The Influence of Eco-Brand, Eco-Labelling and Environmental Advertisement on Consumer Purchasing Behavior through Brand Image

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Abstract

The high level of environmental concern will encourage individual to consume environmentally friendly products and encourage company to implement the green marketing strategy. This study aims to examine the direct and indirect effect of green marketing tools namely eco-label, eco-brand and environmental advertisement on consumer purchase behavior with brand image as an intervening variable. The sampling method used is purposive sampling technique through questionnaire with 115 respondents who are consumers of Ades in Semarang. The data analysis method used is path analysis. The results of this study show that eco-brand and eco-labelling have positive and significant effect on consumer purchase behavior while environmental advertisement has negative and significant effect on consumer purchase behavior. Eco-brand, eco-labeling and environmental advertisement have positive and significant effect on consumer purchase behavior through brand image. Brand image has a role as an intervening variable between eco-brand, eco-labeling and environmental advertisement to consumer purchase behavior.

INTRODUCTION

The seriousness of the government and industry players in dealing with environmental issues has generated the idea that synergy between environment and industrialization is needed. As the result, The United Nations General Assembly in 2015 formed the formulation of Sustainable Development Goals or SDGs, which is based on an integrated development approach consisting of three interconnected dimensions (economic, social and environmental sustainability). In order to achieve these goals and dimensions, structural economic transformation is needed in order to support the transition to a green and sustainable economy (Yiu & Saner, 2017).

Green marketing then emerged as a solution developed by marketers to support the realization of green and sustainable economy. Marketing is defined as social activity that involves the relationship between producers and consumers (Wahyono, 2011). The result of this social activity is the creation and exchange of products and values for individuals (Wibowo, 2010). In other words, green marketing is an alternative strategy for companies to run a profitable and profit-oriented business while having an environmental perspective.

The ultimate goal for green marketing is to create two bottom lines; the first is for profit and the second for social responsibility (Mourad & Ahmed, 2012). On the other hand, consumers who show a higher level of environmental awareness will make purchasing decisions of environmentally friendly products increase more compared to products that pay less attention to this issue (Waskito & Harsono, 2012). Caring for environment by using environmentally fri-
endly products is not only the responsibility of consumer, companies also need to being environmentally friendly as well (Handayani, 2012). Thus, it is no wonder that many companies try to create green brands or environmentally friendly brands.

Green marketing tools such as eco-label, eco-brand and environmental advertisement will make easier perception and awareness of green products attributes and characteristics, consequently, guiding them into purchasing environmentally-friendly products (Rahbar & Wahid, 2011). Several studies have been conducted to see the effect of green marketing tools such as eco-brand, eco-labeling and environmental advertising on consumer purchasing behavior.

The results have shown that eco-brand has a significant and positive influence on consumer purchasing behavior (Ahmadi et al., 2015; Prastiyo, 2016; Chin et al., 2017). There are several studies that have also shown that there is a positive and significant effect of eco-labeling on consumer buying behavior (Juwaheer et al., 2012; Ahmadi et al., 2015; Liu et al., 2017). Environmental advertisement is also another dimension of green marketing tool that has a positive and significant effect on consumer purchasing behavior (Delafrooz, 2014; Sabir et al., 2014; Anjani & Ni Made, 2016; Prastiyo, 2016).

Although several studies have shown a positive influence between green marketing tools and consumer purchasing behavior, several other studies have actually shown different results. According to prior study by Delafrooz et al. (2014), eco-brand has the least effect on consumer purchasing behavior. The results of research conducted by Hwang et al. (2016) also show that eco-label doesn’t have a significant effect on consumer purchasing behavior. The same result is also shown in a study obtained by Hornibrook et al. (2013). There’s no significant effect of eco-label on consumer purchasing behavior in the same study due to the lack of awareness and understanding of eco-label, social and cultural influences and the heterogeneous nature of consumers.

On the other hand, study by Rahbar and Wahid (2011) has proven that environmental advertisement doesn’t have a significant influence on consumer purchasing behavior in Penang, Malaysia. A study obtained by Nursanti and Melissa (2011) has shown similarity with the study by Rahman and Wahid (2011). One of the factors contributing to the lack of impact of environmental advertisements on consumer purchasing behavior is the inability of the ad itself to communicate green products. Therefore, further research is needed to explain the causal relation between eco-label, eco-brand and environmental advertisement on consumer purchasing behavior.

In Indonesia, some companies start to implement green marketing strategy and green product development, one of them is Ades, a brand of pure bottled water by PT Coca Cola Amatil Indonesia. Green marketing tools such as eco-labeling, eco-brand and environmental advertisements can be found in Ades. However, in 2017, Ades sales has reached Rp. 464 billion and that number is decreased by 14% compared to sales in the previous year which reached Rp. 565 billion. Meanwhile, Aqua (PT Tirta Investama) has been ranked first in Top Brand Index (TBI) with its total TBI’s value is more than 10% and dominates market share of bottled drinking water in Indonesia over the past few years. In other side, Ades (PT Coca Cola Amatil Indonesia) consistently stays in fourth place after Vit (PT Buana Tirta Abadi) and Club (PT Tirta Tama Bahagia). This is not in line with the results of the research stated above that green marketing tool has a significant and positive effect on consumer purchasing behavior.

In accordance with description above, researcher is interested in conducting research related to the influence of green marketing tools on consumer purchasing behavior. The researcher choose brand image to be used as intervening variable in this research. In other side, brand is important for companies to show the value of offered products (Khasanah, 2013). Products or services that have brands can provide value-added (Farida, 2014).

Broadly speaking, brand image can be considered as the type of associations that come to consumer’s mind when remembering a particular brand (Ecstasia & Mafukkah, 2018). So there is a close and interrelated relationship between brand image and brand association in which this established associations can shape brand image (Puteara & Wahyono, 2018). In addition, a good brand image on a product can influence consumers to talk about the product to other consumers (Naufal & Mafukkah, 2017). The image of the brand is also related to attitudes in the form of beliefs and preferences towards a brand (Cahyani & Surrasawati, 2016).

Previous studies have proven the relationship between brand image and consumer purchasing behavior. The results showed that brand image will grow stronger in the mind of consumer and become part of consumer purchasing behavior (Malik et al., 2013; Sivanesan, 2014; Rachmadini & Ronny, 2015). The reason for
choosing brand image as an intervening variable is also supported by previous studies which stated that eco-brand, eco-labeling and environmental advertisement can influence consumer purchasing behavior through brand image (Nagar, 2015; Kennedy & Sommer, 2016; Schmidt et al., 2017).

**Hypothesis Development**

There are several studies that have been conducted to see the effect of eco-brands on consumer purchasing behavior. The results showed that eco-brands have a significant and positive influence on consumer purchasing behavior (Delafrooz, 2014; Ahmadi et al., 2015; Prastiyo, 2016; Chin et al., 2017). Therefore, the research hypothesis is developed as follows:

H1: Eco-brand has a positive and significant effect on consumer purchasing behavior.

The results of some studies have proven that eco-labeling has a positive and significant effect on consumer purchasing behavior (Juwheer et al., 2012; Ahmadi et al., 2015; Liu et al., 2017). However, there are other research results that do not support the existence of a positive relationship between eco-labeling and consumer purchasing behavior. The results showed that eco-labeling doesn't not have a significant effect on consumer purchasing behavior (Hornibrook et al., 2013; Hwang et al., 2016). Therefore, the research hypothesis is developed as follows:

H2: Eco-labeling has a positive and significant effect on consumer purchasing behavior.

The other green marketing tools that can also influence consumer buying behavior is environmental advertisement. The results showed a positive influence of environmental advertisement on consumer purchasing behavior (Delafrooz, 2014; Sabir et al., 2014; Anjani & Ni Made, 2016; Prastiyo, 2016). On the other hand, there are results of research that prove that the environmental advertisement doesn't have a significant influence on consumer purchasing behavior (Nursanti & Melisa, 2011; Rahbar & Wahid, 2011). Therefore, the research hypothesis is developed as follows:

H3: Environmental Advertisement has a positive and significant effect on consumer purchasing behavior.

A study conducted by Kennedy and Sommer (2016) shows that green brands or environmentally friendly brands can build strong brand image in the mind of consumers and increase the desire to buy products. Therefore, the research hypothesis is developed as follows:

H4: Eco-brand has a positive and significant effect on consumer purchasing behavior through brand image.

Meanwhile, Schmidt’s et al (2017) study proves that the right use of eco-labeling will increase brand knowledge and shape brand image. This brand image will then positively influence consumer buying behavior and preferences. Therefore, the research hypothesis is developed as follows:

H5: Eco-labeling has a positive and significant effect on consumer purchasing behavior through brand image.

Nagar’s (2015) study concludes that attitude towards environmental advertising or green advertising will have a direct and positive effect on brand image. The results of this study also state that green advertising can play an important role in building a brand image so that it will lead to a greater intention to buy the product advertised. Therefore, the research hypothesis is developed as follows:

H6: Environmental advertisement has a positive and significant effect on consumer purchasing behavior through brand image.

The results of study by Malik et al. (2013) shows that brand image will automatically grow stronger in the mind of consumer and become part of their buying behavior when consumers are aware of a brand and they have a good perception of the brand. This proves that brand image has a strong influence on consumer purchasing behavior (Sivanesan, 2014; Rachmadini & Ronny, 2015). Therefore, the research hypothesis is developed as follows:

H7: Brand image has a positive and significant effect on consumer purchasing behavior.

**METHOD**

In this study, the population is all consumers of drinking water Ades brand in Semarang. As the population is not certainly known, an iteration formula is used and a sample of 115 respondents is obtained. The sampling technique used is purposive sampling by considering that the sample used is Ades consumers in Semarang who had purchased Ades products more than twice. Methods of collecting data are questionnaires and documentation. The data are analyzed by instrument test (validity and re-
liability), descriptive percentage analysis, classic assumption test, and path analysis using IBM SPSS Statistics 23.

Research variables include dependent variables, independent variables and intervening variables. The dependent variable in this study is consumer purchasing behavior with indicators: (1) Information seeking; (2) Willingness to buy products; (3) Post-purchase behavior (Rachmadini & Ronny, 2015; Dewi and Rahyuda, 2018). The independent variables in this study include: eco-brand, eco-labeling and environmental advertisement. Eco-brands are measured by indicators: (1) Eco-brand awareness; (2) Eco-brand as an attraction; (3) Benefits of eco-brands (Bougherara & Combris, 2009; Sugiarta et al., 2017).

While eco-labeling is measured by indicators: (1) Eco-label awareness; (2) Understanding of the meaning of eco-label; (3) Trust in eco-labels (Rahbar & Wahid, 2011; Sugiarta et al., 2017). Environmental advertisements variable is measured by indicators: (1) Advertising becomes an information guide; (2) Execution framework; (3) Impression of advertising (Banarjee et al., 1995; Karna et al., 2001). The intervening variable in this study is brand image with indicators: (1) Company image; (2) Product quality; (3) Brand uniqueness (Li et al, 2011; Jalilvand and Neda, 2012).

RESULT AND DISCUSSION

Validity and Reliability Test

Validity and reliability tests are used to test research instruments. The results of the validity test show that as many as 45 questions are valid with \( R_{\text{runt}} \) value > \( R_{\text{Table}} \) value (0.361). While the reliability test results show that all research variables are declared reliable because the Cronbach's Alpha value is > 0.70.

Classic assumption test

In this study, the classical assumption test included normality tests, multicollinearity and heteroscedasticity.

Normality Test

Normality test in this study uses the P-Plot graph and the non-parametric statistical test of Kolomogorov-Smirnov (K-S). The results of the P-Plot graph show that the spread of data (points) on the diagonal axis of the normal probability plot (P-P plot) forms a pattern that follows the direction of the diagonal line. This shows that the data have normal distribution and the regression model meets the assumptions of normality.

Based on table 1, the value obtained from the normality test using the Kolomogorov-Smirnov (K-S) non-parametric statistical test is 0.686 and Asymp. Sig. (2-tailed) is 0.734. Because the value of Asymp. Sig. (2-tailed)> 0.05, then the residual data is declared to be normally distributed.

Multicollinearity Test

The results of multicollinearity test in table 2 below show that the values obtained by each variable have exceeded 0.1 for tolerance value and less than 10 for VIF value. Therefore, these results can be interpreted that there is no multicollinearity between independent variables in this regression model.

Heteroscedasticity Test

Heteroscedasticity test in this study uses two ways, namely Scatterpott graph analysis and Glejser test. The Scatterpott chart shows that the graph does not have a specific pattern and the points are spread unevenly above or below the number of 0 on the Y axis. Therefore, it can be concluded that there is no heteroscedasticity in the regression model used in this study. While the results of the regression test shown in table 3 below show that the significance value obtained by each independent variable has exceeded the specified significance value of 0.05. Therefore, these results can be interpreted that there is no heteroscedasticity in this regression model.

Hypothesis testing

To test the truth of the hypothesis that has been proposed in this study, the researcher conducted two methods of analysis, namely the partial significance test (t test) and path analysis (Path Analysis).
Partial Signification Test (T Test)
The tests are carried out using a value of 0.05 significance ($\alpha = 5\%$). The decision-making criterion used in testing this hypothesis is if the probability number is $> 0.05$, the regression coefficient is not significant, which means the hypothesis is rejected. This shows that partially the independent variable does not have a significant effect on the dependent variable. Conversely, if the probability of significance is $< 0.05$, then the regression coefficient is significant which means the hypothesis is accepted. This shows that partially the independent variable has a significant influence on the dependent variable.

The direct effect of eco-brand on consumer purchasing behavior
According to the results of the partial statistical test (t test) of eco-brand variable on consumer purchasing behavior, it is obtained 0.016 of significant value. As the significant value is less than the specified alpha ($\alpha$) which is 0.05, then H1 which states "Eco-brand has a positive and significant effect on consumer purchasing behavior" is accepted.

Table 2. Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
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<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
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<td>3.378</td>
<td>-2.581</td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>Eco_brand</td>
<td>.131</td>
<td>.131</td>
<td>.266</td>
<td>2.457</td>
<td>.016</td>
</tr>
<tr>
<td>Eco_Labelling</td>
<td>.164</td>
<td>.164</td>
<td>.322</td>
<td>2.825</td>
<td>.006</td>
</tr>
<tr>
<td>Environmental_Advertisement</td>
<td>.123</td>
<td>.123</td>
<td>.022</td>
<td>.222</td>
<td>.825</td>
</tr>
<tr>
<td>Citra_Merek</td>
<td>.151</td>
<td>.151</td>
<td>.225</td>
<td>2.104</td>
<td>.038</td>
</tr>
</tbody>
</table>

a. Dependent Variable: perilaku_pembelian_konsumen

Table 3. Glejser Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
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<td>Environmental_Advertisement</td>
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<td>Citra_Merek</td>
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<td>.089</td>
<td>.134</td>
<td>.822</td>
</tr>
</tbody>
</table>

a. Dependent Variable: RES2

Table 4. T-test Results

<table>
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<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-8.716</td>
<td>3.378</td>
<td>-2.581</td>
<td>.011</td>
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<tr>
<td>Eco_brand</td>
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<td>.131</td>
<td>.266</td>
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<td>.3322</td>
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<td>Environmental_Advertisement</td>
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<td>Citra_Merek</td>
<td>.318</td>
<td>.151</td>
<td>.225</td>
<td>2.104</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Perilaku_Pembelian_Konsumen
The direct effect of eco-labeling on consumer purchasing behavior

According to the results of the partial statistical test (t test) of eco-labeling variable on consumer purchasing behavior, the obtained significant value is 0.006. As the significant value is less than the specified alpha (α) which is 0.05, then H2 which states "Eco-labeling has a positive and significant effect on consumer purchasing behavior" is accepted.

The direct influence of the environmental advertisement on consumer purchasing behavior

According to the results of the partial statistical test (t test) of the variable environmental advertisement on consumer purchasing behavior, the obtained significant value is 0.825. As the significant value is more than the specified alpha (α) which is 0.05, then H3 which states "Environmental advertisement has a positive and significant effect on consumer purchasing behavior" is rejected.

Direct influence of brand image on consumer purchasing behavior

According to the results of the partial statistical test (t test) of the brand image variable on consumer purchasing behavior, the obtained significant value is 0.038. As the significant value is less than the specified alpha (α) which is 0.05, then H7 which states "Brand image has a positive and significant effect on consumer purchasing behavior" is accepted.

Path Analysis

The influence of eco-brand, eco-labeling, and environmental advertisement on brand image (Model 1).

The following is the calculation of the path coefficient of the independent variable and the intervening variable used in the model equation:

**Table 5. R Square Calculated Value in Model 1.**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tr>
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<td>.815+</td>
<td>.665</td>
<td>.656</td>
<td>2.190</td>
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</tbody>
</table>

Table 5 and 6 show the value of path coefficient of independent variables and dependent variables which can be arranged in the regression equation model 1 as follows:

\[ Y_1 = 0.125X1 + 0.398X2 + 0.375X3 + e \]

From the regression equation model 1 can be concluded:

Eco-brand, eco-labeling and environmental advertisement have a positive relationship and are directly proportional to brand image. This shows that the stronger the eco-brand, eco-labeling and the environmental advertisement on Ades products, the more increasing brand image owned by Ades.

To find out the residual value (e) of the regression model 1, then the formula \( e_1 = \sqrt{1-R^2} \) is used which then obtains a residual value of \( e_1 = \sqrt{(1-0.655)} = \sqrt{0.335} = 0.579 \). It shows that the variance value of brand image which cannot be explained by eco-brand variables, eco-labeling and environmental advertisement is 0.579.

The influence of eco-brands, eco-labeling, the environmental advertisement on Consumer Purchasing Behavior (Model 2)

The following is the calculation of the path coefficient of the independent variable and the intervening variable used in the model equation.

**Table 6. Calculation on the Effects of Eco-Brand, Eco-Labeling and Environmental Advertisement on Brand Image in Model 1.**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
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<td>Eco_brand</td>
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<td>.125</td>
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<td>Eco_Labelling</td>
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<td>.096</td>
<td>.398</td>
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<td>Environmental_Advertisement</td>
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<td>.071</td>
<td>.375</td>
<td>4.608</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Citra_Merek
Table 7. R Square Calculated Value in Model 2

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.761a</td>
<td>.580</td>
<td>3.483</td>
</tr>
</tbody>
</table>

Model Summary

Table 7 and 8 show the value of path coefficients of independent variables and dependent variables which can be arranged in the model 2 of regression equation as follows:

\[ Y_2 = 0.266X_1 + 0.322X_2 + 0.022X_3 + 0.225Y_1 + e_2 \]

From the model 2 of regression equation, the conclusion can be drawn:

The regression equation means that the eco-brand, eco-labeling and environmental advertisement variables have a positive relationship and are directly proportional to consumer purchasing behavior. This shows that the stronger the eco-brand, eco-labeling and the environmental advertisement on Ades products, the more increasing of consumer purchasing behavior towards Ades products.

To find out the residual value (e) of the model 2 of regression equation, the formula \( e^2 = \sqrt{1 - R^2} \) is used which then obtains a residual value of \( e^2 = \sqrt{1 - 0.580} = \sqrt{0.42} = 0.648 \). This shows that the variance value of brand images that cannot be explained by eco-brand variables, eco-labeling and environmental advertisement is 0.648.

Based on the calculation of model 1 and model 2 regression equations, it can be concluded that the regression from this study are as follows:

\[ Y_1 = 0.125X_1 + 0.398X_2 + 0.375X_3 + e_1 \]

\[ Y_2 = 0.266X_1 + 0.322X_2 + 0.022X_3 + 0.225Y_1 + e_2 \]

Table 8. Calculating the Effect of Eco-Brand, Eco-Labeling and Environmental Advertisement on Brand Image in Model 2:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-8.716</td>
<td>3.378</td>
<td>-2.581</td>
<td>.011</td>
</tr>
<tr>
<td>Eco_brand</td>
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<td>Citra_Merek</td>
<td>.318</td>
<td>.151</td>
<td>2.104</td>
<td>.038</td>
</tr>
</tbody>
</table>

Indirect influence of X1 (Eco-Brand) on Y2 (Consumer Purchasing Behavior)

The results of the IBM SPSS Statistics 23 program indicate that the direct effect of eco-brand on brand image is represented by \( \beta_1 \) of 0.125. The results of the IBM SPSS Statistics 23 program indicate that the direct effect of eco-brand on consumer purchasing behavior is represented by \( \beta_4 \) which is 0.266. The indirect effect of eco-brand variables on consumer purchasing behavior can be seen by multiplying the path coefficient of eco-brand on brand image (\( \beta_1 \)) and path coefficient of brand image on consumer purchasing behavior (\( \beta_7 \)). The results of the multiplication then obtained a value of 0.125 x 0.225 = 0.028 which is represented by \( \beta_1 \times \beta_7 \).

The total path coefficient of the indirect influence of eco-brand on buying behavior is obtained by summing the direct effect of eco-brand and eco-brand indirect influence on consumer purchasing behavior. That is \( \beta_4 + (\beta_1 \times \beta_7) = 0.266 + 0.028 = 0.294 \).

It is known that the total path coefficient of eco-brand indirect influence on consumer purchasing behavior is 0.294, while the path coefficient of direct eco-brand influence on consumer purchasing behavior is 0.266. As the total indirect path coefficient (0.294) > direct path coefficient (0.266), it can be concluded that H4 which states "Eco-brand has a positive and significant effect on consumer purchasing behavior through brand image" is accepted.

Indirect influence of X2 (Eco-labeling) on Y2 (Consumer Purchasing Behavior)

The results of the IBM SPSS Statistics 23 output program indicate that the direct effect of eco-labeling on brand image is represented by \( \beta_2 \) which is 0.398. The results of the IBM SPSS Statistics 23 output program indicate that the direct effect of eco-Labeling of consumer purchasing behavior can be seen by multiplying the path coefficient of eco-labeling on brand image (\( \beta_2 \)) and path coefficient of brand image on consumer purchasing behavior (\( \beta_7 \)).
behavior represented by $\beta_5$ is 0.322. The indirect effect of eco-labeling variable on consumer purchasing behavior can be known by multiplying the path coefficient of eco-labeling on brand image ($\beta_2$) and path coefficient of brand image on consumer purchasing behavior ($\beta_7$). The results of the multiplication then obtained a value of 0.398 x 0.225 = 0.089 which is represented by $\beta_2 \times \beta_7$.

The total path coefficient of the indirect influence of eco-labeling on purchasing behavior is obtained by summing the direct effect of eco-labeling and the indirect effect of eco-labeling on consumer purchasing behavior namely $\beta_5 + (\beta_2 \times \beta_7) = 0.322 + 0.089 = 0.411$.

It is known that the total path coefficient of eco-labeling indirect influence on consumer purchasing behavior is 0.411, while the path coefficient of the direct effect of eco-labeling on consumer purchasing behavior is 0.322. As the total indirect path coefficient (0.411) > direct path coefficient (0.322), it can be concluded that H5 which states “Eco-labeling has a positive and significant effect on consumer purchasing behavior through brand image” is accepted.

Indirect influence of X3 (Environmental Advertisement) on Y2 (Consumer Purchasing Behavior)

The results of the IBM SPSS Statistics 23 output program indicate that the direct effect of the environmental advertisement on brand image is represented by $\beta_3$ of 0.375. The results of the IBM SPSS Statistics 23 output program indicate that the direct influence of the environmental advertisement on consumer purchasing behavior represented by $\beta_6$ is 0.022. The indirect effect of the variable environmental advertisement on consumer purchasing behavior can be determined by multiplying the path coefficient of the environmental advertisement to brand image ($\beta_3$) and the path coefficient of the brand image of consumer purchasing behavior ($\beta_7$). The results of the multiplication then obtained a value of 0.375 x 0.225 = 0.084 represented by $\beta_3 \times \beta_7$.

The total path coefficient of indirect influence from the environmental advertisement on purchasing behavior is obtained by summing the direct influence of the environmental advertisement and the indirect influence of the environmental advertisement on consumer purchasing behavior, that is $\beta_6 + (\beta_3 \times \beta_7) = 0.022 + 0.084 = 0.106$.

It is known that the total path coefficient of the indirect influence of the environmental advertisement on consumer purchasing behavior is 0.106, while the path coefficient of the direct influence of the environmental advertisement on consumer purchasing behavior is 0.022. As the total indirect path coefficient (0.106)> direct path coefficient (0.022), it can be concluded that H6 which states “Environmental advertisement has a positive and significant effect on consumer purchasing behavior through brand image” is accepted.

CONCLUSION AND RECOMMENDATION

The results of this study have proven that eco-brand and eco-labeling have a positive effect on consumer purchasing behavior. The better and stronger features of eco-brand and eco-labeling which are owned by Ades, more convinced the consumers feel to buy Ades products. However, the environmental advertisement has a negative effect on consumer purchasing behavior. Brand image is also proven to have a role as an intervening variable among green marketing tools in the form of eco-brands, eco-labeling and environmental advertisements on consumer purchasing behavior. This means that brand image can mediate the influence of green marketing tools on consumer purchasing behavior of Ades products. If the green marketing tool is getting better, it will increasingly influence the brand image. Therefore, it will have an impact on the increasing consumer purchasing behavior of Ades products.

Suggestion for companies are continuing innovation for their products and improving strategies and concepts in advertising their products. For further researchers, it is recommended to consider other variables that can influence consumer’s purchasing behavior and related to green marketing, such as: eco-innovation, green perceived value and green perceived risk.
REFERENCES


