The Role of Price Sensitivity and Green Knowledge Moderate the Influence of Eco-Label and Eco-Brand on Repurchase Intention in Green Product (Study of Sensatia Botanicals Product Consumers in Denpasar, Bali, Indonesia)

Yuni Refti Mauliawan, I Nyoman Nurcaya

Faculty of Economics and Business, Udayana University (Unud), Bali, Indonesia

ABSTRACT: Repurchase intention is the intention to make purchases in the future and is done repeatedly based on a positive attitude from past buying experiences. Along with the times, green products are increasingly in demand by people in purchasing personal care products or household products. The number of green living campaigns provides a great impetus for green product consumers to repurchase green products. This study aims to determine the role of price sensitivity and green knowledge in moderating the effect of eco-labels and eco-brands on repurchase intention of green products. The sample used in this study are 126 people with a purposive sampling technique. The data was collected through a questionnaire and analyzed using Moderated Regression Analysis. Based on the analysis, Eco-label has a positive and significant effect on Repurchase Intention. Eco-brand has a positive and significant effect on Repurchase Intention. Price Sensitivity does not moderate the effect of Eco-label on Repurchase Intention. Green Knowledge moderates the effect of Eco-brand on Repurchase Intention.

Keywords - Price Sensitivity, Green Knowledge, Eco-Label, Eco-Brand, Repurchase Intention

I. INTRODUCTION

Global warming has become a world problem that needs to be addressed by all inhabitants of the earth. Rapid economic development and technological advances, unsustainable development and consumption patterns have many negative impacts on the environment, such as climate change, water and air pollution, ozone layer depletion, and smog. Of course these developments exacerbate the issue of global warming. Environmental issues have become the focus of the public and the media, and have attracted a lot of attention from scholars. Thus, green products receive attention from companies. Many companies are adopting environmentally friendly practices in response to global awareness of climate change and its potential consequences for the planet and its people. In order to gain a larger market share of green products, companies develop various green products and services to meet consumer demand. Green products or environmentally friendly products are products that prioritize the use of ingredients that are safe for the environment and can be renewed, as well as increase the efficiency of energy.

PT. Sensatia Botanicals is a company that produces skin care products using natural ingredients for all of its products with GMP (Good Manufacturing Product) certified production facilities where all production activities are consistent and controlled based on predetermined standards. The concern of PT. Sensatia Botanicals towards the environment is seen in the use of chemical-free ingredients, vegan and implementing recycling programs. The products offered are facial care products, body care, for bathing purposes and essential oils. Many local companies are similar but have not been seen to fully support green or environmentally friendly concepts such as Utama Spice, Bali Alus, Bali Ratih, Herborist, Bali Balance, Blue Stone Botanicals. The basic ingredients used, environmentally friendly labeling and recycling programs attract consumers to buy Sensatia Botanicals products.

Purchasing green products is a form of consumer awareness of the environment. This buying activity leads to a change in green lifestyle. The results of a survey by WWF Indonesia and Nielsen showed that 63 percent of Indonesian consumers are willing to consume green products (Nielsen, 2018). This indicates a significant increase in consumer awareness of the consumption of green products. So that consumption preferences for green products will increase and demand is abundant. Increased consumption of environmentally friendly products will occur when consumer purchase intentions are high for green products. Buying intention
for green products is the desire of consumers to choose environmentally friendly products as an option compared to traditional products in their purchase considerations.

Labeling of a product can serve as a guide for potential buyers in determining which products to buy. Labels can be found on the packaging and the product's official website in the form of an image or written description. In the green product, eco-label is information on a product that has met environmental friendly product quality standards. Previous research has linked eco-labels with consumer purchasing behavior, branding strategy, the desire to pay more and environmental awareness. The choice of eco-label to increase purchase intention in the study still has a low level of significance. Previous research involved purchase intentions that were positively and significantly influenced by eco-labels. However, eco-label was found not to be a factor influencing consumer intention to buy green products in Malaysia, which indicates that eco-label has no significant effect on purchase intention (Sharaf, 2016).

As much as 60 percent of consumers today, before deciding to buy from a brand, will check first if the brand is concerned about the effects and issues on the environment. The application of eco-brand to brands is something that cannot be overlooked because it is important information in making purchasing decisions by consumers. Eco-brand is the name, term, sign, symbol or design of an environmentally friendly product to identify and differentiate the product from competitors. The name Botanicals and the green and white colors of the Sensatia Botanicals brand reflect the eco-brand's application. In its application, the Sensatia Botanicals brand gives the impression of a product made from natural, hygienic, and environmentally friendly ingredients. Eco-brands provide positive and significant results on green purchasing behavior in the context of rural tourism (Chin & Wong, 2017). Mohd Suki (2016) shows that there is no significant effect of the role of eco-brand knowledge in moderating the relationship between green brand positioning and purchase intention.

Eco-labels and eco-brands are among the commercial sources which contain information that can be found on the packaging, display and website. This information serves to influence consumer purchasing decisions so that it also directly generates purchase intentions for green products. Commercial sources are those that are dominated by marketers with the aim of influencing the consumer's decision-making process in making purchases. The occurrence of purchasing green products is proof that marketers have succeeded in making information on the right eco-labels and eco-brands to increase consumer purchase intentions so that consumers buy their green products (Liu et al., 2017).

Previous research on eco-labels and eco-brands on purchase intentions has had mixed results. So that the variance generated by previous studies raises the presumption of other factors that influence the influence of eco-labels and eco-brands. Another factor that is suspected is the emergence of moderating variables such as price sensitivity and green knowledge. Price has a relationship with the concept of elasticity. Elasticity is a general concept that can be used to measure the response in one variable when another variable changes. If the price of a product changes, the demand will also change. The response given by this request is an understanding of the price elasticity of demand. In the price elasticity of demand, there are types of elasticity, including inelastic demand and elastic demand. Inelastic demand occurs if price changes do not affect demand and consumers give little response to these price changes (Sabatelli, 2016). Most of the products that have substitutes are likely to experience elastic demand. In this type of demand market, the role of consumers in responding to or being sensitive to price changes is very large. Giving a high price will tend to reduce product demand. A relatively high price for them will increase the likelihood that purchasing behavior will not occur. Therefore, consumer sensitivity to price determines consumer decision making in buying a product.

Price Sensitivity has a relationship with the price elasticity of demand. Both of these concepts can be researched through purchasing activities that have already occurred. This activity provides experience so that it can form a perception about the level of consumer sensitivity to prices. This perception will influence future purchasing activity by involving repurchase intentions. Therefore, this study uses repurchase intention as the dependent variable. Repurchase intention is the tendency of buying behavior from consumers on a product and service that is repeated for a certain period of time and actively likes and has a positive attitude towards a product or service, based on experiences that have been done in the past (S. A. Dewi & Rastini, 2017). Future purchase intentions by customers depend on the value obtained in their past transactions such as considerations of costs and benefits of the products offered (Arifin et al., 2016).

Consumers who place importance on price in the purchasing decision process rarely buy green products (Liobikienė et al., 2017). Price sensitivity is consumers' awareness of how they will feel by buying a certain product at the cost they pay. Consumers who are sensitive to price cause their intention to buy products to decrease even though these consumers have environmental knowledge. However, Ritter (2016) explained that the price relationship does not have an influence on the decision to consume green products. Premium prices do not have a moderating effect on eco-labels on purchase intentions because currently consumers are starting to embrace the concept of living green and understand its benefits. Premium prices are no longer an obstacle for them to consume green products. Premium prices that do not have a moderating effect on purchase intentions indicate that consumers are no longer sensitive to green product prices so that they are not a factor that weakens...
purchase intentions. In addition to price, environmental knowledge has an influence on purchasing intentions for green or environmentally friendly products (Debora Indriani et al., 2019). Green or environmental knowledge is the level of consumer knowledge about green or environmental issues (Kusuma & Sulhaini, 2018). Environmental knowledge will strengthen positive attitudes and consumer intentions for organic products (Taufique et al., 2016). Inconsistent results were found if environmental knowledge had no significant effect on green product consumption (Liobikiënė et al., 2017).

Many developed countries are in the industrial sector where the lifestyle of their people has turned to a green lifestyle. 50 percent of Americans are looking for eco-labeled products and switch to eco-friendly brands and in Australia 61.5 percent of respondents are willing to pay more for products that are safe for the environment and are willing to pay 15 percent to 20 percent more (Giarti & Santoso, 2016). The condition of consumers that has begun to lead to the green concept explains that consumers are now becoming more concerned about their daily habits and their impact on the environment, especially in developed industrial countries. Several studies have been conducted on green purchase intention to identify the determinants of green purchase intention behavior. With inconsistent results previous studies are only relevant to a particular culture, demographics and geographies and time. Consumer behavior in green purchasing is complex, therefore, it cannot be generalized to different cultural, social and demographic factors. Some researchers have found that demand and behavior towards environmentally friendly products tends to be uneven across different market segments and cultures (Chekima, 2015). Thus, research with price sensitivity and green knowledge variables moderates the influence of eco-labels and eco-brands on the repurchase intention of green products in Indonesia, especially Denpasar, Bali, which are considered appropriate to be used as research. City residents who are starting to shift their preferences to consumption of green products can easily find Sensatia Botanica stores in Denpasa City shopping centers.

II. HYPOTHESIS DEVELOPMENT

Previous research has explained the positive significance of awareness of eco-labeling on the desire to buy. Nekmahmud & Bekete-Farkas (2020), Zhang & Dong (2020) shows that knowledge from eco-labels also has an effect on purchase intentions, however, the availability of products that apply eco-labels does not lead to consumer intentions to buy green products. Purchase intention is positively and significantly influenced by eco-label (Cai et al., 2017). Nhu et al. (2019) found that there is a positive and significant relationship between eco-labels on repurchase intention. These results can be evidence that trusting and awareness of eco-labels will influence consumer purchase intentions for environmentally friendly products. Eco-label was found not to be a factor affecting consumer intention to buy green products in Malaysia, which indicates that eco-label does not have a significant effect on purchase intention (Sharaf et al., 2015).

H1: Eco-labeling positively and significantly affects repurchase intention.

Anjani & Aksari (2016), Prastiyo (2016), Wibawa & Warmika (2019) shown that there is a positive and significant influence between eco-brands and green buying behavior. Subsequent research confirms that significant and positive results are also obtained in the context of rural tourism (Chin & Wong, 2017). Dewi & Rahyuadha (2018) have also provided positive and significant results where the influence of eco-brands has a dominant effect on consumer buying behavior at Sariayu Martha Tilaar in Denpasar. Other research results show that there are insignificant results from the role of green brand knowledge in moderating the relationship between green brand positioning and purchase intention (Mohd Suki, 2016). From the results of previous research, it can be seen that there is a definite and significant influence between eco-brands on consumer purchasing behavior. However, further research examining the effect of eco-brands on consumer purchase intentions has found limitations.

H2: Eco-brand positively and significantly affects repurchase intention.

Price and brand name are determinants of purchasing decisions rather than consumer concerns on environmentally friendly issues (Rahayu et al., 2017). Consumers who are sensitive to price cause their intention to buy products to decrease even though these consumers have environmental knowledge (Sawitri & Rahanatha, 2019). In line with that, consumers who place importance on price in the purchase decision process rarely buy green products (Liobikiënė et al., 2017). The price level is an obstacle to green buying behavior and lowering the price of green products will certainly increase green buying behavior. The relationship between price and quality does not have an influence on the decision to consume green products, consumers will be more willing to pay more if a green product is related to health for fulfilling their quality of life (Ritter, 2016).

Subsequent research confirms that premium prices do not have a moderating effect on eco-labels on purchase intentions because currently consumers are starting to embrace the concept of living green and understand its benefits, so premium prices are no longer an obstacle for them to consume green products (Chekima, 2015). Premium prices that do not have a moderating effect on purchase intentions indicate that consumers are no
longer sensitive to green product prices so that they are not a factor that weakens purchase intentions. Price sensitivity has an effect by weakening repurchase intention in the retail market (Graciola et al., 2018)

H3: Price sensitivity weakens the effect of eco-label on repurchase intention.

Previous research has explained the significant influence of environmental knowledge on consumer attitudes and intentions on organic products and pro-environmental behavior (Suratno et al., 2017). Subsequent research confirms previous findings that environmental knowledge will strengthen positive attitudes and consumer intentions for organic products (Setiawati et al., 2018). Supporting previous research, Debora Indriani et al. (2019) that knowledge of green environment will influence consumers in purchasing intention of green products. Liobikiené et al. (2017) shown consistent results where environmental knowledge has no significant effect on green product consumption. Correspondingly, environmental knowledge does not provide significant results on purchase intentions or green buying behavior (Ginting & Ekawati, 2016)

H4: Green knowledge strengthens the influence of eco-brands on repurchase intention.

### Figure 1 Conceptual Framework

![Conceptual Framework](image)

<table>
<thead>
<tr>
<th>Price Sensitivity (M1)</th>
<th>Eco-label (X1)</th>
<th>Repurchase Intention (Y)</th>
<th>Eco-brand (X2)</th>
<th>Green Knowledge (M2)</th>
</tr>
</thead>
</table>

### III. METHODS

This research is an associative study which aims to explain the effect of independent variables on the dependent variable using quantitative or statistical data analysis techniques. The purpose of this study was to explain price sensitivity and green knowledge to moderate the effect of eco-label and eco-brand on repurchase intention. The population of this study are consumers residing in Denpasar who have already purchased PT. Sensatia Botanicals. The population of this study is infinite or cannot be measured with certainty. The sample in this study were people who had made purchases at the Sensatia Botanicals store in the city of Denpasar. The sample used in this study were respondents who had criteria where they had purchased products from PT. Sensatia Botanicals directly by coming to a store or online via a website or e-commerce and having awareness of the environment. This criterion aims to determine the repurchase intention of Sensatia Botanicals products. The sampling method used was non-probability sampling with a purposive sampling technique. The data collection method used in this study was a questionnaire. The method used in this research is Moderated regression analysis (MRA).

\[
Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3M_1 + \beta_4M_2 + \beta_5X_1M_1 + \beta_6X_2M_2 + \epsilon \quad \ldots \ldots \ldots (1)
\]

### IV. RESULTS AND DISCUSSION

Based on the results of research conducted on consumers who make repeat purchases at Sensatia Botanicals Products in Denpasar (sample: 126 people), women dominate with a percentage of 88.89 percent, respondents aged 28-33 years dominate with a percentage of 39.68 percent and self-employed workers who dominate with a percentage of 34.92 percent.

The statement of Repurchase Intention which has the lowest score is "I plan to re-purchase Sensatia Botanicals products", obtained a score of 3.19, in general respondents think they have not planned to re-purchase Sensatia Botanicals products. The highest score is the statement "Sensatia Botanicals as the first choice..."
for skin care needs”, obtained a score of 3.22, this means that in general respondents feel Sensatia Botanicals as the first choice for skin care needs.

The Eco-label statement that has the lowest score is "I believe products that have eco-labels provide accurate and precise information about environmentally friendly products", a score of 2.97 means that in general respondents are not sure products that have eco-labels provide accurate information. and be precise about environmentally friendly products. The highest score is the statement "I know about eco-labels on environmentally friendly products”, obtained a score of 3.08, this means that respondents know about eco-labels on environmentally friendly products.

The statement of the Eco-brand that has the lowest score is "I believe Sensatia Botanicals is an environmentally friendly brand", obtained a score of 3.03, respondents think they do not believe Sensatia Botanicals is an environmentally friendly brand. The highest score is the statement "I want to know more about Sensatia Botanicals", obtained a score of 3.24, this means that respondents think they want to know more about Sensatia Botanicals.

The statement of Price Sensitivity that has the lowest score is "I agree with the price offered by environmentally friendly products according to their quality.". Obtained a score of 2.88. This means that the respondent thinks that they do not agree with the price offered by environmentally friendly products in accordance with their quality. The highest score is the statement "The price offered by environmentally friendly products is relatively more expensive than non-green products", obtained a score of 2.96, this means that respondents consider the price offered by environmentally friendly products is relatively more expensive than non-green products.

The Green Knowledge statement that has the lowest score is "My concern for the environment affects purchasing activities.". "I know environmental issues from the impact of using products that are not environmentally friendly.". "I get knowledge about the environment through personal experience." obtained a score of 3.02. In general, respondents think that they have not involved concern in purchasing activities, do not know about environmental issues from the impact of using products that are not environmentally friendly, and have not received knowledge about the environment through personal experience. The highest score is the statement "I understand the words and symbols about the environment in environmentally friendly products.". Obtained a score of 3.11, this means that in general respondents think they understand words and symbols about the environment in environmentally friendly products.

### Results of Multiple Regression Analysis

\[
Y = 0.284X_1 + 0.426X_2 - 0.246M_1 + 0.468M_2 - 0.050X_1M_1 + 0.173X_2M_2
\]

<table>
<thead>
<tr>
<th>Y</th>
<th>SE</th>
<th>T</th>
<th>Sig. t</th>
<th>R²</th>
<th>F</th>
<th>Sig. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td>(0.063)</td>
<td>(0.065)</td>
<td>(0.105)</td>
<td>(0.102)</td>
<td>(0.070)</td>
<td>(0.072)</td>
</tr>
<tr>
<td>T</td>
<td>(4.133)</td>
<td>(6.054)</td>
<td>(-2.154)</td>
<td>(4.216)</td>
<td>(-0.800)</td>
<td>(2.784)</td>
</tr>
<tr>
<td>Sig. t</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.033)</td>
<td>(0.000)</td>
<td>(0.425)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>R²</td>
<td>0.648</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>36.434</td>
<td></td>
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<tr>
<td>Sig. F</td>
<td>0.000</td>
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Source: Primary data (processed data), 2020

Based on results, it can be explained that the meaning of the coefficient of each variable in this study is as follows:

\[
Y = 0.284X_1 + 0.426X_2 - 0.246M_1 + 0.468M_2 - 0.050X_1M_1 + 0.173X_2M_2
\]

X1 has a beta coefficient of 0.284. This coefficient is positive, meaning that the better the eco-label, the better the repurchase intention. X2 has a beta coefficient of 0.426. This coefficient is positive, meaning that the better the eco-brand, the better the repurchase intention. M1 has a beta coefficient of 0.246. This coefficient is negative, meaning that the better the price sensitivity, the lower the repurchase intention will be. M2 has a beta coefficient of 0.468. This coefficient is positive, meaning that the better the green knowledge, the better the repurchase intention. X1M1 has a beta coefficient of 0.050. This coefficient is negative, meaning that with price sensitivity the effect of eco-label on repurchase intention is weakened. X2M2 has a beta coefficient of 0.173. This coefficient is positive, meaning that with green knowledge the effect of eco-label on repurchase intention is strengthened.

The percentage value of R² = 68.4 percent, which means that 68.4 percent of Repurchase Intention on Sensatia Botanicals Products in Denpasar is influenced by the variables Eco-label, Eco-brand, Price Sensitivity, and Green Knowledge and the remaining 31.6 percent is influenced by other variables not examined in this study. Based on the regression analysis reporting, the Sig. F is 0.000, it can be said that H1 is accepted because of the Sig. F 0.000 <0.05. The conclusion is that eco-label, eco-brand, price sensitivity, and green knowledge
simultaneously have a significant effect on repurchase intention of Sensatia Botanicals products in Denpasar City, the model used in this study is feasible and can be used for further analysis.

Based on the analysis results, Eco-label has a Beta value of 0.284 and a Sig. amounting to 0.000. The conclusion is that eco-label has a positive and significant effect on repurchase intention, in other words, if the eco-label increases, the repurchase intention for Sensatia Botanicals products in Denpasar will increase. So that H1 is accepted. Eco-brand has a Beta value of 0.426 and a Sig value. amounting to 0.000 then, it can be said that H2 is accepted. The conclusion is that eco-brands have a positive and significant influence on Repurchase Intention, in other words, if eco-brands increase, repurchase intention of Sensatia Botanicals products in Denpasar will increase. Price sensitivity interaction has a Beta value of -0.050 and a Sig. amounting to 0.425, it can be said that H3 is rejected because of the Sig. 0.425> 0.05. The conclusion is that price sensitivity does not moderate the effect of eco-label on repurchase intention of Sensatia Botanicals products in Denpasar. The relationship between price and quality has no effect on the decision to consume green products, consumers will be more willing to buy back if a green product is related to health. The green knowledge interaction has a Beta value of 0.173 and a Sig value. amounting to 0.006 then, it can be said that H4 is accepted. The conclusion is that green knowledge moderates the influence of Eco-brands on repurchase intention of Sensatia Botanicals products in Denpasar. Where the resulting moderation effect is to strengthen relationships, in other words, if there is a green knowledge variable, the effect of eco-brand on repurchase intention of Sensatia Botanicals products in Denpasar will be further strengthened.

V. CONCLUSION

Management must provide accurate and precise information about environmentally friendly products. Companies can convince the public that the products being sold are environmentally friendly products. Companies must also pay attention to the prices offered by environmentally friendly products according to their quality and provide knowledge to the public to find out about environmental issues from the impact of using non-environmentally friendly products. For further research, it is expected to be able to add variables that can affect repurchase intention, as well as be able to expand the scope of the research, so as to provide a more insightful view and can be implemented in general.

REFERENCES


