# The Effects of Green Products, Environmental Attitudes and Social Media Marketing on Willingness to Buy (Empirical Study on Stainless Steel Straws in Balikpapan)

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# The Effects of Green Products, Environmental Attitudes and Social Media Marketing on Willingness to Buy (Empirical Study on Stainless Steel Straws in Balikpapan)

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One of the causes of pollution is plastic waste, because it takes a long time to decompose naturally. One of the solutions to solve this problem is to reduce the use of disposable plastic-based items and use green products- stainless straw is one example of green products. Social media could be the right choice to educate society, to create a high environmental awareness that will affect consumption patterns and attitudes towards the environment, it can be a variable that reinforces or weakens the relationship between each variable on buying interest as a dependent variable. This study aims to analyse the effect of green products and environmental attitudes and social media marketing as a moderating variable on willingness to buy. All results showed positive and significant, except for the moderating effect of social media marketing, which showed that the results were not proven to be adequate between the environmental attitude and willingness to buy.

**Keywords:** Green product, Environmental attitude, Social media marketing, Willingness to buy.

#### Introduction

Depletion of natural resources and environmental pollution is a global problem that needs more attention atx this time. One cause of pollution is plastic waste, because it takes a long time to decompose naturally. Estimates of plastic being dumped into the sea is about eight million tons per year; this plastic comes from everyday activities and industrial waste (Jensen, 2018). Based on the latest data, Hoegh-Guldberg *et al.* (2015), showed that Indonesia ranks second as the largest contributor of plastic waste being dumped into the sea, which is about 187.2 million tons per year, the world's largest after China, with 262.9 million tons per year. The emergence of an environmental attitude of concern is the result of environmental awareness affecting people's behaviour, as more positive attitudes towards the environment affect the consumption patterns that tend to promote the use of green products (Rahman, 2018). The use of green products can reduce the negative impact on the environment (Albino *et al*, 2009). Thus, the green product is the right step in dealing with the issue - this time of environmental issues (Bhatia *et al*, 2013).

Green products (environmentally friendly products) are products made from raw materials that are durable or biodegradable, so they do not damage the environment. In addition, basic materials also contain no harmful chemicals and are safe to use in each time period. One of the environmentally friendly products that is easy to find today is stainless steel straws. The transition to the use of straws of stainless steel is good for the environment, because every day the estimate of the use of plastic straws collected is approximately 93,244,847, according to the restaurant and beverage packaging figures as well as other sources. The number mentioned is equal to 16,784 kilometres: the distance between Jakarta and Mexico City, if this usage is accumulated in a week, it reaches a distance of 117,488 kilometres or three times the circumference of the earth (Diversal clean action, 2017). Indonesia has issued a regulation to address these issues, namely the Law of the Republic of Indonesia Number 18 Year 2008 on waste management, which is applied with one plastic bag directive concerning the prohibition of the use of disposable plastic. Reducing the use of plastic straws will bring positive effects for the environment, because plastic straws are included in disposable plastic waste products.

Most people are aware of the current environmental conditions and a high awareness would create a moral responsibility to care for the environment (Chekima, *et al.*, 2015). Public awareness of the need to safeguard the environment can be seen by an increase in demand for steel straws in the market. One form of environmental consciousness is the underlying environmental impact of consumer attitudes, which ultimately leads to the willingness to buy (Maichum, *et al*, 2017). Willingness to buy appears when consumers get their perception of the value or positive belief for a product or service, giving rise to an attitude and a desire to buy (Perera, *et al.*, 2017).

One of the appropriate tools to promote environmental awareness is through social media, because the effective way to attract retail customers is by sharing experiences that they will receive or benefit from use of the product (Sorescu, *et al.*, 2010). Retail-related research is demonstrated by an online retailer or seller seeking to educate and offer, for example, stainless straw to the consumer. The experience and the benefits of that are shared to educate and increase the knowledge and strengthen the desire to buy environmentally friendly products for users to see, especially since one generation that actively use social media is the generation of millennials, which makes it part of the lifestyle as well as a reference in seeking information or before purchasing an item.

Social media marketing is a technology that facilitates interaction and can be used to market the product, because of the growing number of online consumers in line with the increase of social media users (Bashar, et al., 2012). Marketing products using effective social media is good for retailers, because it is cheaper when compared with offline promotions (Dehghani & Turner, 2015). So social media marketing can be a variable that can strengthen or weaken the association between green products and environmental variables such as the attitude towards consumer willingness to buy the steel straw.

### Literature Review

# Theory of Planned Behaviour

This theory illustrates that all behaviour is based on the first factor, namely *belief behaviour*. Any belief that underlies behaviour, such as pessimistic optimism, is an example of someone loosely basing their assessment of the results or the benefits that will be received on their belief system. Related research on buying interest against a green product, an attitude or a healthy lifestyle can impact consumer buying interest against a green product (Nezakati & Hosseinpour, 2016). This conviction is obtained from the evaluation of products on natural ingredients, bio-degradable, environmentally friendly, CFC-free (chlorofluorocarbon gases) and so forth (Ajzen, 2005).

The second factor in the TPB is subjective norms, this is social pressure, such as peers, parents and others. This pressure can be certain communications which then creates the motivation to do something. For example, when someone receives influence to buy *green products*, then the person is believed to be motivated in a positive way and behaviours arise as interest, even leading to purchase of the product (Ajzen, 2005). Related to this research, the effect can be delivered directly or through a medium.

The last factor in the TPB is the perception of self-control, which is usually determined by several factors, one of them the confidence to be gained from personal experience or from

others so that it can become a supporting or inhibiting factor in the emergence of certain behaviour (Ajzen, 2005). In this case, for example, it is informed either directly or through certain media, such as social media, so it can be a factor that supports or hinders the creation of behaviour.

# **Green Products**

In today's environment, green products can be one of the solutions to overcoming environmental pollution. According to Fan & Zeng (2011), green products are not limited to the end product alone, but involve all the elements of products such as materials used, the manufacturing process as well as product packaging, thereby, green products can be categorised into three sub-categories of product, production and packaging. Kumar & Ghodeswar (2015) support this view regarding the definition of green products in terms of life cycle, such as product design, raw material procurement, production, storage, distribution and use and post-use products. Green products or services are used by consumers to satisfy their desires and needs. Products produced through green technology do not cause harm to the environment (Rahman 2018). It is also disclosed by Albino *et al* (2009), that the green product is made to reduce the excessive use of resources and can decimate a negative impact on the environment.

The characteristics of a green product according to Gusai (2018) are:

- 1. Naturally grown products
- 2. Products that can be recycled or reused, and are biodegradable
- 3. Products made from natural materials
- 4. The products are made from recyclable materials and do not contain toxic chemicals
- 5. The chemicals used in the product are identified as not dangerous
- 6. Do not give negative impact to the environment
- 7. The products are not tested on animals
- 8. Environmentally friendly packaging can be used or replenished

# Environmental Attitude

Environmental attitude is a tendency to seek out and then respond to the action on the environment either positively or negatively (Rashid, 2009). Environmental awareness will likely lead to positive behaviours which influence purchase intentions towards *green products*, for further environmental awareness will be the automatic response from consumers in addressing the environmental problems that exist, it will affect consumption patterns and other matters related to the behaviour as an effort to preserve the environment (Chekima, *et al.*, 2015). Environmental determinants of environmental attitudes are consistent with research behaviour. Hal Ali, *et al.* (2011) and Greaves, *et al.* (2013) showed

environmental attitude as a core element in the environmental determinants of behaviour; environmental attitude is considered a contradictory problem in that a positive attitude and purchase of eco-friendly products will have no effect on consumer purchases for other needs.

# Social Media Marketing

According to Chi (2013), social media marketing is the connection between brand and consumer, and their channel offerings for specific transactions based on networking and social interaction. Marketing products in social media is effective for companies between it is cheaper than offline promotions (Dehghani & Turner, 2015). Social media opens a new world for retailers by providing a wide range of potential interactions with consumers (Uri, et al., 2013). The main motivation in the use of social media is the easy exchange of information between the user and seller, and it is very useful for consumers to get relevant ads sites in line with their wishes, perception of the value of the received information is crucial to consumer attitudes (Muntinga, et al., 2011).

# Willingness to Buy

Willingness to buy refers to the willingness of consumers to buy after receiving advertising messages (Cai et al, 2016). Willingness to buy appears when consumers get their perception of the value or positive belief for a product or service, giving rise to an attitude and a desire to buy (Perera, et al., 2017). The desire to buy is not only limited to willingness to pay, but also behaviour before and after the purchase is made, the marketing is an important strategy to sell products, but the company needs to carry out a couple of methods to attract the attention of consumers and promote their products, which will increase the interest in buying (Zhou Jiang & Xie, 2019).

#### Method

This study population is selected from a whole community in Balikpapan who care about the environment, so the population cannot be determined exactly. Determination of a minimum number, according to Hair *et al* (2014), is the number of samples, as the respondent must correspond to the number of indicator questions used in the questionnaire, with assuming  $n \times$  five observed variables (indicators) up to  $n \times 10$  observed variables (indicators). In this study, there are 14 items used in questions to measure four variables, so that the number of respondents is  $14 \times 7 = 98$  respondents.

The survey was condected online via social networking sites. The instrument (questionnaire) was placed on top of Google docs and a link is sent to the user to enter the instrument through the various social networking sites. This study used a *purposive sampling technique*, namely

elements of the population selected based on respondent's desire or respondents considered by the researchers to be representative of the population. Researchers discovered that the required information specified for respondents has information and criteria set by the researchers (Ferdinand, 2014). The samples used were taken from the population members that had the following characteristics:

- 1. The age of respondents had to be a minimum of 17 years, since the age of respondents was considered to fill out the questionnaire properly and appropriately.
- 2. The respondents are residents who live in the city of Balikpapan.

This study uses a green product  $(X_1)$  and environmental attitude  $(X_2)$  as the independent variable and social media marketing (Z) as a variable of moderation, and willingness to buy (Y) as the dependent variable. With the indicator as a measure of each variable as follows:

#### Green Products

Indicators for Green Products are adapted from (Santoso & Fitriani, 2017; D'Souza, et al., 2006):

- X<sub>1.1</sub> positive benefits of the use of green products, one of which is the turnover of stainless steel straws to benefit the environment.
- X<sub>1,2</sub> Straws of stainless steel performance is in accordance with the wishes of consumers.
- X<sub>1,3</sub> The composition of the contents: the materials used in stainless steel straws are safe to use in each period and do not damage the environment.
- X<sub>1,4</sub> The packaging on straws of stainless steel does not produce waste that can harm the environment.

# Environmental Attitude

The attitude of Environmental indicators is adapted from (Hedlund-de Witt, et al., 2014):

- X<sub>2.1</sub> A feeling of connectedness to nature that is bound to nature, so the desire to live in a more environmentally friendly fashion, such as being reluctant to use a plastic straw.
- X<sub>2.2</sub> Willingness to change is the desire for someone to change their lifestyle to be more environmentally based, one way is to switch from the use of plastic straws to using stainless steel straws.
- X<sub>2,3</sub> Instrumentalism is the belief that after having learned that plastic is a component that pollutes the environment, so it dominates the desire to use stainless steel straws.

# Social Media Marketing

Media marketing Social Indicators are adapted from (Assaad & Gómez, 2011):

- Z<sub>1.1</sub> Online Communities are online discussion groups for all matters relating to the environment and stainless steel straws.
- $Z_{1.2}$  Interaction is the existence of communication to provide information and recommendations related to stainless steel straws.
- Z<sub>1.3</sub> Content sharing is often the discovery of content use or sale of stainless steel straws uploaded on social media.
- Z<sub>1.4</sub> Accessibility, namely the public ease of access to social media to get information about the environment and related products, one of which is stainless steel straws.

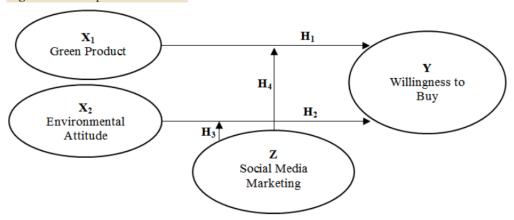
# Willingness to Buy

Indicators of consumer interest in buying are an adaptation of (Ferdinand, 2014), as follows:

- Y<sub>1.1</sub> Frequency of looking for information, consumers seeking information about stainless steel straws.
- $Y_{1.2}$  Desire to immediately buy will be higher, after getting information about stainless steel straws.
- Y<sub>1,3</sub> Presential interest, namely consumer emphasis on stainless steel straws and wanting to replace them if something happens to the product.

The conceptual framework on this research is as follows:

Figure 1. Conceptual Framework



The hypotheses in this study are:

H<sub>1</sub> : Green product has a positive and significant effect on the willingness to buy.

- H<sub>2</sub> : Environmental attitude has a positive and significant effect on the willingness to by.
- H<sub>3</sub> : Social media marketing moderates the relationship between green products and the pillingness to buy.
- H<sub>4</sub> : Social media marketing moderates the relationship between environmental attitudes towards willingness to buy.

# **Results and Discussion**

# Convergent Validity

Convergent validity is met if the scores obtained by two different instruments that measure the same concept show a high correlation. By using practical significance as criteria, then the minimum value of an indicator is in the range of 0.30 to 0.40, and has reached the minimum level for the interpretation of the structure and a good loading factor has a value above (Hair, et al., 2014). The test results of testing the validity of indicators of each variable can be displayed in the following table:

Table 1: Convergent Validity Testing Results

Indicator	Variables	Outer Loading	Standard Deviation (STDEV)	t Stat	Explanation 16
X1.1		0.689	0.082	8.390	valid
$X_{1.2}$	Green product	0.821	0,046	17.924	valid
X1.3	$(\mathbf{X}_1)$	0.784	0.057	13.781	valid
$X_{1.4}$		0.777	0.061	12.824	valid
X2.1	Environmental	0,367	1.179	2.050	valid
$X_{2,2}$	Environmental	0.826	0.056	14.362	valid
X2.3	Attitude (X <sub>2</sub> )	0.734	0.068	10.813	valid
$\mathbb{Z}_1$		0.757	0.082	8.679	valid
$\mathbb{Z}_2$	Social Media	0.580	0.060	12.784	valid
$\mathbb{Z}_3$	Marketing (Z)	0.735	0,026	31.786	valid
<b>Z</b> 4		0.640	0.063	12.084	valid
Y <sub>1</sub>	Willingness to Buy (Y)	0.710	0.120	14.811	valid
<b>Y</b> 2		0.766	0.069	10.588	valid
Y3		0.841	0.098	6.533	valid

Source: Data Processing Results, 2019.

Based on the table, results show that the value of convergent validity for each indicator as a measure of each of the variables is considered to have met the criteria. On the outer loading,

 $X_{2.1}$  shows the results of 0.367, which is the lowest value in the study of the convergent validity test, measurement still being done by involving  $X_{2.1}$  is connectedness to nature, which is considered to interpret the structure of the environmental variables attitude, which if it is associated with the theory of planned behaviour, suggests that behaviour influences the creation of confidence and underlying attitudes or behaviour in the future. In relation to this research, the belief creates a sense of attachment to nature, then underlying attitudes towards the environment.

# 1 Discriminant Validity

The discriminant validity test is intended to show that unrelated measures are not in fact related. Discriminant validity testing methods can be used as cross-loading between the indicator with the contract using the root of the average variance extracted (AVE). Discriminant validity of the measurement model is judged based on the measurement of cross loading of the constructs. If the correlation with the basic constructs for each indicator measurement is larger than the other constructs, then the latent constructs capable of predicting the indicators are better than the other constructs. This means that the indicators used to construct the latent constructs are valid.

Table 2: Loadings Cross Testing Results

	X <sub>1</sub>	X <sub>2</sub>	Z	Y
X <sub>1.1</sub>	0.688	0.429	0.448	0.448
X <sub>1.2</sub>	0.721	0.680	0,729	0.729
X1.3	0.785	0.420	0.571	0.571
X <sub>1,4</sub>	0.777	0.395	0.632	0.632
X2.2	0.658	0.854	0.370	0.579
X2.3	0.322	0.731	0.328	0.442
$\mathbf{Z}_1$	0.442	0.273	0.758	0.456
$\mathbb{Z}_2$	0.110	0.283	0.580	0.231
$\mathbb{Z}_3$	0.360	0.349	0.735	0.481
<b>Z</b> 4	0.245	0,303	0.640	0.362
Y <sub>1</sub>	0.463	0.453	0.495	0.708
Y <sub>2</sub>	0.454	0.434	0.469	0.766
Y3	0.708	0.599	0.415	0.842

Source: Data Processing Results, 2019.

The above analysis shows that the correlation constructs each indicator latent variables with greater validity than with other latent variables. It can be concluded that the model already meets the discriminant validity.

The second assessment is through Appendix Variance Extracted (AVE). Values of 0 and higher AVE demonstrate an adequate level of convergent validity (Hair, et al., 2014), which means that the latent variables account for more than half of the variance indicator.

**Table 3:** AVE

No.	Variables	AVE	Exp.
1	Green Product (X <sub>1</sub> )	0.6	valid
2	Environmental Attitude (X <sub>2</sub> )	0.5	valid
3	Willingness to buy (Y)	0.6	valid
4	Moderating $X_1 - Z - Y$	1.0	valid
5	Moderating $X_2 - Z - Y$	1.0	valid

Source: Data Processing Results, 2019.

The test results showed that the value of the whole construct showed AVE sufficient value in terms of convergent validity.

# Reliability

Composite reliability is used to test the reliability or the reliability value between indicators of the constructs that make it up. Reliability of composite value is said to be good, if the value is above 0.70 is recommended, but the value of 0.5-0.6 factors can be tolerated. In other words, the value of a good composite reliability shows that the discriminant validity has been reached. Reliability testing results can be seen in the following table:

Table 4: Reliability

Variables	Composite Reliability	Ket
$X_1$	0.9	reliable
$X_2$	0.7	reliable
Y	0.8	reliable
moderating effect	1.0	reliable
moderating effect	1.0	reliable

Source: data processing results, 2019.

In the composite output results, the reliabilit 20 whole has a value which indicates that the discriminant validity has been reached. Thus, it can be stated that all latent variables have a good level of reliability.

# Inner Evaluation Model

The main evaluation criteria for the structural model in SEM-PLS is based on the value of R <sup>2</sup> and the level and significance of the path coefficients. The purpose of the PLS-SEM-oriented approach to explaining variance dependent latent variables indicates R<sup>2</sup> level should be high. There is no common reference in the interpretation of the value of R<sup>2</sup> and this is based on the respective disciplines.

Table 5: The coefficient R<sup>2</sup>

Variables	R Square
Willingness to Buy	0.67

Source: Data Processing Results, 2019.

 $R^2$  value of 0.67 indicates that the variant variable Willingness to Buy can be explained by the variable green product, environmental attitude, and social media marketing at 67%. While the remaining 33% can be explained by other variables outside this research.

# The Results of the Analysis and Testing Coefficient Structural Model Line

The Structural model (inner model) is evaluated by looking at the value of coefficient parameters of the connectivity between the latent variables. Testing of the structural model (inner model) is made after the model of the relationship that is built in accordance with the data of this study observation and overall fitness model (goodness of fit model). Objective testing of the structural model is to determine the relationship between the latent variables designed in this study. From the results of the PLS model output, the structural model and hypothesis testing is done by looking at the path coefficient estimated value and the value of the critical point (*t-statistic*), significant at  $\alpha = 0.05$  and *p-value*. The entire structural model estimation method was presented as follows:

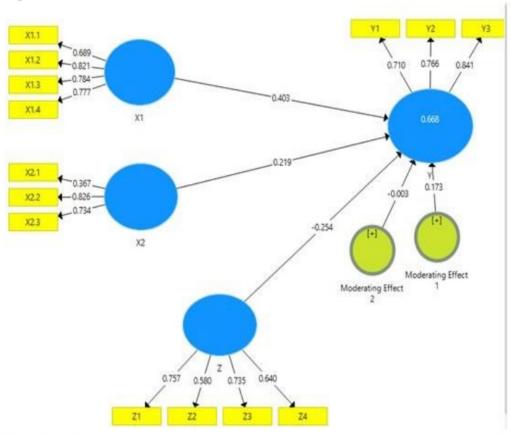


Figure 2. Structural Model

# **Hypothesis Test**

Testing the hypothesis in this study is a hypothesis testing the direct influence of the independent variables on the dependent, as can be seen in the test results between the study variables other than indicated by the path coefficients and *t-statistics* and *p-value*, which can also be seen on the track diagram PLS Algorithm and Bootstrapping path.

The moderating influence coefficient test track and research hypothesis aims to answer if the hypothesis can be accepted or rejected. Parameter hypothesis testing used the comparative value of t, i.e. t-count > t-table (1.96), and the significance or p-values < 0.05.

The path coefficients and testing hypotheses influence can be described as follows:

Table 6: Path Coefficient

	Origina l Sample (O)	t Statistics >1.96	p Value <0.05	Directions Hypothesi s	Informati on
Green product $(X_1)$ $\rightarrow$ Willingness to buy $(Y)$	0.40	4.82	0.00	Positive	Significant
Environmental attitude (X₂)  → Willingness to buy (Y)	0.22	2.44	0.00	Positive	Significant
Moderating Green product (X <sub>1</sub> )  → Social media marketing (Z)  → Willingness to buy (Y)	0.17	2.29	0.00	Positive	Significant
Environmental moderating attitude $(X_2) \rightarrow$ Social media marketing $(Z) \rightarrow$ Willingness to buy $(Y)$	-0.00	0.04	0.97	Negative	Not significant

Source: Processed Data, 2019

Based on the analysis of parameters of path coefficients and statistical t test and p value, it is indicated that there are three path coefficients with significant influence and there is a path coefficient that has no significant influence between the variables. Parameter hypothesis testing uses the comparative value of t, that is, if the value of the t-statistic > t-table (1.96) or p-value (<0.05), then  $h_0$  refused and  $H_1$  accepted.

Green product to the willingness to buy has a value coefficient lane of 0.40, the value of statistic of 4.82 (>1.96), and p-value of 0.00 (<0.05), thus showing that the green product has a significant positive effect on the willingness to buy.

Environmental attitude to the willingness to buy has coefficient value of 0.22, the value of t-statistic of 2.44 (>1.96), and 0.2 (<0.05), thus it can be concluded that the environmental attitude has a positive and significant effect on the willingness to buy.

Moderating effect of social media marketing among green product to the willingness to buy has a value coefficient lanes of 0.17, the value of the *t-statistic* of 2.29 (> 1.96) and the value of *p-value* of 0.02 (< 0.05), and it is therefore indicated that the moderating effect of social media marketing between green products has a positive and significant impact on the willingness to buy.

Moderating effect of social media marketing between environmental attitude toward willingness to buy has a value coefficient lane at -0.00 as well as the value of the *t-statistic* of

0.04 (<1.96), and the value of *p-value* of 0.97 (>0.05) and it is therefore indicated that the moderating effect of social media marketing between environmental attitude has a negative effect and no significant effect on willingness to buy.

#### Discussion

Based on the existing characteristics of the respondents in the previous discussion, this research shows that most respondents are women, with most respondents age range being 17-25 years. The discussion of descriptive data analysis results are as follows:

On the outer evaluation loading on each indicator as a measurement variable green product showed that the greatest value contained in  $X_{1,2}$  indicator is the performance of green products; this is because consumers expect that stainless steel straws has a good performance as a green product. While the outer loading on each indicator as a measure of environmental attitude variable found the greatest value on the indicator  $X_{2,2}$  was willingness to change, this is because the consumer awareness of the environmental crisis currently requires attention and action, while the actions consumers carry out in the form of lifestyle changes are based on further increasing the use of green products, reducing plastic use and disposing of waste appropriately.

Outer loading on each indicator as a measure of social media marketing variable shows that the largest value in the  $Z_1$  indicator is online communities, this is because the respondents received information that added insight and ultimately led to a higher environmental awareness. While the outer loading on each indicator as a measure variable showed willingness to buy  $Y_3$  namely preferential interest, this is because respondents prioritise the use of straws of stainless steel because of conscience, which has a positive influence on the environment. The results of testing the hypothesis in this study are:

# Effect of Green Product to the Willingness to Buy

Green product and Significant positive effect on the willingness to buy. Positive means higher green product, the higher the willingness to buy or purchases of interested respondents. This is because the use of green products saves energy, reduces or even eliminates the use of toxic resources, environmental pollution and waste (Azad & Laheri 2014). This is in line with research carried out by Kong *et al* (2014), which shows that there is a positive and significant green product perception of the consumer, with the indicator as a measurement variable green product in this study as the benefits of green products, performance of green products, the composition of the contents as well as packaging indicates that green products build positive perceptions for consumers, ultimately creating buying interest (Santoso & Fitriani, 2017).

**H**<sub>1</sub>: That *Green product* has a positive and significant effect on the willingness to buy be accepted.

# Attitude towards Environmental Influence Willingness to Buy

Environmental attitude has a positive and significant effect on the willingness to buy. And significant positive environmental attitude means that the higher this is, the higher the influence on consumers to buy. These results are supported by research carried out by Khaola, et al. (2014) and Rashid (2009) which shows positive influence and significant correlation between environmental attitude toward willingness to buy. In general, innovation is understood as the creation of new products or the improvement of existing products and is carried out through the process of creativity (Suarniki, et al, 2019). Environmental awareness increases public attention to the eco-label products and will increasingly affect attitudes towards protecting nature purchasing environmentally friendly products.

**H**<sub>2</sub> : That *Environmental attitude* has a positive and significant effect on the willingness to buy be accepted.

# The Influence of Social Media Marketing Influence Moderates the Relationship between Green Product to the Willingness to Buy

Based on the results of data analysis, it is shown that social media marketing in this study showed a positive and significant effect between gen products and the willingness to buy. Because there were no previous studies that use social media marketing as a moderating variable between variables related to the study, so the researchers assume the variables have a similar purpose. Research carried out Rahbar & Wahid (2011) showed results consistent with this study, which used variable based promotion of environmental factors and mentioned that this campaign can increase the respondents' knowledge of green products, supported by Chekima, et al. (2015) in which it is stated that to increase the knowledge and information received by respondents will increase the conviction to buy green products. Promotions based environments mentioned in the previous studies did not mention intermediaries or media used. While in this study the focus is on discussing social media marketing as the promotion of products or services through the means of social media as an intermediary for the delivery of information, because the shared variables have this in common, so that researchers can assume this represents the meaning to be conveyed.

**H**<sub>3</sub>: That *Social media marketing* moderates the relationship between green products to the willingness to buy be accepted.

# The Influence of Social Media Marketing Moderates the Relationship between Environmental Attitude toward Willingness to Buy

The results of hypothesis testing showed that social media marketing has a negative influence and is insignificant, indicating that social media marketing cannot be a moderating variable between environmental attitude toward willingness to buy. In the study Leonidou, et al. (2011) showed 92.5% environmental-based research identified by the developed countries such as America, Europe and Japan. This is contrary to the habits of society in developing countries such as Indonesia, this is in accordance with the Minister of Environment and Forestry (LHK) assessing that Indonesian public environmental awareness is low (Safio, 2018), especially in the location in this study, the city of Balikpapan, where people still have a high environmental awareness (Widya, 2019). Related to this research, that discussed the environmental attitude as including environment-based factors, we take into account that the facts of the contents of the campaign carried out are neutral and less attractive to consumers, which may have caused the results of the study to be insignificant (Kong Wilson, et al., 2014). This is not in line with research conducted by Litvine & Wüstenhagen (2011) and Ali, et al. (2011) which used a variable environment-based promotion to show the results that these variables have an indirect moderating influence on attitudes towards purchasing in a behaviour-based environment. The nature of this study does not address the media or intermediary in the promotion of environment-based factors, but due to the variable of interest held in common with social media marketing, so researchers can assume this represents the meaning to be conveyed.

**H**<sub>4</sub> : *Social media marketing* moderating the relationship between environmental attitude toward willingness to buy is rejected.

# Conclusions

- Green products have a positive and significant impact on the willingness to buy. This is
  in line with previous studies, in which the perception of positive messages from the use
  of green products will provide a good influence on the environment, thus creating
  interest in buying the product proficiency level, in this study, namely stainless steel
  straws.
- Environmental attitude showed a positive and significant effect on the willingness to buy, supported by previous studies, which influence the attitudes of respondent's environmental awareness and create interest in buying eco-friendly products as a contribution directly to nature.
- 3. Social media marketing has a positive effect and significant between green products to the willingness to buy. This is consistent with previous studies, in which the promotion will increase the knowledge of the respondents on the usefulness and impact of their

- attitude towards nature, so it ultimately creates buying interest in environmentally friendly products, related to the object of this research: stainless steel straws.
- 4. Social media marketing has a negative effect and no significance between environmental attitudes toward willingness to buy. This is in contrast with previous studies which use environment variable-based promotions to show the result that these variables have an indirect moderating influence on attitudes towards purchasing in a behaviour-based environment.

# Suggestions

- 1. For the Government to be more assertive in enforcing the rules already established in order to create a disciplined society.
- 2. For sellers to be more informative when creating the promotions, such as being active in providing information related to environmental conditions and benefits of the use of green products, which will increase knowledge and awareness of potential consumers who are expected to react to triggers increasing buying interest.
- 3. For the community to be expected to raise awareness of the environment as well as to be advised of the realisation of a direct contribution to the environment, such as prioritising the use of green products and disposing of garbage by sorting based on kind, because the change can begin with small things first.
- 4. For further research to find and add other indicators that can better represent the variables to be studied, especially on environmental variables attitudes.

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