Effect of Green Advertising, Green Product on Purchase Decisions with Brand Image as Intervening Variable

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Abstract
This research aims to test the influence of Green Advertising and Green Product on Purchasing Decisions by using Brand Image as an intervening variable. The sample in this research were Daihatsu Sigra users in Bogor Regency. The sampling method uses non-probability sampling. The analytical method used are, validity test, reliability test, and path test. Based on the results of data analysis can be concluded that (1) Green Advertising does not have a positive and significant effect on Purchasing Decisions, (2) Green Products have a positive and significant influence on Purchasing Decisions, Green Advertising has a positive and significant effect on Brand Image, Green Products has a positive and significant influence on Brand Image, Brand Image has a positive and significant influence on Purchasing Decisions, Brand Image is able to mediate the effect of Green Advertising on Purchasing Decisions.

Keywords: Green Advertising, Green Product, Brand Image, Purchase Decision

JEL Classification: M37, O14, M31

INTRODUCTION
In this modern era, in line with the development of the physical development of cities and industrial centers, as well as the development of transportation, the air quality also undergoes changes caused by air pollution, or, as a change in the composition of the air from its normal state; namely the entry of pollutant substances (in the form of gases and small particles/aerosols) into the air in a certain amount for a long period of time, so that it can interfere with human, animal and plant life. .2014)
So that the spirit of using energy that is more environmentally friendly continues to be echoed by those who care about the environment, which in the end the concept of Green Marketing becomes interesting, because now people are increasingly paying attention to the environmental impact of the products offered by manufacturers. Then in the end the concept of Low Cost Green Car (LCGC) was born, which means a car with an affordable price and also an environmentally friendly car, as contained in the ministry of industry.go.id website or in Minister of Industry Regulation No. 33/2013 which contains one of the following: one point that requires LCGC cars to have a fuel consumption of at least 20 km/liter, which is considered sufficient to reduce the use of fuel oil and the amount of emissions released, so as to uphold environmental health, then fuel efficiency at a level that is given by the government is already close to the fuel consumption of a hybrid car which is in the range of 20 km / liter.

### Daihatsu Sigra Car Sales Trend April-August 2019

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Units Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>6,317</td>
</tr>
<tr>
<td>Mei</td>
<td>4,957</td>
</tr>
<tr>
<td>Juni</td>
<td>1,189</td>
</tr>
<tr>
<td>July</td>
<td>3,757</td>
</tr>
<tr>
<td>August</td>
<td>4,371</td>
</tr>
</tbody>
</table>

Business phenomena that occur at the level of Daihatsu Sigra's sales are fluctuating and research gaps or gaps are found between researchers with one another, such as research conducted by Winarno (2019), Ridwan et.al. (2018), Purnama (2019), Mustaghfiroh (2019), Masturoh (2016) and Nursanti and Melisa (2010) who state that the Green Advertising variable has a positive and significant effect on purchasing decisions, while research conducted by Ariescy et.al. (2019) and Ratnasari (2017) get the results that the Green Advertising variable does not have a significant influence on Purchase Decisions.

Based on the research problems that exist in the results of previous studies and also the phenomenon of sales fluctuations, it can be formulated the problem of this research is how to maintain the level of sales of Daihatsu Daihatsu Sigra through aspects of Green Product and Green Advertising through Brand Image that is in the minds of consumers about Daihatsu Sigra.

This research is intended as an implementation of marketing science learning, based on the formulation of the problem to be studied above, so this study aims to examine and find out more about the variables that are problematic in this study. The purposes of this study are, (1) To determine the effect of Green Advertising on the Purchase Decision of Daihatsu Sigra vehicle products, (2) To determine the effect of Green Product on the Purchase Decision of Daihatsu Sigra vehicle products, (3) To determine the effect of Green Advertising on the Brand Image of the product. Daihatsu Sigra vehicles, (4) To determine the effect of Green Product on the Brand Image of Daihatsu Sigra vehicle products, (5) To determine the effect of Brand Image on the Purchase Decision of Daihatsu Sigra.
vehicle products, (6) To determine the effect of Brand Image in mediating the relationship between Green Product, Green Advertising on the Purchase Decision of Daihatsu Sigra.

LITERATURE REVIEW

Green Advertising

According to Keller (2001, in Wong et. al. 2014) “Green Advertising is a marketing tool to inform and disseminate information related to the environmental efforts and commitment of an enterprise”. and disseminate information related to the business and commitment of a company in protecting or caring for the environment

According to Tiwari (2011, in Muqorrobin et. al. 2017) Green Advertising is advertising that promotes products, services, ideas, or organizational capabilities to help or reduce environmental damage.

Green Product

According to Shabani et. al. (2012, in Ahmad, 2016) Green products are products that do not pollute the environment, do not waste resources or can be recycled. Green products help save energy to preserve and enhance natural environmental resources and reduce or eliminate the use of toxic substances, pollution and waste

Ottman (2010:5 in Ahmad, 2016) defines green products as products that are usually durable, not harmful to health, packaging made of recycled materials. From the existing definition, it can be concluded that a Green Product is a product that is good for users and does not pollute the surrounding environment.

Brand Image

According to Kotler and Keller (2009, p. 115, Dalam Iwan, 2013) who define Brand Image as a set of beliefs, ideas, and impressions that a person has of a brand.

According to Suryani (2013, in Muqorrobin et. al. 2017) Brand Image is everything related to the brand that is in the minds of consumers or consumers’ impressions about a brand.

Buying decision

Kotler (2012:190 in Lubis and Hidayat, 2017) "purchase decision is the stage in the decision-making process where consumers actually buy”.

Kotler and Keller (2012: 193 in Lubis and Hidayat, 2017) state that there are five stages of purchasing decisions made by consumers. Customers are:

1. Product selection, consumers make decisions to buy a product or use their money for other purposes. In this case the company must focus its attention on people who are interested in buying its products.

2. Brand Selection, consumers must make a decision about which brand to buy. Each brand has its own differences. In this case the company must know how consumers choose a brand.

3. Selection of Purchase Channels, consumers must make decisions about which dealers to visit. Each consumer is different in terms of choosing a dealer, usually due to factors such as close location, low prices, complete inventory, shopping convenience, spaciousness of the place and so on.
4. Number of Purchases, consumers can make decisions about how many products to buy. In this case the company must prepare the number of products according to consumer needs.

5. Time of Purchase, consumer decisions at the time of purchase may vary, for example: some buy every day, once a week, once every two weeks, even once a month depending on their needs.

HYPOTHESES DEVELOPMENT

1. The Influence of Green Advertising on Purchase Decisions

In a study conducted by (Lestari et.al. 2015) Green Advertising had a positive and significant effect on the decision to buy bottled water with the AQUA brand in Sumbersari District, Jember Regency, then the results of research conducted by (Firliani et.al. 2014) received the second hypothesis which means that Green Advertising in the Suzuki Karimun Wagon R has a significant effect on consumer purchasing decisions in the city of Jember.

1: Green Advertising has a positive and significant effect on Purchase Decisions

2. The Effect of Green Products on Purchase Decisions

According to the results of research conducted by Ahmad et. al. (2016) Green Product partially has a significant effect on The Body Shop Product Purchase Decision in Manado Town Square, then this is also the same as the results of research conducted by (Muqorrorbin et.al. 2017) namely Green Product has a positive and significant influence on buying decision.

2: Green Product has a positive and significant effect on Purchase Decisions

3. Effect of Green Advertising on Brand Image

In a study conducted by (Pawitaningtyas et. al. 2015) Green Advertising proved to have a significant effect on brand image. This means that Green Advertising which is used in mineral water in Aqua bottles has succeeded in building the image of the Aqua brand that cares about the environment, then the research conducted by Iwan (2013) concluded that Green Advertising has a positive and significant effect on Brand Image.

3: Green Advertising has a positive and significant effect on Brand Image

4. The Effect of Green Products on Brand Image

Based on the results of research by Rahmat and Silvianita (2016) regarding the four variables measured (Green Product, Green Price, Green Place, and Green Promotion), there are two variables that have no effect on Brand Image, the two variables are Green Price and Green Place. Meanwhile, the Green Product and green promotion variables have an effect on Brand Image, then based on the results of Priyanka's research (2019) regarding the Effect of Green Product and Green Promotion on the Brand Image of PT Suzuki Indomobil in Padang City, Green Product has an effect but is not significant on Brand Image.

4: Green Product has a positive and significant effect on Brand Image

5. Effect of Brand Image on Purchase Decision

In a study conducted by Ardiantika and Rachmi (2017) with the title "The Effect of Product Innovation and Brand Image on Purchase Decisions at Olivia Cake And
Bakery Mojokerto" concluded that Brand Image has a significant effect on Purchase Decisions, furthermore, according to (Parengkuan et.al. 2012) Brand Image has no significant effect on Purchase Decisions.

5: Brand Image has a positive and significant effect on Purchase Decisions

6. The Effect of Green Advertising on Purchase Decisions through Brand Image

In a study conducted by Pawitaningtyas et al. (2015) The Green Advertising variable (X2) through the Brand Image variable (Y1) has an indirect and significant effect on the purchasing decision variable (Y2), Then research conducted by Muqorrobin et al. (2017) The Green Advertising variable (X1) through the Brand Image variable (Y1) has an indirect and significant effect on the purchasing decision variable (Y2)

7. The Influence of Green Products on Purchase Decisions through Brand Image

In a study conducted by Muqorrobin et al. (2017) which examines the Green Product Variable (X1) through the brand image variable (Y1) which has an indirect and significant effect on the purchasing decision variable (Y2)

RESEARCH METHODS

Based on the results of a literature review and analysis of research that has been done by other researchers, the

has an indirect and significant effect on the purchasing decision variable (Y2)

6: Brand Image mediates the relationship between Green Advertising and then has a positive and significant effect on purchasing decisions

7. The Influence of Green Products on Purchase Decisions through Brand Image

variables to be examined in this study are Green Advertising, Green Product, Purchase Decision and Brand Image as intervening variables, so the research model is as follows:

The population in this study were all Daihatsu Sigra users, and in this study a sample of 100 people was determined.

\[ n = \left( \frac{Z_{a/2} \cdot \sigma}{e} \right)^2 = \left( \frac{1.96 \cdot 0.25}{0.05} \right)^2 = 96.04 \]
So, the number was rounded up to 100 people. In this study, several data analysis techniques were used, namely: descriptive analysis of respondent characteristics, index variable analysis, Structural Equation Modeling (SEM) analysis, analysis of outer model testing, inner model testing. In some analyzes, a calculator is used using an application, and in this study using a SmartPLS 3.0 calculator. According to Abdillah & Hartono (2015:164) PLS (Partial Least Square) is a variant-based structural equation analysis (SEM) that can simultaneously test the model. measurement as well as structural model testing. Testing of structural models or inner models is used to predict causal relationships between variables or test hypotheses.

**Data analysis**

**Testing Outer Model**

<table>
<thead>
<tr>
<th>Green Advertising</th>
<th>Green Product</th>
<th>Brand Image</th>
<th>Keputusan Pembelian</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA1</td>
<td>0.912</td>
<td>0.644</td>
<td>0.715</td>
</tr>
<tr>
<td>GA2</td>
<td>0.911</td>
<td>0.673</td>
<td>0.697</td>
</tr>
<tr>
<td>GA3</td>
<td>0.833</td>
<td>0.640</td>
<td>0.714</td>
</tr>
<tr>
<td>GA4</td>
<td>0.923</td>
<td>0.690</td>
<td>0.871</td>
</tr>
<tr>
<td>GP1</td>
<td>0.352</td>
<td>0.669</td>
<td>0.403</td>
</tr>
<tr>
<td>GP2</td>
<td>0.662</td>
<td>0.880</td>
<td>0.629</td>
</tr>
<tr>
<td>GP3</td>
<td>0.610</td>
<td>0.845</td>
<td>0.701</td>
</tr>
<tr>
<td>GP4</td>
<td>0.633</td>
<td>0.830</td>
<td>0.636</td>
</tr>
<tr>
<td>GP5</td>
<td>0.708</td>
<td>0.830</td>
<td>0.628</td>
</tr>
<tr>
<td>BI1</td>
<td>0.848</td>
<td>0.666</td>
<td>0.887</td>
</tr>
<tr>
<td>BI2</td>
<td>0.786</td>
<td>0.690</td>
<td>0.954</td>
</tr>
<tr>
<td>BI3</td>
<td>0.704</td>
<td>0.714</td>
<td>0.932</td>
</tr>
<tr>
<td>KP1</td>
<td>0.667</td>
<td>0.701</td>
<td>0.705</td>
</tr>
<tr>
<td>KP2</td>
<td>0.642</td>
<td>0.648</td>
<td>0.703</td>
</tr>
<tr>
<td>KP3</td>
<td>0.602</td>
<td>0.725</td>
<td>0.694</td>
</tr>
<tr>
<td>KP4</td>
<td>0.566</td>
<td>0.761</td>
<td>0.628</td>
</tr>
<tr>
<td>KP5</td>
<td>0.575</td>
<td>0.733</td>
<td>0.715</td>
</tr>
<tr>
<td>KP6</td>
<td>0.719</td>
<td>0.728</td>
<td>0.811</td>
</tr>
</tbody>
</table>

From the results above, it can be concluded that the loading score is above 0.5 and the factor value for each indicator has the largest factor loading value when compared to other indicators. This means that each variable and indicator has a good loading score and discriminatory validity.

Then, the quality of the data can also be seen from the Average Variance Extracted (AVE) value of each construct. A construct can be said to have good quality if the Composite Reliability value is above 0.70 and the AVE is above 0.50. In table 3 below are the results of the
Composite Reliability and AVE values of all variables

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Average Variance Extracted (AVE)</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Advertising</td>
<td>0.802</td>
<td>0.942</td>
</tr>
<tr>
<td>Green Product</td>
<td>0.663</td>
<td>0.907</td>
</tr>
<tr>
<td>Brand Image</td>
<td>0.855</td>
<td>0.947</td>
</tr>
<tr>
<td>Buying Decision</td>
<td>0.773</td>
<td>0.953</td>
</tr>
</tbody>
</table>

Based on the results above, it can be concluded that the existing constructs meet the standard criteria, namely composite reliability above 0.70 and AVE above 0.5.

**Inner Model Test Results**

<table>
<thead>
<tr>
<th>Construct</th>
<th>R Square</th>
<th>R Adjusted</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image</td>
<td>0.742</td>
<td>0.736</td>
<td></td>
</tr>
<tr>
<td>Keputusan Pembelian</td>
<td>0.757</td>
<td>0.750</td>
<td></td>
</tr>
</tbody>
</table>

Based on the table above, it can be concluded that the structural model shows that the Brand Image variable shows an R2 value of 0.709, which means that 74.2% of the Brand Image variance is explained by the Green Product and Green Advertising variables and 25.8% is explained by other variables. While the Purchasing Decision variable has an R2 value of 0.757 which means that 75.7% of the Purchase Decision variance is explained by the Green Product and Green Advertising variables and 24.3% is explained by other variables.

**Hypothesis testing**

For hypothesis testing, it can be seen from the value of t-statistics and path-coefficient. The t-statistical value shows the significance of the construct, while the path-coefficient shows the nature of the relationship between variables.

<table>
<thead>
<tr>
<th>construct</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T Statistic</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA &gt; KP</td>
<td>-0.068</td>
<td>-0.054</td>
<td>0.174</td>
<td>0.390</td>
<td>0.348</td>
</tr>
<tr>
<td>GP &gt; KP</td>
<td>0.495</td>
<td>0.498</td>
<td>0.104</td>
<td>4.751</td>
<td>0.000</td>
</tr>
<tr>
<td>GA &gt; BI</td>
<td>0.638</td>
<td>0.619</td>
<td>0.117</td>
<td>5.464</td>
<td>0.000</td>
</tr>
<tr>
<td>GP &gt; BI</td>
<td>0.274</td>
<td>0.298</td>
<td>0.127</td>
<td>2.161</td>
<td>0.016</td>
</tr>
<tr>
<td>BI &gt; KP</td>
<td>0.497</td>
<td>0.478</td>
<td>0.140</td>
<td>3.541</td>
<td>0.000</td>
</tr>
<tr>
<td>GA &gt; BI &gt; KP</td>
<td>0.317</td>
<td>0.296</td>
<td>0.097</td>
<td>3.271</td>
<td>0.001</td>
</tr>
<tr>
<td>GP &gt; BI &gt; KP</td>
<td>0.136</td>
<td>0.137</td>
<td>0.072</td>
<td>1.901</td>
<td>0.029</td>
</tr>
</tbody>
</table>

Source: Smart PLS 3 Processing Data Results, 2020
1. The Influence of Green Advertising on Purchase Decisions

Statistical test results show that Green Advertising has a negative and insignificant effect on purchasing decisions with a t-statistic value (0.390) > from t table (1.66), beta coefficient value (-0.068), and P Values value of 0.348. Based on the results obtained from respondents and data processing, it can be seen that Green Advertising does not affect Purchase Decisions, this is in line with research conducted by (Pawitaningtyas et. al. 2015) that Green Advertising shows an insignificant effect on Purchase Decisions on consumers AQUA products. So it can be concluded that the first hypothesis is rejected.

2. The Effect of Green Products on Purchase Decisions

Statistical test results show that Green Product has a positive and significant effect on purchasing decisions with a t-statistic value (4.751) > from t table (1.66), the beta coefficient value is 0.495, and the P Values is 0.000. This is in line with research conducted by (Syafrina, 2016) with the title The Effect of Green Product (Tissue Tessa) on Purchase Decisions (Case Study of Bandung Regency and Bandung City in 2016) concluding that Green Product has a significant influence on Purchase Decision, then with these results, the second hypothesis is accepted.

3. Effect of Green Advertising on Brand Image

The results of statistical tests show that Green Advertising has a positive and significant effect on Brand Image with a t-statistic value (5.464) > from t table (1.66), a beta coefficient value of 0.638, and a P Values of 0.000. Based on the results obtained from data processing that has been obtained from respondents, that Green Advertising has a positive and significant effect on Brand Image, this is in accordance with the results of research conducted by (Pawitaningtyas et. al. 2015) which in conclusion Green Advertising has a positive influence and significant to Brand Image, so the third hypothesis in this study is accepted.

4. The Effect of Green Products on Brand Image

Statistical test results show that Green Product has a positive and significant effect on Brand Image with a t-statistic value (2.161) > from t table (1.66), beta coefficient value is 0.247, and P Values is 0.000. The results of this study are also supported by several previous studies/journals, namely, according to Rahmat and Silvianita (2016) who in their research concluded that Green Products have an influence on Brand Image, so from the results of existing research, it can be concluded that the fourth hypothesis is accepted.

5. Effect of Brand Image on Purchase Decision

Statistical test results show that Brand Image has a positive and significant effect on purchasing decisions with a t-statistic value (3.541) > from t table (1.66), beta coefficient value of 0.497, and P Values of 0.000. These results are similar to previous research conducted by Ardiantika and Rachmi (2017) with the title "The Effect of Product Innovation and Brand Image on Purchase Decisions at Olivia Cake And Bakery Mojokerto" concluding that Brand Image has a significant effect on purchasing decisions. So from the above results it can be
concluded that the fifth hypothesis is accepted.

6. The Effect of Green Advertising on Purchase Decisions through Brand Image

Based on the results of testing the indirect effect of Green Advertising on Purchase Decisions through Brand Image, the t statistic value is 3.271. This value is greater than t table (1.66) and the p-value is 0.001, thus the sixth hypothesis is acceptable.

Means that Brand Image Mediates the Effect of Green Advertising on Purchase Decisions. This research is similar in a previous study conducted by Muqorrobin et al. (2017) The Green Advertising variable through the brand image variable has an indirect and significant effect on the purchasing decision variable.

Based on the mediation test or the indirect relationship between the construct variables, the results showed that Brand Image was able to mediate the relationship between the Green Advertising variable and the purchase decision positively and significantly, so it can be concluded that the Brand Image variable can increase the influence of Green Advertising on the Daihatsu Sigra Purchase Decision, where in previous research it was found that Green Advertising did not have a positive and significant influence on the Daihatsu Sigra Purchase Decision, so the sixth hypothesis was accepted.

7. The Influence of Green Products on Purchase Decisions through Brand Image

Based on the results of testing the indirect effect of Green Product on Purchase Decisions through Brand Image, the t statistic value is 1.901. This value is greater than t table (1.66) and the p value is equal to, thus the sixth hypothesis or H7 can be accepted. This means that Brand Image mediates the influence of Green Products on Purchase Decisions. In this study it is not in accordance with previous research conducted by Muqorrobin et al. (2017) The Green Product variable through the brand image variable has an indirect and significant effect on the purchasing decision variable.

CONCLUSIONS AND SUGGESTIONS

Based on the analysis of the results of the research conducted, the following conclusions can be drawn:

1. Green Advertising has no positive and significant effect on Purchase Decisions with a t statistic of (0.390) > or less than t table (1.66)
2. Green Product has a positive and significant effect on Purchase Decisions with a t statistic of (4.751) > or greater than t table (1.66)
3. Green Advertising has a positive and significant effect on Brand Image with a t statistic of (5.464) > or greater than t table (1.66)
4. Green Product has a positive and significant effect on Brand Image with a t statistic of (2.161) > or greater than t table (1.66)
5. Brand Image has a positive and significant effect on Purchase Decisions with a t statistic of (3.541) > or greater than t table (1.66)
6. Brand Image mediates the relationship between Green Advertising and Purchase Decisions with a t statistic of 4.036. This value is greater than t table (1.66) and
greater than t statistic in a direct relationship.

7. Brand Image mediates the relationship between Green Product and Purchase Decision, with a t-statistic value of 1.901. This value is greater than t-table (1.66).

Based on the conclusions, suggestions are proposed which are expected to be useful.

For PT. Astra Daihatsu Motor

1. In improving the Daihatsu Sigra Purchase Decision, PT Astra Daihatsu Motor should pay attention to aspects of Green Advertising, Green Product and Brand Image, especially for Green Advertising must be supported by Brand Image so that claims and messages conveyed can be accepted by consumers.

2. PT Astra Daihatsu Motor has prepared aspects of Green Advertising or advertisements that can convey an even better environmentally friendly message, because based on the results of the existing index, the environmentally friendly message contained in the Daihatsu Sigra advertisement is considered lacking if compared to other indicators, then for the Green aspect The product should PT Astra Daihatsu Motor pay more attention to the exhaust emissions of Daihatsu Sigra, by offering a better EURO standard, or with a hybrid variant or with an electric car variant, then in terms of Brand Image PT Astra Daihatsu Motor should focus more on building a good image of its customers. Daihatsu Sigra users, because this product is considered mostly only used by online taxis.

For Further Researchers

1. Future researchers are expected to be able to develop the variables studied, or use other indicators.

2. Further researchers are expected to be able to add literature or other references.

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Ratnasari, P. Y. (2017) Analisis Pengaruh Green Product, Green Packaging,


Cervin Chaniago, Live Nupus  
Effect of Green Advertising, Green Product on Purchase Decisions with Brand Image as Intervening Variable

Konsumen Produk Ades Di Purworejo).  
VOLATILITAS


https://www.kemenperin.go.id/artikel/6775/Menperin-Keluarkan-Peraturan-Mobil-LCGC, diakses pada, 1 November 2019