



THE INFLUENCE OF GREEN BRANDS ON ECO-LABELLING AND ECO-BRANDING ON GREEN PURCHASE INTENTION IN SKINCARE PRODUCTS**Zima Khalifatul Aulia¹****Universitas Muhammadiyah Surakarta, Surakarta, Indonesia**b100214514@student.ums.ac.id**Ihwan Susila²****Universitas Muhammadiyah Surakarta, Surakarta, Indonesia**ihwan.susila@ums.ac.id

Abstract

This study aims to determine the effect of green brands on consumer preferences in the context of the facial care industry. At this time, there is a trend in skincare, so many companies compete to provide the best service for their consumers, but many of these companies do not pay attention to the condition of the surrounding environment. Even though a lot of skincare waste threatens the environment because it is not managed properly by the company that produces the skincare. Around us, there are only a few companies that pay attention to the composition of the products used by the company, and the product is not tested on animals, such as rabbits, and uses packaging that is easily recycled or can even be easily decomposed in the soil. This is done to test the effect of green brands on green purchase intention by considering eco-branding and eco-labeling. Because green branding refers to a green brand or product that commits to the environment, eco branding is also a link between consumer perceptions of green brand and green purchase intention. This study uses a questionnaire and purposive sampling method to collect data from respondents, which requires approximately 185 data and will then be processed using a data processing application, Smart PLS. So, the empirical results of the study stating that the "Green Brand Effect" can significantly mediate between "Eco Branding" and "Eco Labeling" indicate that when a brand has a strong eco-branding strategy, it can increase consumers' perception of the brand as environmentally friendly and can affect customer purchase intentions. Then, things that can be done by the NPure skincare company include having a long-term, continued commitment and also a clear goal to



reduce the impact of the bad environment and provide good NPure product innovations to make a good contribution to the environment.

Key Words: Green Brand, Eco Branding, Eco Labeling, Green Purchase Intention

INTRODUCTION

Recent studies show that the skincare industry is one of the biggest areas encouraging people to buy products in a more eco-friendly way. According to Bu et al. (2020), brands that focus on the environment can make consumers more likely to buy green skincare items because these products are seen as safe and good for the planet. This shows how important it is for companies to talk about sustainability when trying to influence what people buy in the beauty market.

The skincare trend is a trend that is in high demand at this time, so. On the other hand, skincare products also have the potential to hurt the environment, the packaging used can contribute to plastic waste which can cause, increased pollution, climate change, and others. According to (Nekmahmud & Fekete-Farkas, 2020) these environmental problems can be solved if consumers take responsibility for negative impacts on the environment by using larger green products, such as green skincare products or other needs. Therefore, many companies are competing to provide the best service for their consumers. Companies began to implement green marketing strategies to meet the needs of their customers, these strategies are also carried out to gain long-term benefits (Sana, 2020).

These growing shifts in consumer preferences highlight the urgent need for companies to integrate sustainability into their branding strategies, particularly through mechanisms such as eco-labeling and eco-branding, which may strongly influence green purchase intention in the skincare sector.

Eco-friendly brands play an important role in helping companies build marketing strategies that focus on the environment. These brands attract customers who are concerned about protecting the planet. People often want to buy products that are good for the environment, and they feel more confident and secure when using these products or services. When customers are aware of eco-friendly brands, they tend to become more loyal to them, which can lead to more purchases of environmentally friendly items. Studies have shown that when people understand what eco-friendly brands stand for, they are more



likely to be interested in buying products that are good for the environment. Researchers also found that knowing about eco-friendly brands has a big impact on whether people decide to buy them. However, there are other things that could affect how eco-friendly brands influence buying decisions. More research is needed, especially for products that are labeled as eco-friendly.

Another important way to use green marketing is by using eco-friendly labels. These labels help set environmental rules by encouraging people to choose products and services that are better for the planet. Marketers should also think about how their usual choices affect competition in the market, since the labels they choose can greatly influence their business goals. This also makes consumers feel more confident that the products they buy are good for the environment. Studies have found a strong link between eco-friendly labels and the likelihood of people buying sustainable products.

Eco-labels act as a trusted informational cue that increases consumers' confidence in the environmental claims of a product. (Diga & Severin, 2021) found that eco-labeling significantly enhances consumer trust, which subsequently leads to higher green purchase intention. This indicates that eco-labels reduce perceived risk and play a crucial role in strengthening consumers' decision-making toward environmentally friendly products.

Recent evidence shows that younger consumers, especially Millennials and Generation Z, are highly responsive to sustainability cues in cosmetic and personal care branding. (J. Chen et al., 2019) found that environmentally responsible communication significantly increases young consumers' intention to purchase sustainable cosmetic products, particularly when brands demonstrate transparency and clear environmental commitment. This suggests that sustainability-oriented messages are especially influential for younger demographics in the beauty and skincare market.

Eco-branding plays a big role in how people decide to buy products that are good for the environment. It is a type of marketing that focuses on environmental awareness and making things sustainable. Eco-branding involves carefully sharing messages, building a brand image, and highlighting values that are kind to the environment. The main goal is to show that a company or product cares about the planet, which helps attract customers who care about being eco-friendly. Eco-branding can also involve creating new products and supporting social causes that help the environment. A study by Putri found that eco-branding has a strong effect on what people want to buy, and eco-friendly labels can also make a big difference in their buying choices.



Furthermore, recent evidence shows that eco-branding strategies can foster emotional attachment between consumers and environmentally responsible brands. (Fernandes et al., 2018) found that when brands integrate sustainability values into their identity and communication, consumers develop stronger emotional responses that positively influence green purchase intention. This indicates that eco-branding is not only functional but also psychological in shaping consumer behavior.

Green purchase intention is increasingly recognized as a key predictor of sustainable consumer behavior, particularly in product categories that directly relate to personal health and environmental safety, such as skincare. (Sohaili et al., 2016) found that consumers are more likely to intend to purchase green products when they perceive strong environmental benefits and ethical responsibility from the brand. Furthermore, (Sanjay et al., 2017) demonstrated that green purchase intention is significantly influenced by consumers' perception of product credibility, highlighting the need for transparent environmental communication. In addition, recent evidence indicates that consumers demonstrate stronger green purchase intention when green products are associated with personal care and beauty needs. (Tang & Demeritt, 2018) revealed that environmentally responsible practices in the beauty and personal care sector significantly increase consumers' intention to purchase eco-friendly products, especially when products are perceived to contribute to both personal well-being and environmental protection.

Based on earlier research, several factors have been found to be important in predicting a person's intention to buy eco-friendly products. These factors include eco-friendly brands, eco-labels, and the overall image of eco-friendly brands. However, most of the past studies have mainly looked at the direct link between eco-friendly brands and the desire to buy, without much attention to how other factors might affect this relationship. In particular, there hasn't been much research on how eco-labels and eco-friendly brand image work together as middle steps or mediators in influencing purchase decisions, especially within the skincare industry. To fill this gap, this study examines how eco-friendly brands can affect the intention to buy eco-friendly products by looking at eco-labels and eco-friendly brand image as key factors in between. This approach matches recent findings that show eco-friendly brands often influence buying decisions indirectly, and that tools like eco-labels and a strong eco-friendly brand image are important in turning brand perception into actual purchases. (Hinderer & Kuckertz, 2022)



LITERATURE REVIEW

Green Brand Effect

A green brand is a label or set of labels that shows a company is focused on sustainability and being environmentally responsible (Grant, 2008). This idea is about how businesses operate in a way that tries to cut down on harm to the environment, like using materials that are better for the planet, making products in a way that's sustainable, and managing natural resources carefully. Companies that call themselves green brands usually try to attract customers who care about the environment and sustainability. Green brands play a big role in sustainable marketing because they can affect what customers choose to buy and are linked closely to eco-friendly labels and green branding (Chuang & Chen, 2023). Because of this, customers can understand what a company is trying to say through its brand campaigns and become more interested in buying products that are better for the environment. When people buy these eco-friendly products, they might feel like they're helping to lessen the bad effects that come from the waste created by the products they use (Salehzadeh et al., 2023). From the above description, it can be concluded that:

H1: Green brand has a significant effect on purchase intention.

H2: Green brand has a significant effect on eco-labeling.

H3: Green brand has a significant effect on eco-branding.

Eco-Labeling

Eco-labeling is the practice of giving certain labels or recognition to products or services that meet certain standards in terms of environmental sustainability (Delmas & Grant, 2014). These labels are designed to help consumers identify products that are more environmentally friendly among the choices available in the market. Eco-labels are a strategic tool that companies use to express concern for the environment to consumers, to minimize social impacts on the environment (Song et al., 2020). Therefore, eco-labeling is very important in green marketing, not only for the knowledge of environmentally friendly symbols for consumers but also to attract consumer purchase intentions (Wojnarowska et al., 2021). Eco-labeling plays an important role in mediating between green brands and purchase intention (Husain et al., 2022). Consumers often face uncertainty about sustainability claims made by companies, with eco-labeling consumers can find independent confirmation that the product or brand meets certain standards in terms of environmental sustainability. This can strengthen the image of green brands in the eyes of consumers who care about the environment. That way the eco-label attached to the green brand can

increase consumer purchasing intentions. With this, it can be concluded with a hypothesis:

H4: Eco-labeling has a significant effect on purchase intention.

H5: Eco-labeling has a significant effect on mediating the relationship between green brand and purchase intention..

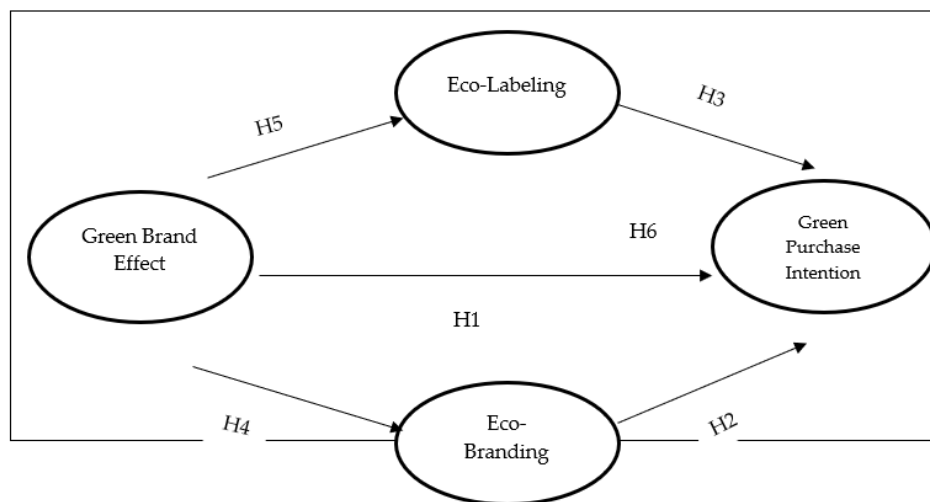
Eco-Branding

Eco-branding is a strategy used by brands to identify themselves with the values of sustainability and environmental protection (Orsato, 2009). It involves using branding elements such as brand names, logos, marketing communications, and other brand identities to demonstrate a commitment to environmentally friendly and socially responsible business practices. The concept of eco-branding encompasses not only how brands manage the environmental impact of their operations, but also how they seek to influence consumer behavior toward more environmentally friendly choices (Ali et al., 2023). Eco-branding often involves the use of specific labels or certifications, such as eco-labels, that affirm a product or service's adherence to internationally recognized sustainability standards. By highlighting sustainability values, eco-branding can influence consumer behavior, and encourage purchase intentions for environmentally friendly products. Therefore, it can be said with a hypothesis, then as follows:

H6: Eco branding has a significant effect on purchase intention.

H7: Eco branding has a significant effect on mediating the relationship between green brand and purchase intention.

Figure 1.
Research Model





RESEARCH METHOD

The object of this research is a skincare product that has an image as a safe and environmentally friendly product, this product has also carried out several eco-friendly campaign actions. This research was conducted to see how many users of skincare products choose products from environmentally friendly companies and care about the preservation of nature.

Sampling and Data Collection

In this study, data was collected by a survey, it was conducted during May 2024. Google Forms were distributed based on the survey. The sampling technique used was purposive sampling. Purposive sampling is a sampling technique in which the researcher relies on his discretion to select participants from the research population (Obilor, 2023). With the data that has been obtained, as many as 185 valid respondents match the specified criteria. The respondent criteria of this study are people who use skincare products from men and women in Indonesia who care about environmental problems that are currently rife due to the accumulation of waste derived from skincare products such as Npure and other skincare.

Measurement Scale

The measurement has been developed from previous studies. The Likert scale measures attitudes by asking people to indicate how strongly they agree or disagree with a series of statements about a topic. This study uses a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), which is designed to test how strongly respondents' opinions are (Mumu et al., 2022). The measurement of variables in this study is a development of previous studies. Green Brand Effect items are adopted from (Bashir et al., 2020). The Eco Labeling variable measurement item is adopted from (Ko & Jeon, 2024). Then the Eco-Branding Variable Measurement Item is adopted from (Khan et al., 2020). The last is the measurement item of the Green Purchase Intention variable adopted from (Amin & Tarun, 2021).

Measurement Procedure

PLS-SEM is used to confirm the research construct model using Smart PLS 3.0 software. According to (Sobaih & Elshaer, 2022) Smart PLS-SEM is a model suitable for analyzing complex research models, consisting of related theories and empirical data, and helping information caused by related theories (Achmad et al., 2021). Software like Smart PLS is very helpful for researchers who have a lot of data so that it is easier to process in one platform/application.

**RESULTS AND DISCUSSION**

Table 1 presents the demographic profile of the 185 respondents who met the criteria. The survey involved approximately 185 people, consisting of 132 females and 53 males. The highest percentage in the age criteria classification is in the age of 20-25 years old, which amounted to (91.9%), consisting of 170 respondents. Then the criteria with the second highest number fell on the work being done at the time this survey was taking place, and almost most chose to be students with a percentage of 79.5%, which means there were around 147 respondents who chose these criteria. Then the next is the classification of pocket money/income, most respondents chose an income of more than 1,000,000, with a percentage of 43.8% (81 respondents). And the last is the classification of how often to buy environmentally friendly products, most respondents choose 2-5 times a month, with a percentage of 48.1% (89 respondents).

Table 1.
Demographic Variables

Demographic Variable	Frequency	Percentage
Gender		
Male	53	28,6%
Female	134	71,4%
Age		
< 17	7	3,8%
20 – 25	170	91,9%
Age		
25-30	7	3,8%
31-35	1	0,5%
Current Employee		
Employee	15	8,1%
Privat Officer	17	9,2%
Housewife	1	0,5%
Student	147	79,5%
Self-Employee	1	0,5%
Tutoring Staff	1	0,5%
Others	2	1,0%
How Often Do You Buy Fashion Product in a Year?		
1 time in a week	49	26,5%



2- 5 times	89	48,1%
More than 5 in one year	44	23,8%
Other	4	2,0%
How Often Do You Buy Skincare Product in a Year (Currency:Rp)		
Less than 100.000	25	13,5%
200.000 – 500.000	42	22,7%
500.000 – 1.000.000	37	20%
More than 1.000.000	81	43,8%

Assessment of Construct

The way to check if a measurement is valid, meaning the variables being studied are actually the ones the researcher wants to look at, involves looking at the external loading values. Reliability is checked using a measure called composite reliability, as explained by Sarstedt and Christian M. Ringle in 2017. From Table 4, it can be seen that all the constructs have external loadings that are above the minimum required level of 0.7. Also, the composite reliability and Cronbach's alpha values are both higher than 0.7, showing that the measurements are consistent. Additionally, the AVE values are all greater than 0.5, which means the constructs have convergent validity, as mentioned by Hair et al. in 2019. The VIF values range from 1.623 to 2.992, which is within an acceptable range. A VIF value below 3.3 means there's no significant common method bias, according to Kock in 2015. To check for discriminant validity, Table 4 shows that the HTMT ratio is used with a limit of 0.9 to confirm both convergent and discriminant validity, as described by Henseler et al. in 2009. The results show that both convergent and discriminant validity are present.

Table 2.
Measurement Construct

Constructs	Validity		VIF	Reliability		AVE
	Items	Outer Loadings		Cronbach's Alpha	Composite Reliability	
Green Brand	The Npure brand reminds me of someone who is competent and knows what he is doing.	0,730	1,689	0,878	0,908	0,624
	The Npure brand has the ability to deliver what it	0,851	2,719			



	promises.					
	The Npure brand delivers what it promises.	0,840	2,561			
	Npure brand product claims are trustworthy.	0,825	2,154			
	The Npure brand has a name you can trust.	0,732	1,709			
	The Npure brand does not pretend to be something it is not.	0,752	1,707			
Eco-Labeling	Whenever possible, I buy Npure products that are packaged in reusable containers.	0,781	1,772	0,791	0,856	0,544
	I buy green products if they are certified by an Environmental Organization.	0,751	1,546			
	I believe the eco-friendly claims in the Npure advertisement.	0,742	1,428			
	Marketers should advertise the environmental aspects of Npure products.	0,706	1,394			
	The government should make eco-labeling mandatory.	0,706	1,479			
Eco-Branding	The Npure brand makes me think about the state of the environment.	0,702	1,525			
	The Npure brand gives the impression of	0,796	1,937			



	being environmentally friendly. (eco-friendly = not harmful to the environment).					0,882	0,599
	The Npure brand creates eco-friendly emotions.	0,771	1,775	0,832			
	The Npure brand makes me behave in an eco-friendly manner.	0,812	2,150				
	When I shop, I buy eco-friendly Npure products	0,785	1,973				
Green Purchase Intention	I can spend more money on eco-friendly Npure products compared to conventional products.	0,841	1,671				
	I will buy Npure products because I care about the environment.	0,834	1,701	0,796	0,880	0,710	
	My likelihood of buying the product of this Npure brand is high.	0,853	1,707				

Table 3.
Discriminant Validity with Heterotrait-Monotrait Ratio (HTMT)

	Eco-Branding	Eco-Labeling	Green Brand Effect	Green Purchase Intention
Eco Branding				
Eco Labeling	0,838			
Green Brand Effect	0,817	0,735		
Green Purchase Intention	0,833	0,786	0,692	



Table 4. Hypothesis Testing

	Hypothesis	Path Coefficient	Standard Deviation	T Value	P Value	Decision
H1	Green brand -> Green purchase intention	0,125	0,133	0,937	0,349	Not Supported
H2	Green brand -> eco-labeling	0,622	0,089	6,987	0,000	Supported
H3	Green brand -> eco-branding	0,703	0,046	15,250	0,000	Supported
H4	eco-labeling -> green purchase intention	0,280	0,117	2,396	0,017	Supported
H5	Green brand -> Eco-labeling -> Green purchase intention	0,174	0,067	2,593	0,010	Fully mediated
H6	Eco branding-> Green purchase intention	0,400	0,086	4,630	0,000	Supported
H7	Green brand -> Eco-branding -> green purchase intention	0,281	0,061	4,611	0,000	Fully mediated

Inner Model Assessment

Once the designed model had good validity and reliability, a bootstrapping approach was conducted with 500 subsamples to test the hypotheses. PLS-SEM was chosen because it can assess measurement models and structural models, as well as for exploratory analysis focusing on theory development (Achmad et al., 2021). Another argument for using PLS-SEM is its suitability for complex models. For the Bootstrapping test, a sample size of 500 was chosen because of the directional hypotheses method, which requires a one-



tailed test.

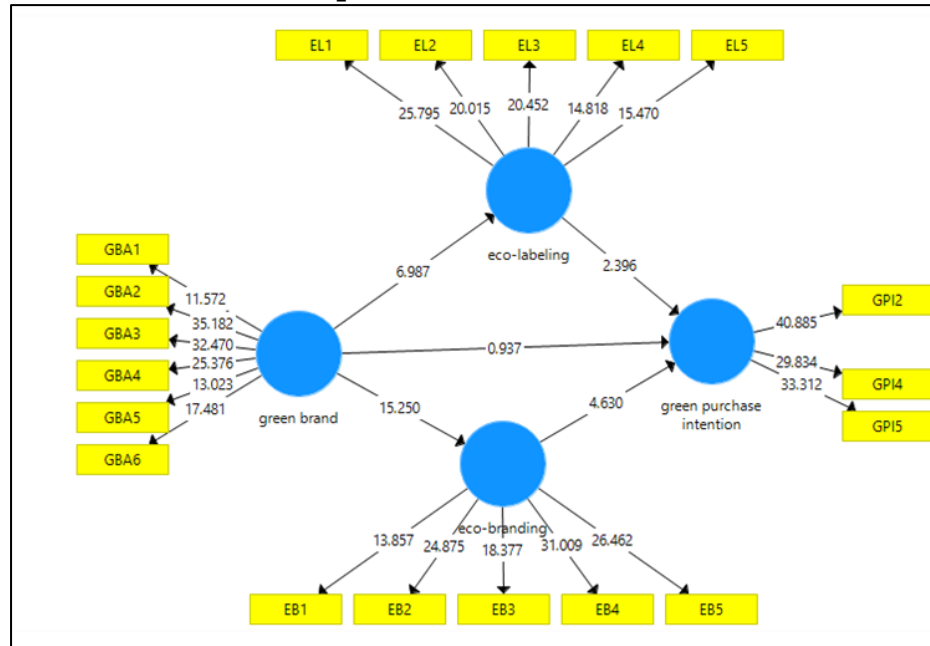
The results of the direct impact in Figure 2 and Table 5 display that green brand has a significant relationship with eco-labeling ($t = 6,987$; $p = 0.000$) and eco-branding ($t = 15,250$; $p = 0.000$), supporting hypotheses H2 and H3. Therefore, it can be said that green brand is always closely related to green marketing, namely eco-labeling and eco-branding.

In addition, the study found a significant relationship between eco-labeling and green purchase intention ($t = 2,396$; $p = 0.017$), supporting hypothesis H4. Similarly, eco-branding also had a significant effect on green purchase intention ($t = 4,630$; $p = 0.000$), supporting hypothesis H6. These results suggest That green marketing such as eco-labeling and eco-branding has several advantages, among others; providing certainty of environmental friendliness of brand products, providing satisfaction to brands because they can channel positive steps through buying environmentally friendly products, and of course, educating consumers about new innovations in environmentally friendly products.

Similarly, eco-labeling also has a significant mediating effect on the relationship between green brand and green purchase intention ($t = 2,593$; $p = 0.010$), which supports hypothesis H5. Then, hypothesis H7 is supported by a significant relationship between eco-branding mediating green brand and green purchase intention ($t=4,611$; $p=0.000$). These results indicate that green marketing such as eco-labeling and eco-branding is very important because it can make consumers aware of the product and can influence consumer buying interest. Green brand marketers need to emphasize eco-branding and eco-labeling in marketing their products.

In contrast, there was no significant relationship found between green brand and green purchase intention ($t = 0,937$; $p = 0.349$). Therefore, these results do not support hypothesis 1 (H1). The study suggests that environmentally friendly product brands will not attract consumer buying intentions if they are not accompanied by appropriate promotions.

Figure 2.
PLS Output of The Structural Model



The empirical results of this study state that the green brand effect can significantly mediate between eco-branding and eco-labeling. This suggests that when a brand has a strong eco-branding strategy, it can increase consumer perceptions of the brand as environmentally friendly. Then, this perception can be effectively transferred to the product through eco-labeling, which in turn affects consumers' perception of the product as eco-friendly (Grant, 2008). Using strategies such as communicating the brand's commitment to environmental issues, using environmentally friendly materials, or participating in environmental initiatives, consumers are likely to form positive perceptions of the brand as environmentally friendly (Wojnarowska et al., 2021). This perception then influences how consumers perceive the brand's products. When products are labeled as eco-friendly, consumers will be more aware of the brand's commitment to sustainable practices, as the label provides direct information about the environmental aspects of the product. Therefore, positive perceptions of the brand as an environmentally conscious brand can be reinforced by the use of environmental labels on its products.

Moreover, the green brand effect acts as a link or mediator between eco-branding and eco-labeling (Augtiah et al., 2022). This means that a strong eco-branding strategy not only increases consumers' perception of the brand as environmentally friendly but also influences their perception of the brand's



products through the use of eco-labeling. This shows the importance of consistent brand communication and the use of eco-labeling in building a sustainable brand image in the eyes of consumers.

Then the green brand effect can significantly mediate between eco branding and green buying intention. This shows that a strong eco-branding strategy can positively influence consumers' green purchase intention through creating a positive perception of the brand as a brand that cares about the environment. In more detail, these results show that when brands use effective eco-branding strategies, such as communicating the brand's commitment to environmental issues, using environmentally friendly materials, or participating in environmental initiatives, this can shape consumers' positive perceptions of the brand as a brand that cares about the environment. This positive perception then influences consumers' green purchase intentions. When consumers believe that a brand does have a strong commitment to environmental issues, they will be more likely to choose products from that brand than brands that pay less attention to environmental sustainability.

This study examines the effect of eco-branding as a strong link or mediator between eco-branding and green purchase intentions. Therefore, strong eco branding not only increases consumers' perception of the brand as environmentally friendly but also influences consumers' green purchase intentions. This shows that consistent and clear brand communication about commitment to environmental issues can positively influence consumer purchasing behavior in supporting environmentally friendly products (Febriani et al., 2022)

CONCLUSION

This study has several conclusions, namely green brand products have a strong influence on purchasing decisions mediated by eco-labeling and eco-branding, which shows that green brand effect variables have a positive and significant effect on green purchase intention and eco-labeling significantly mediates the influence of eco-branding on purchasing decisions. Therefore, it can be said that a green brand should emphasize eco-labeling because it can influence consumers' purchasing intentions. Furthermore, the eco-branding strategy of green campaigns can help company marketers provide knowledge to consumers about brand products. The result of this study is the importance of an environmentally friendly product brand to be clear in eco-branding and eco-labeling a product to increase purchase intention for environmentally friendly



products.

Moreover, this research has limitations. Offline and online purchase intentions were not tested by the researchers. Future studies may be able to test the differences between the two. In addition, the sample obtained in this study was very limited. The respondent data obtained is dominated by college students. Future researchers have an opportunity for further research by focusing on productive respondents between the ages of 25-35. It is also suggested to future researchers to add other variables such as green brand positioning and brand image, mediation of brand knowledge, mediation of social media, awareness of price, and so on. For future researchers, it is hoped that this research can be a reference material for conducting similar research. Future research can add recommended variables to test the influence of green purchasing decisions.

REFERENCES

- Achmad, N., Kuswati, R., & Imronudin. (2021). *Teori & Praktek Statistik Milenial*. Jasmine Publisher.
- Adiputra, I. G., Nataherwin, & Aoleria, K. (2023). The Effect of Environmental Concern and Attitude of Toward Green Brand on Green Purchase Intention: Evidences in Milenial Generations in Jakarta. *Archives of Business Research*, 11(8), 48–59.
- Ali, M., Ullah, S., Salman, M., Mui, A., Cheok, Y., & Alenezi, H. (2023). *Assessing the impact of green consumption behavior and green purchase intention among millennials toward sustainable environment*. 23335–23347. <https://doi.org/10.1007/s11356-022-23811-1>
- Amin, S., & Tarun, M. T. (2021). Effect of consumption values on customers' green purchase intention: a mediating role of green trust. *Social Responsibility Journal*, 17(8), 1320–1336. <https://doi.org/10.1108/SRJ-05-2020-0191>
- Augtiah, I., Ihwan Susila, & Wiyadi. (2022). Pengaruh Green Product, Green Advertising, Dan Green Brand Image Terhadap Keputusan Pembelian Dengan Consumer Attitude Sebagai Variabel Mediasi. *Benefit: Jurnal Manajemen Dan Bisnis*, 7(3), 10–26. <https://doi.org/10.23917/benefit.v7i2.1486>
- Bashir, S., Khwaja, M. G., Rashid, Y., Turi, J. A., & Waheed, T. (2020). Green Brand Benefits and Brand Outcomes: The Mediating Role of Green Brand Image. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020953156>



- Bu, L., Chen, C., Ng, K. K. H., Zheng, P., Dong, G., & Liu, H. (2020). Journal Pre of. *Journal of Cleaner Production*, 124413. <https://doi.org/10.1016/j.jclepro.2020.124413>
- Chen, J., Wang, C., Wang, Q., & Luo, B. (2019). *Sibling Rivalry vs . Brothers in Arms : The Contingency Effects of Involvement of Multiple Offsprings on Risk Taking in Family Firms*.
- Chen, Y. S., Chang, T. W., Li, H. X., & Chen, Y. R. (2020). The influence of green brand affect on green purchase intentions: The mediation effects of green brand associations and green brand attitude. *International Journal of Environmental Research and Public Health*, 17(11), 1–17. <https://doi.org/10.3390/ijerph17114089>
- Chuang, H., & Chen, C. (2023). *The Role of Two-Way Influences on Sustaining Green Brand Engagement and Loyalty in Social Media*.
- Davidenko, L., Sherimova, N., Kunyazova, S., Amirova, M., & Beisembina, A. (2024). Sustainable Economy: The Eco-Branding of an Industrial Region in Kazakhstan. *Sustainability (Switzerland)*, 16(1). <https://doi.org/10.3390/su16010413>
- Delmas, M. A., & Grant, L. E. (2014). Eco-Labeling Strategies and Price-Premium: The Wine Industry Puzzle. In *Business and Society* (Vol. 53, Issue 1). <https://doi.org/10.1177/0007650310362254>
- Diga, D., & Severin, I. (2021). *Quality Study on Vehicle Heat Ventilation and Air Conditioning Failure*. 1–13.
- Fernandes, N., Rodrigues, R., Samagaio, A., & Miranda, G. (2018). The adoption of management control systems by start-ups : Internal factors and context as determinants. *Journal of Business Research*, November, 1–10. <https://doi.org/10.1016/j.jbusres.2018.11.020>
- Grant, J. (2008). Green marketing. *Strategic Direction*, 24(6), 25–27. <https://doi.org/10.1108/02580540810868041>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20(2009), 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hinderer, S., & Kuckertz, A. (2022). *The bioeconomy transformation as an external enabler of sustainable entrepreneurship*. October 2021, 2947–2963. <https://doi.org/10.1002/bse.3056>



- Huang, Y. C., Yang, M., & Wang, Y. C. (2014). Effects of green brand on green purchase intention. *Marketing Intelligence and Planning*, 32(3), 250–268. <https://doi.org/10.1108/MIP-10-2012-0105>
- Husain, R., Ahmad, A., & Khan, B. M. (2022). The impact of brand equity, status consumption, and brand trust on purchase intention of luxury brands. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2034234>
- Isbahi, M. B., Zuana, M. M. M., & Toha, M. (2024). The Multi-Social Relation of the Cattle Industry in the Plaosan Subdistrict Animal Market of Magetan Regency. *Malacca: Journal of Management and Business Development*, 1(1), 31–46. <https://doi.org/10.69965/malacca.v1i1.51>
- Jamil, K., Liu, D., Gul, R. F., Hussain, Z., Mohsin, M., Qin, G., & Khan, F. U. (2021). Do remittance and renewable energy affect CO2 emissions? An empirical evidence from selected G-20 countries. *Energy & Environment*, 33(5), 916–932. <https://doi.org/10.1177/0958305X211029636>
- Khan, E. A., Royhan, P., Rahman, M. A., Rahman, M. M., & Mostafa, A. (2020). The impact of enviropreneurial orientation on small firms' business performance: The mediation of green marketing mix and eco-labeling strategies. *Sustainability (Switzerland)*, 12(1), 0–15. <https://doi.org/10.3390/SU12010221>
- Ko, J. H., & Jeon, H. M. (2024). The Impact of Eco-Friendly Practices on Generation Z's Green Image, Brand Attachment, Brand Advocacy, and Brand Loyalty in Coffee Shop. *Sustainability (Switzerland)*, 16(8). <https://doi.org/10.3390/su16083126>
- Kock, N. (2015). Common Method Bias in PLS-SEM. *International Journal of E-Collaboration*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>
- Li, Y. (2020). Competing eco-labels and product market competition. *Resource and Energy Economics*, 60. <https://doi.org/10.1016/j.reseneeco.2020.101149>
- Mumu, J., Tanujaya, B., Charitas, R., & Prahmana, I. (2022). Likert Scale in Social Sciences Research: Problems and Difficulties. *FWU Journal of Social Sciences*, 16(4), 89–101. <https://doi.org/10.51709/19951272/Winter2022/7>
- Nekmahmud, M., & Fekete-Farkas, M. (2020). Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. *Sustainability (Switzerland)*, 12(19), 1–31. <https://doi.org/10.3390/su12197880>
- Obilor, E. I. (2023). Convenience and Purposive Sampling Techniques: Are they the Same? *International Journal of Innovative Social & Science Education Research*, 11(1), 1–7.



- Orsato, R. J. (2009). When Does it Pay to be Green? *Sustainability Strategies*, 3–22. https://doi.org/10.1057/9780230236851_1
- Putri, V. P. (2023). Mendorong Pilihan Berkelanjutan: Eco Labeling, Eco Branding, Dan Dampaknya Terhadap Green Purchase Intentions dan Consumer Behaviour. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (JEBMA)*, 3(3), 875–888. <https://doi.org/10.47709/jebma.v3i3.3036>
- Riza Aura Febriani, Sholahuddin, M., Kuswati, R., & Soepatini. (2022). Do Artificial Intelligence and Digital Marketing Impact Purchase Intention Mediated by Perceived Value? *Journal of Business and Management Studies*, 4(4), 184–196. <https://doi.org/10.32996/jbms.2022.4.4.28>
- Salehzadeh, R., Sayedan, M., Mirmehdi, S. M., & Heidari Aqagoli, P. (2023). Elucidating green branding among Muslim consumers: the nexus of green brand love, image, trust and attitude. *Journal of Islamic Marketing*, 14(1), 250–272. <https://doi.org/10.1108/JIMA-08-2019-0169>
- Sana, S. S. (2020). Price competition between green and non green products under corporate social responsible firm. *Journal of Retailing and Consumer Services*, 55(March), 102118. <https://doi.org/10.1016/j.jretconser.2020.102118>
- Sanjay, M. R., Madhu, P., Jawaid, M., Senthamaraiannan, P., Senthil, S., & Pradeep, S. (2017). Characterization and Properties of Natural Fiber Polymer Composites: A Comprehensive Review. In *Journal of Cleaner Production*. Elsevier B.V. <https://doi.org/10.1016/j.jclepro.2017.10.101>
- Sarstedt, M., & Christian M. Ringle, and J. F. H. (2017). Partial least squares structural equation modeling with R. In *Practical Assessment, Research and Evaluation* (Vol. 21, Issue 1).
- Shabbir, M. S., Bait Ali Sulaiman, M. A., Hasan Al-Kumaim, N., Mahmood, A., & Abbas, M. (2020). Green Marketing Approaches and Their Impact on Consumer Behavior towards the Environment—A Study from the UAE. *Sustainability*, 12(21), 8977. <https://doi.org/10.3390/su12218977>
- Sobaih, A. E. E., & Elshaer, I. A. (2022). Personal Traits and Digital Entrepreneurship: A Mediation Model Using SmartPLS Data Analysis. *Mathematics*, 10(21), 1–19. <https://doi.org/10.3390/math10213926>
- Sohaili, J., Siau, H., Hassan, N., Ahmad, N., & Kumari, S. (2016). Removal of scale deposition on pipe walls by using magnetic field treatment and the effects of magnetic strength. *Journal of Cleaner Production*, 139, 1393–1399. <https://doi.org/10.1016/j.jclepro.2016.09.028>



- Song, Y., Qin, Z., & Qin, Z. (2020). Green Marketing to Gen Z Consumers in China: Examining the Mediating Factors of an Eco-Label-Informed Purchase. *SAGE Open*, 10(4). <https://doi.org/10.1177/2158244020963573>
- Susilawati, C., Joharudin, A., Abduh, M., & Sonjaya, A. (2023). The Influence of Religiosity and Halal Labeling on Purchase Intention of Non-Food Halal Products. *Indonesian Journal of Halal Research*, 5(2), 77–89. <https://doi.org/10.15575/ijhar.v5i2.22965>
- Tan, Z., Sadiq, B., Bashir, T., Mahmood, H., & Rasool, Y. (2022). Investigating the Impact of Green Marketing Components on Purchase Intention: The Mediating Role of Brand Image and Brand Trust. *Sustainability (Switzerland)*, 14(10). <https://doi.org/10.3390/su14105939>
- Tang, S., & Demeritt, D. (2018). *Climate Change and Mandatory Carbon Reporting: Impacts on Business Process and Performance*. 455(December 2017), 437–455. <https://doi.org/10.1002/bse.1985>
- Wojnarowska, M., Sołtysik, M., & Prusak, A. (2021). Impact of eco-labelling on the implementation of sustainable production and consumption. *Environmental Impact Assessment Review*, 86(November 2020). <https://doi.org/10.1016/j.eiar.2020.106505>