism.2015.04.001.