The Influence of Green Brand towards Green Personal Care Product Purchase Decision with Green Knowledge as Moderating Variable (A Study on “Original Source” Consumers in Malang)

Dwivanny Retnaningtyas
Faculty of Economics and Business Universitas Brawijaya
dwivannyretna1107@yahoo.com

Supervisor:
Drs. Sunaryo, M.Si., Ph.D.

ABSTRACT

Being one of the industries that highly impacts the environment, the Fast-Moving Consumer Goods (FMCG) industry, especially the personal-care category is a growing business in Indonesia. Many FMCG businesses have shifted their business into a greener and more sustainable one. Even so, the amount of waste stockpiled in Indonesia is still the second largest in the world. This shows the low decision to purchase green product by Indonesian consumer. This research aimed to identify whether if Green Brand perception in Original Source brand impact consumers’ Green Product Purchase Decision and whether if Green Knowledge moderate the influence. The type of research is explanatory research with a quantitative approach. The data used was primary data in the form of a survey with a questionnaire as the data collection instrument. There are 150 respondents as the sample selected based on several criteria. The analysis method used is Multiple Regression Analysis (MRA) using the SPSS 23 software for Windows. The result of the research implies that Green Brand influence is positively significant to Green Product Purchase Decision. The second finding shows that Green Knowledge influence is able to moderate and weaken the relationship of Green Brand towards Green Product Purchase Decision.

Keywords: Green Brand, Green Knowledge, Purchase Decision

ABSTRAK

Menjadi salah satu industri yang berpengaruh tinggi terhadap lingkungan, industri barang konsumen yang bergerak cepat, terutama kategori perawatan diri, adalah
The Influence of Green Brand towards Green Personal Care Product Purchase Decision with Green Knowledge as Moderating Variable (A Study on “Original Source” Consumers in Malang)

Dwivanny Retnaningtyas
Faculty of Economics and Business Universitas Brawijaya
dwivannyretna1107@yahoo.com

Supervisor:
Drs. Sunaryo, M.Si., Ph.D.

ABSTRACT

Being one of the industries that highly impacts the environment, the Fast-Moving Consumer Goods (FMCG) industry, especially the personal-care category is a growing business in Indonesia. Many FMCG businesses have shifted their business into a greener and more sustainable one. Even so, the amount of waste stockpiled in Indonesia is still the second largest in the world. This shows the low decision to purchase green product by Indonesian consumer. This research aimed to identify whether if Green Brand perception in Original Source brand impact consumers’ Green Product Purchase Decision and whether if Green Knowledge moderate the influence. The type of research is explanatory research with a quantitative approach. The data used was primary data in the form of a survey with a questionnaire as the data collection instrument. There are 150 respondents as the sample selected based on several criteria. The analysis method used is Multiple Regression Analysis (MRA) using the SPSS 23 software for Windows. The result of the research implies that Green Brand influence is positively significant to Green Product Purchase Decision. The second finding shows that Green Knowledge influence is able to moderate and weaken the relationship of Green Brand towards Green Product Purchase Decision.

Keywords: Green Brand, Green Knowledge, Purchase Decision

ABSTRAK

Menjadi salah satu industri yang berpengaruh tinggi terhadap lingkungan, industri barang konsumen yang bergerak cepat, terutama kategori perawatan diri, adalah

Kata Kunci: Merek Hijau, Pengetahuan Hijau, Keputusan Pembelian

I. BACKGROUND

Today, the earth condition is significantly changing from good to worse. One of the main reasons is global warming. Global warming is a global temperature increase in the earth’s surface. This temperature increase causes slow destruction on the earth’s surface. In Indonesia, global warming has caused the overall temperature to increase 0.3°C along with the change of the pattern of the weather. It has also emerged threats to Indonesia’s biodiversity (World Wildlife Fund Indonesia, 2007).

As a result of the phenomenon, in this era every party needs to react and engage in actions in order to help to sustain the planet. One of them is to produce and to use eco-friendly product. According to Mei, Ling and Piew (2012), eco-friendly product or green product is a product that does not pollute the environment and contributes less negative impact compared to its other alternatives. Another explanation by Chen and Chai (2010) green product is a product that is environmentally sound in packaging as well as in its content which then its
environmental impact will be reduced. Based on the journal by Heck and Yidan (2013), a company that practice environmental responsibility will impress consumers’ mind and eventually will enhance the company’s brand image as well as brand awareness. As for the consumers, by using an eco-friendly product, they are playing a part in preserving the environment by reducing pollution, waste, and thus reducing the rate of disaster (Al Mamun et al., 2018).

From the explained phenomenon of global warming and its impact, many companies are starting to compete in innovation to create eco-friendly products that do not harm the environment and further destroy the earth. One of the industries that profoundly impact the environment is the Fast-Moving Consumer Goods (FMCG) industry due to the fact that environmental degradation is driven by unsustainable consumption habits of private household (Cruz and Prabawani, 2017). Fast-Moving Consumer Goods (FMCG) or Consumer Packaged Goods (CPG) are non-durable goods, quickly sold and usually are low in cost (Fouladivanda, 2013).

According to Statista (2018), a provider of market and consumer data, Indonesian cosmetics and personal care market are expected to grow annually by 7.2% in 2018-2021. It shows that personal care is one of the potential segments in Indonesia for fast moving consumer goods and is currently growing. To add, in the Fast-Moving Consumer Goods industry specifically personal care segment, there are plenty of companies who stand by their green values. As explained by Kline & Company (2008) in Ling (2013), the market of green personal care products in Asia is having a higher potential or opportunity to grow compared to the non-green personal care sector.

One of the brands with ‘green’ claims in Indonesia is a personal care brand established in mid-1990s that operates under its parent company, PZ Cussons. Original Source’s products include personal care and hygiene products that include shower gels, body butter, body mist, body scrub, hand wash and men’s products.
Original Source products are well-known for being natural, cruelty-free, and also for the youthful campaign. In Indonesia, Original Source products can be found in several selected supermarkets, convenient stores and pharmacist such as Guardian, Superindo, Hypermart, Carrefour, Giant, Watsons, Century and many more (PZ Cussons, 2017).

However, there are still not many green consumers in Indonesia. A journal article by Narula and Desore (2016) stated that a green consumer is a consumer who seeks for green product attributes that they think are able to give environmental benefits such as recyclable, without decreasing any part of the actual performance and quality of that product. The fact that there are not enough green consumers in Indonesia is proven by data released by Jambeck et al. (2015) that stated the amount of plastic waste stockpiled by Indonesian people is the second largest in the world after China. The lack of Indonesian green consumers also implies that there is not enough green product purchase decision.

The Model of Buyer Behavior by Howard and Sheth (1969) explains the way consumers behave before deciding to buy a certain product. This model is suitable to explain the purchasing behavior of FMCG consumers because FMCG are goods that are repeatedly bought by buyer, which is the focus of this specific model. This model explained how symbolic and significative stimuli inputs from a brand and how a customer perceives the message are included in customers’ purchase decision concerns. There were also several research that had been conducted in the past to identify the significance of the influence of brand towards purchase decision (e.g. Romdonny and Rosmadi, 2018; Arianty, 2016).

According to Rios et al. (2006), when a brand positions itself as a “green brand”, there are vigorous communications and differentiation that distinguishes that brand from its competitors by emphasizing its eco-friendly attributes. As to that matter, it is important for green consumers to
have knowledge in order to distinguish between green brand products and non-green brand products. It has also been stated by Laroche and Barbaro-Forleo (2001) that the customers of green brand are more likely to be more educated, which means those customers have gained more knowledge; hence the reason of why Green Knowledge (GK) is chosen to be the moderating variable of this research.

This research aims to identify whether if Green Brand perception in Original Source brand impact consumers’ Green Product Purchase Decision and whether if Green Knowledge of the consumer moderate the influence.

II. THEORETICAL REVIEW

Green Brand

Brand is a name, symbol or specific design or several combinations of elements designed to identify goods or products offered by a company. Brand is what distinguishes one product or services of a company to the other (Tengor et al, 2016). Brand can also be described as promises given by a company in order to consistently deliver the characteristic, benefit, and specific service to the customer (Abdullah and Tantri, cited by Kurnia, 2016). Mourad and Ahmed (2012) explained several aspects that were discussed in the perception of the green brand, which are green brand image, green satisfaction, green trust, and green awareness.

Green Knowledge

Knowledge is a relevant and important construct that influences how consumer gathers and arrange information, the amount of that information will be used to make a decision and determine how that consumer evaluate the goods or services (Haryadi, 2009). Consumers are expecting to get and receive environmental issues information which is reliable in order to boost their Green Knowledge and therefore facilitate green product purchases. (Geyer-Allely and Zacarias-Farah, 2003). There are numbers of studies that have reported the positive impact
of environmental knowledge towards consumers’ intention and actual purchase of green products (Mohd Suki, 2016). The indicators of Knowledge according to Haryadi (2009) are environmental/green knowledge, consumer’s awareness, and environmental regulation.

**Green Product Purchase Decision**

Based on a view by Gurau and Ranchhod (2005), a green product is a product that is manufactured based on an environmentally friendly procedure and is using toxic-free ingredients; a green product is also a product that is certified by recognized organizations. According to Bai et al. (2018), a product is considered as a green product based on different reasons such as its production and its usage. If seen from the production process, it is a green product because it went through the supply chain with green process and using green materials, although not being totally eco-friendly in terms of the usage.

Purchasing decision towards a product is closely related to consumer behavior. Based on a journal article by Hanaysha (2018), before making any purchase, there is a sequence of formatted choices by a consumer after he/she has a need and is willing to fulfill it. They should reach decisions in terms of purchasing such as purchase quantity, place of purchasing, time to buy, amount to spend, desired brand and model, and payment method. However, marketers can influence these decisions by providing information which may contribute to their assessment process.

Green Purchase Decision means to support companies that are addressing environmental issues to buy green products and social conformity, all in all to support green companies (Schlegelmilch et al., 1996). According to Simamora (2002) in Azmi (2016), every purchasing decision is related to four decisions, which are decision about the type of product, decision about the form of product, decision about the brand, and decision about the seller.
Figure 1: Research Framework

Source: Researcher, 2019

Based on the research questions and the empirical studies that had been done before, the hypothesis are:

H₁: Green Brand positively impacts Green Product Purchase Decision.

H₂: Green Knowledge positively impacts Green Product Purchase Decision.

H₃: Green Knowledge can moderate the influence of Green Brand towards Green Product Purchase Decision.

III. RESEARCH METHOD

Based on the research problem and the research purpose, this research is an explanatory research with quantitative method, adopting survey orientation. Everyone in Malang city who is the consumer of Original Source products is part of the population. This research used nonprobability sampling technique and the sampling procedure that is used in this research is judgment (purposive) sampling procedure. The criteria for the sample units are that respondent is at least 17 years old in age, is currently living in Malang, and have bought Original Source product at least once. The sample size required is 150 samples and will be using online distributed questionnaire as the data gathering instrument and will be conducted in Malang city.

The research instrument test is using validity and reliability test after passing pilot test. Then followed by classical assumption test consists of normality, multicollinearity, and heteroskedasticity test. Last, the data analysis will be conducted using the Multiple Regression Analysis, Coefficient of Determination, Goodness of Fit, and Hypothesis test.

IV. FINDINGS AND DISCUSSION

Respondent Characteristic

The majority of the respondent is female, with the percentage of 82.7% and the rest is male respondents, with the percentage of 17.3%. The majority of the respondents are within the age range of
17 up to 21 years old with the percentage of 68%. The majority of respondent’s latest education is high school with the percentage of 72% and the rest are respondent whose latest educations are bachelor / diploma / undergraduate with the percentage of 28%. The most occupation of the respondent is student, with the percentage of 89.3%. 49.3% of the respondents are people with the income of less than Rp 1,500,000,00 per month. This income group has the most respondents. The most reason the respondent bought green product is due to their support of the environmental protection and their drive for environmental responsibility with 47.3% of the respondents choosing this reason.

**Descriptive Analysis**

The Green Brand perception of Original Source perceived by consumers in Malang is already good. This can be explained based on the whole statements in the Green Brand variable. The option ‘agree’ were chosen the most with the average percentage of 48.13% with the average score of overall scoring is 3.81.

The Green Knowledge of Original Source consumer in Malang is already good. This can be explained based on the whole statements in the Green Knowledge variable. The option ‘agree’ was chosen the most with the average percentage of 53.33% with the average score of the variable is 4.01.

The Green Product Purchase Decision of Original Source consumer in Malang is good. This can be explained from the whole statements in the Green Product Purchase Decision variable. The option ‘agree’ was chosen the most with the average percentage of 48.90% with the average score of overall scoring of 3.96

**Validity Test**

Validity test is meant to identify the validity regarding the understanding between the concept and empirical reality. The r coefficient of each item is higher than 0.3 and are positive. So, it can be concluded that all of the items can be used to measure the research variables.

**Reliability Test**

Reliability test shows the level of stability, constancy and accuracy of
a measuring instrument that is used to know how far the measurement is relatively consistent when a repeat measurement is conducted. The alpha cronbach value for all variables are higher than 0.6. From that reason, all the variables used for this research are considered reliable.

**Classical Assumption Test**

First, Normality test is conducted to know whether or not if the residual value is distributed normally. The procedure is done with Kolmogorov-Smirnov test and seen from the normal probability plot. If the \( \text{sig. (p-value)} > 0.05 \) and the data distribution line is close to the diagonal line, then \( H_0 \) is accepted which means normality is fulfilled. The normal probability plot shows that the line representing the actual data distribution closely follows the diagonal and from the calculation result, the sig. is as big as 0.200 or higher than 0.05; \( H_0 \) is accepted and normality assumption is fulfilled.

Second, Multicollinearity test is done to find out that there is no strong relation or no perfect linear relation, or can be said that there is no relation between independent variables. The test result shows that the overall tolerance value > 0.1 and VIF value < 10. It can be concluded that multicollinearity did not happen between independent variables. That being said, the assumption of there is no multicollinearity is fulfilled.

Heteroscedasticity test is used to find out whether there is an inequality of residual deviation due to the size of the value of one of the independent variables, or if there is a difference in the value of variance with the increasing value of the independent variable. The test procedure is carried out by testing scatter plots. It is found that the view in the scatterplot diagram is spreading out and does not create any certain pattern. Therefore, heteroskedasticity did not occur.

**Multiple Regression Analysis**

Regression equation is used to know the form of the relationship between the independent variable and the dependent variable. By using the help of *SPSS for Windows ver 23.00*, the model regression as below was obtained:
Y = 1,678 X₁ + 1,324 X₂ - 2,540 X₁X₂

The obtained regression equation can be interpreted as such:

1. Green Product Purchase Decision will increase as big as 1,678 units for every added unit of X₁ (Green Brand). So, if Green Brand is increased by 1 unit, then Green Product Purchase Decision will increase as big as 1,678 units. In another word, the higher consumers’ green perception about a brand, the higher the purchase decision will be.

2. Green Product Purchase Decision will increase as big as 1,324 units for every added unit of X₂ (Green Knowledge). So, if Green Knowledge is increased by 1 unit, then Green Product Purchase Decision will increase as big as 1,324 units. In another word, the higher consumers’ environmental knowledge, the higher the purchase decision will be.

3. Green Product Purchase Decision will decrease as big as 2,540 units for every added unit of X₁X₂ (Green Brand*Green Knowledge). So, Green Brand*Green Knowledge can weaken the relationship between Green Brand with Green Product Purchase Decision. In another word, the higher consumers’ environmental knowledge, the lower the influence of consumers’ green perception about a brand towards the purchase decision.

Coefficient of Determination

Coefficient of determination is used to count the amount of influence or contributions of independent variable towards dependent variable. The result obtained is the number of adjusted $R^2$ (adjusted coefficient of determination) as big as 0.370. It means that 37% of the variable Green Product Purchase Decision will be influenced by its independent variables, which are Green Brand (X₁), Green Knowledge (X₂) and Green Brand*Green Knowledge (X₁X₂), while the rest of it being 63%; the variable Green Product Purchase Decision will be influenced by other
variables that are not discussed within this research.

**Goodness of Fit Test**

F test or model test is used to know whether or not if the result of the regression analysis is significant, in other words, whether or not if the expected model is fit. If the result is significant, then H$_0$ is rejected and H$_1$ is accepted, and if the result is not significant, then H$_0$ is accepted and H$_1$ is rejected.

The result shows that the value of F count is 30.141 while F table ($\alpha = 0.05$; df regression = 3; df residual = 146) is 2.666. Due to the fact that F count is higher than F table which is 30.141 > 2.666 or the value of sig. F (0.000) < $\alpha = 0.05$ then the regression analysis used is already fit/well.

**Hypothesis Test**

Hypothesis test prime purpose is to answer the hypotheses made by the researcher. If t count > t table or -t count < -t table, then the result is significant and means that H$_0$ is rejected and H$_1$ is accepted.

1. H$_1$: *Green Brand* positively impacts *Green Product Purchase Decision*.  
   T test between X1 (Green Brand) with Y (Green Product Purchase Decision) shows t count = 3.432, while t table ($\alpha = 0.05$; df residual = 146) is as big as 1.976. Due to the fact that t count > t table which is 3.432 > 1.976 then the influence of X1 towards Y is significant. This means H$_0$ is rejected and H$_1$ is accepted. Based on the statistical test, it shows that *Green Brand* has positive and significant influence towards *Green Product Purchase Decision*.

2. H$_2$: *Green Knowledge* positively impacts *Green Product Purchase Decision*.  
   T test between X2 (Green Knowledge) with Y (Green Product Purchase Decision) shows that t count = 2.967, while t table ($\alpha = 0.05$; df residual = 146) is as big as 1.976. Due to the fact that t count > t table which is 2.967 >
1,976 then the influence of X2 towards Y is significant. This means $H_0$ is rejected and $H_1$ is accepted. Based on the statistical test, it shows that Green Knowledge has positive and significant influence towards Green Product Purchase Decision.

3. $H_3$: Green Brand*Green Knowledge can moderate the influence of Green Brand towards Green Product Purchase Decision.

T test between X1X2 (Green Brand*Green Knowledge) with Y (Green Product Purchase Decision) shows that $t$ count = -2.540, while $t$ table ($\alpha = 0.05$ ; df residual = 146) is as big as 1.976. Due to the fact that $-t$ count > $-t$ table which is -2.540 > -1.976, then the influence of X1X2 towards Y is significant. Based on the statistical test, it shows that Green Brand*Green Knowledge has significant and negative influence towards Green Product Purchase Decision.

Variable Green Product Purchase Decision that is significant is concluding that the variable is a moderating variable, specifically quasi moderating variable due to the fact that X2 and X3 (X1X2) are both significant.

Based on the overall result, it can be concluded that independent variables has significant influences towards the dependent variable Green Product Purchase Decision, both simultaneously and partially.

Discussion

Based on the hypothesis test, it is seen that the variable Green Brand has a positive and significant influence towards Green Product Purchase Decision and more significant than Green Knowledge. When a brand is perceived as a green brand, it stimulates the consumers to decide buying the product. This can happen because brand is the first trait of a product that is seen and perceived by consumers. The characteristic, benefit, and specific service that are offered by a green brand can stimulate the decision-making behavior. A
consumer who intended not to buy green product, will eventually decide to buy green product due to its outstanding characteristic. This explanation is supported by Braimah and Twendeboah-Koduah (2011) in their journal stating that when Green brand awareness is low the impact of green brand awareness on purchase decisions is even lower. This means that when the perception or awareness on green brand is high, the impact it has on the purchase decision will be higher.

Based on the hypothesis test, the result shows that the variable Green Knowledge acts as a quasi moderator. Overall Original Source consumer in Malang claimed that they have good environmental knowledge. However, the relationship indicates a negative influence. This means that the relationship between Green Brand and Green Product Purchase Decision decreases as Green Knowledge rises. This could happen due to different knowledge that leads to different expectation. Each person’s perception can be different and it creates different expectations. This is supported by Haryanto and Budiman (2014) that state each individual can have diverse connotations in perceiving green product. One possibility is that people with higher environmental knowledge expect more of what has already been offered by Original Source as a green brand. They would rather decide on buying other brand that is greener according to them; hence the weakening effect. Haryanto and Budiman (2014) also state that environmental knowledge negatively moderates the relationship of brand
positioning and positive attitude towards green products. This means the higher the environmental knowledge of consumer, the impact of positioning a brand based on its ability to reduce negative impacts on the environment on the positive attitude towards green product will be lessen, which at the end, might have negative impact on the purchase decision.

V. CONCLUSION AND SUGGESTION

Based on the result of the conducted research, it can be concluded as such:

1. Green Brand (X1) has positive impact towards Green Product Purchase Decision (Y).
2. Green Knowledge (X2) has positive impact towards Green Product Purchase Decision (Y).
3. Green Brand*Green Knowledge (X1X2) could moderate the impact of Green Brand towards Green Product Purchase Decision (Y), especially in weakening the relationship.

Based on this research result, there are several suggestions that can be suggested:

1. Based on the first finding, Original Source must improve in terms of giving the public transparency about their effort in sustaining the earth as well as the result. This can be applied through building a green Corporate Social Responsibility (CSR) and create dropping site for used packaging in order to create better perception towards Original Source as a green brand that is responsible.
2. Based on the second finding, Original Source is suggested to make sure the consumers are
constantly exposed to the environmental information by spreading awareness about environmental regulation through social media platforms in order to improve consumers’ environmental knowledge and therefore increasing the purchase decision.

3. Based on the third finding, Original Source must be able to know the exact green product expectation from environmentally educated consumers by conducting research that enables it to obtain real and deep insights from consumers which then can be converted into product improvements. Another way is to obtain more eco-labels and improve their product packaging to lessen waste.

4. Researcher is suggested to add the research variable such as promotion or price.

5. Researcher is suggested to broaden the research by conducting research on different population and sample.

REFERENCES


