



<https://ejournal.ibik.ac.id/index.php/riset>

JURNAL APLIKASI EKONOMI AKUNTANSI DAN BISNIS

E-ISSN : 2656-7113 P-ISSN : 2797-4057 DOI : doi.org/10.37641/riset.v4i2.167

ANALYSIS OF CONSUMERS' GREEN PURCHASE BEHAVIOR ON BOTTLED WATER THROUGH A GREEN BRAND IMAGE APPROACH

Budi Setiawan¹⁾, Gen Gen Gendalasari²⁾, Dewi Raisa Putrie³⁾.

^{1, 2, 3)} Institute of Business and Informatics Kesatuan

E-mail: budi@ibik.ac.id¹⁾, gen2_sari@ibik.ac.id²⁾, 181120074@student.ibik.ac.id³⁾

ARTICLE INFO

ANALYSIS OF
CONSUMERS' GREEN
PURCHASE
BEHAVIOR ON
BOTTLED WATER
THROUGH A GREEN
BRAND IMAGE
APPROACH

Submitted:

12 – July – 2022

Revised:

26 – August – 2022

Accepted:

27 – September – 2022



ABSTRACT

This study analyzes the effect of greenwash on consumer green purchasing behavior by a company mediated by the role of a company's green brand image. This study was conducted on consumers who know about bottled drinking water product brands in Indonesia. Primary data was performed using a questionnaire with a total of 385 data. The data in this study is quantitative. This study uses Structural Equation Modeling (SEM). The software used in this study is LISREL 8.8 and SPSS 22. The results of this study are that greenwashing has a negative effect on the brand image of green companies, and green brand image has a positive effect on green consumer purchases. Green brand image has an essential role in mediating the effect of greenwashing on green consumer purchase behavior. Therefore, companies need to reduce greenwashing activities and enhance their green brand image to increase green consumer purchase behavior.

Keywords: Greenwashing, Green Brand Image, Green Purchase Behavior.

INTRODUCTION

The global popularity of the green environment raises awareness of the Indonesian people towards environmental care and makes this awareness continue to increase among the people. This condition results in a shift in the community's needs, desires, and expectations for the products and services they use and the emergence of pro-environmental behavior. Pro-environmental behavior is taking action based on a sense of responsibility by individuals or groups in carrying out an effort to overcome

and preserve the environment, such as protecting nature and reducing environmental problems (Lee, Jan, & Yang, 2013; Palupi & Sawitri, 2017). Pro-environmental behavior, also known as green behavior, sustainable, or environmentally-friendly (eco-friendly) conduct, is defined as acts taken to safeguard the environment. Pro-environmental behavior includes responsibly engaging with nature or recycling household waste. However, they can also be adaptive responses to the effects of climate change, such as purchasing sustainable products (e.g., local food, green cleaning products), conserving water or energy, or changing travel modes.

Therefore, if the company wants to continue to survive, there needs to be an adjustment to the consumer's environmentally friendly purchasing behavior. Thus, companies also need to offer appropriate solutions. By doing green marketing to attract consumers who care about the environment (Chang, 2013; Chen & Tung, 2014; Chen & Chang, 2012a; Wu et al., 2016). This thing can be done by innovating products or services with clear and transparent environmentally friendly claims. It is because if companies often take advantage of green claims or advertising activities that are not true, it will make consumers feel confused about green purchases. It can harm the demand for green products in the market (Hameed et al., 2021). Therefore, the main purpose of marketing can work like a symbiotic mutualism, where companies benefit from soaring sales, and people feel safe when using or consuming environmentally friendly products. Green marketing is a marketing area in which products and services are promoted based on their environmental advantages. Green marketing is also described as promoting environmentally friendly items that are not detrimental to the environment and manufactured using environmentally friendly processes.

Greenwashing is a marketing activity in the name of being environmentally friendly for the products it promotes, the purpose of which is to form a perception in the minds of consumers that the products promoted by the company are environmentally friendly, but in reality, they are not (Chen et al., 2018). Greenwashing is a misguided marketing concept (Hameed et al., 2021). Many companies use greenwashing whose objectives include: 1. To become a well-known company for doing green marketing, which is a current trend; 2. Increase market share (consumer segments are pro-environmental and have environmentally friendly purchasing behavior; 3. Increase company sales; 4. Get a positive brand image in the minds of consumers. Of course, this is very detrimental to consumers because the company has claimed the products offered are environmentally friendly when in reality, it's not (Hameed et al., 2021).

Greenwashing occurs when a firm or organization spends more time and money presenting itself as environmentally friendly than genuinely reducing its environmental effect. It is a deceptive advertising strategy used to earn favor from people who want to support firms that care about the environment. In examining consumer feedback on purchasing green products under green environmental conditions, the organization is thinking of adjusting to the growing consumer demand for products that are least harmful to the environment (Hameed et al., 2021; Hameed, Waris, & Haq, 2019). Greenwashing practice can harm companies' brand image. According to the American Marketing Association in Tjiptono (2015), a brand is a combination of names, terms, signs, symbols, or designs that aim to identify the goods or services offered by a seller that distinguish them from the goods or services provided by competitors. A brand is a possible tool that can be used to distinguish a company's products from competing products. Therefore, it can show the company name and all products marketed in one product line or specific product unit (Tjiptono, 2015). Brand image refers to the framework of a brand's thinking, which contains an explanation to consumers about the

attributes, advantages, uses, situations, characteristics of users and marketers, or the characteristics of the maker of the product or brand (Hafilah et al., 2019).

In line with this concept, T. W. Chang et al. (2020) explain that environmental buying behavior is a shift in consumer behavior due to the declining quality of ecological life. Therefore, consumers turn to green products to reduce pollution and environmental damage and have started to carry out ecological protection. In addition, environmentally friendly purchasing behavior is a consumer behavior that focuses on environmental issues and includes purchases made according to personal experience or knowledge of certain environmentally friendly products with functions and benefits that can protect the environment (T. W. Chang et al., 2020). Green purchase behavior is an action taken by consumers to use products that provide benefits for the environment and care for the environment. Consumers with this environmentally friendly purchasing behavior usually do not mind spending more money to buy green products.

Green purchasing behavior refers to purchasing environmentally friendly or sustainable items that are "recyclable and "useful" to the environment, as opposed to purchasing such things that hurt the environment and society. Green purchasing consumer behavior is often analyzed in terms of customers' desire or intention to acquire green items, and that conscious behavior or intention finally turned into their purchase choice.

According to Hameed et al. (2021), greenwashing is a marketing concept that is not implemented. The company does this by promoting that the manufacture of environmentally friendly products consumes many company resources. The company does not apply it to its business practices. Chen et al. (2018) explained that greenwashing could harm all companies implementing green marketing. As a result, consumers will easily distrust the company's green marketing activities. Greenwashing activities are deceiving consumers. Therefore, it will have a negative effect on the company's reputation (Chen et al., 2018; Hameed et al., 2021). According to Chen et al. (2018), companies often take advantage of green claims or misleading advertising activities. In the end, greenwashing can confuse consumers about green purchases and hurt the demand for green products in the market. Therefore, consumers will be suspicious because the company's green claims do not match reality (Chen et al., 2018). The greenwashing point of view will reduce consumer behavior toward consumer commitment to the company (Chen et al., 2018). Therefore, greenwash can harm the company's green image, caused of consumers doubts the company's green marketing.

Brand image is essential in marketing activities that are more systematically arranged where it isn't easy to differentiate products or services for consumers. As the world becomes increasingly aware of climate change and the adverse effects of specific activities and goods on the environment, a green brand image may demonstrate to customers that an organization is compassionate and cutting-edge. In addition, greenwashing will confuse consumers because unreliable marketing can make it difficult for consumers to judge the company's products (Chen et al., 2018). As a result, greenwashing can harm the company's green brand image. Therefore, the first hypothesis of this study is as follows:

H₁: Greenwashing has a negative effect on corporate green brand image.

When greenwashing activities are carried out, it can burden the growth of green marketing. This condition will make it difficult for consumers to differentiate the idea of green trust (Chen et al., 2018). Consumers are already aware of greenwash activities by companies that do not apply entirely environmentally friendly claims (Chen et al.,

2018). Therefore, the Company is prohibited from giving the wrong environmental message to consumers in the market because greenwash will harm the actual existence of environmentally friendly products and hinder the function of green marketing (Chen et al., 2018). Greenwashing activities will result in changes in consumer perceptions of green claims and can make it difficult for consumers to trust all green claims from other manufacturers. As a result, the Company experienced a decline in consumer support in the market.

On the other hand, if the Company often conducts green marketing and succeeds in giving messages to consumers about the environment, consumers will get used to it, and there is a high possibility that consumers will trust the Company's green advertising (Chen et al., 2018). When companies carry out activities that exaggerate the usefulness of the Company's green products, consumers will not trust the Company anymore (Chen et al., 2018). Suppose the Company takes advantage of greenwashing activities to avoid telling the truth to customers. In that case, the Company's customers will refuse to buy the Company's products in the market (Chen & Chang, 2013 & Chen et al., 2018).

Greenwashing will lead to negative word-of-mouth attitudes regarding the environmental message of a particular product, brand, or service (Chen et al., 2018). Green purchase behavior means that consumers make purchases of specific brands, products, or services that come from their environmental needs (Chen & Chang, 2012 & Chen et al., 2018). Greenwashing affects consumer buying behavior (Chen & Chang, 2012 & Chen et al., 2018). Based on this, the second hypothesis of this study is as follows:

H₂: Greenwashing has a negative effect on consumers green purchase behavior.

Companies must build a good consumer environment, make strict environmental regulations, and take advantage of the green marketing concept. Consumer behavior can be influenced by the image that consumers perceive themselves. Therefore, brand image will positively affect customer buying behavior (Tariq et al., 2013; Wang & Tsai, 2014 & Chen et al., 2018). Purchase intentions arise due to the company's brand image (Shah et al., 2012 & Chen et al., 2018).

A green brand image is evident when clients are actively aware of a company's eco-friendly products and actions, which are generally more robust than their competitors' environmental initiatives. A green brand image takes time and a variety of techniques to develop since it reflects the entire brand, not just one product or campaign. This results in green brand equity, which means that a firm with a green brand image will be seen favorably and trusted by environmentally conscientious consumers.

A lousy brand image will reduce consumers' purchase intentions (Tariq et al., 2013 & Chen et al., 2018). Thus, when consumers no longer purchase the company's products, the company's brand image in the market is already bad. Therefore, companies try to avoid the occurrence of a bad brand image (Chen et al., 2018). Green brand image can be an essential determinant in the green era. This study states that the company's green brand image positively relates to consumers' green purchasing behavior. Thus, the third hypothesis of this study is as follows:

H₃: The company's green brand image has a positive effect on consumers' green purchasing behavior.

This research states that greenwashing has a negative effect on green brand image, and green brand image positively affects green purchasing behavior. Furthermore,

greenwashing is also thought to have a negative effect on green buying behavior. In addition, greenwashing can directly affect green brand image and green-friendly purchasing behavior. Therefore, brand image has a vital role in this study, so the fourth hypothesis of this study is as follows:

H4: Green brand image significantly affects the relationship between greenwashing and consumers' green purchase behavior.

METHOD

This study uses quantitative data. The method used in data collection is a questionnaire method using a Likert scale of 1-5. This study focuses on consumers knowing about drinking water products in disposable gallon packaging brands in Indonesia. The distribution of the questionnaires was carried out online using a Google form. The sampling technique in this study used purposive sampling. The criteria for respondents are consumers with a minimum age of 16 years who know the brand and have an awareness of protecting the environment. Below is a research model:

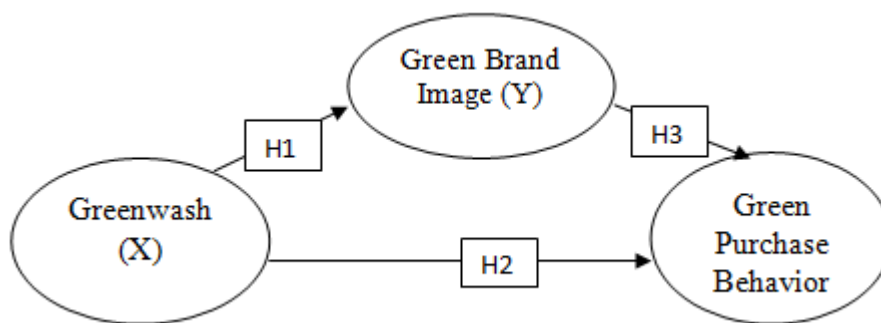


Figure 1. Research Model

Source: Data Processed

The unit of analysis in this study is drinking water products in disposable gallons in Indonesia.

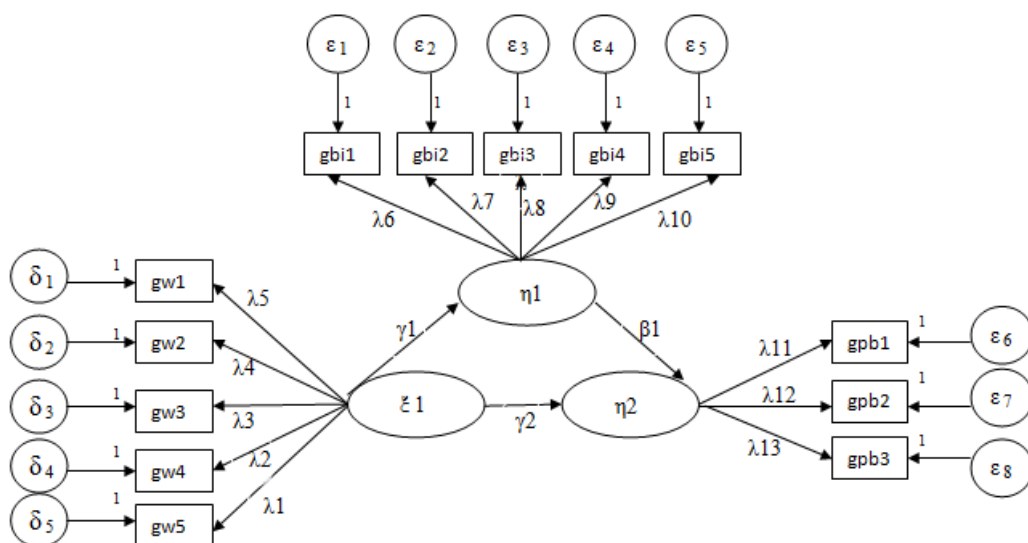


Figure 2. Full Complete Model

Source: Data Processed

In this study, data analysis was carried out using validity, reliability, normality, confirmatory factor analysis, hypothesis, and Sobel tests. The software used in carrying out measurements in this study is LISREL software version 8.80, which is carried out for confirmatory factor analysis, the goodness of fit, Structural model testing, and hypothesis testing. LISREL itself is a software or software developed for SEM data processing. This study also used SPSS 22 software to test its validity and reliability.

RESULTS

First, the confirmatory factor analysis was carried out to test the validity and reliability of the item's measurement. The results are provided in Table 1.

Table 1. Confirmatory Factor Analysis Results

Variable	Indicator	Standard Loading Factor	Error	CR	VE
Green Wash	gw1	0.82	0.33	0.92	0.70
	gw2	0.85	0.28		
	gw3	0.83	0.31		
	gw4	0.83	0.31		
	gw5	0.86	0.27		
Green Brand Image	gbi2	0.84	0.30	0.92	0.75
	gbi3	0.85	0.27		
	gbi4	0.90	0.18		
	gbi5	0.88	0.23		
Green purchase behavior	gpb1	0.89	0.20	0.94	0.83
	gpb2	0.93	0.14		
	gpb3	0.92	0.15		

Source: Data Processed

Based on Table 1, it can be seen that the measurement of this study has met the aspects of validity and reliability. Second, the goodness-of-fit analysis was carried out. The results are provided in Table 2:

Table 2. Goodness of Fit (GOF) test results

Measurement	Parameter	Result
Chi-square	Chi-square/ pdf < 2	56.24/45 = 1.25
GFI	0.90	0.98
AGFA	0.90	0.96
RMS	<0.08	0.0
NCP	< confidence interval NCP	0.0
NNFI	0.90	1.00
NFI	0.90	1.00

(Continuation)

Measurement	Parameter	Result
SOME	< 0.1	0.022
RFI	0.90	0.99
IF	0.90	1.00
CFI	0.90	1.00

Source: Data Processed

A coefficient value or estimate of the relationship between 2 latent variables is χ (Lee et al., 2013; Palupi & Sawitri, 2017). Pro-environmental behavior, also known as green behavior, sustainable, or environmentally-friendly (eco-friendly) conduct, is defined as acts taken to safeguard the environment. Pro-environmental behavior includes responsibly engaging with nature or recycling household waste. However, they can also be adaptive responses to the effects of climate change, such as purchasing sustainable products (e.g., local food, green cleaning products), conserving water or energy, or changing travel modes.

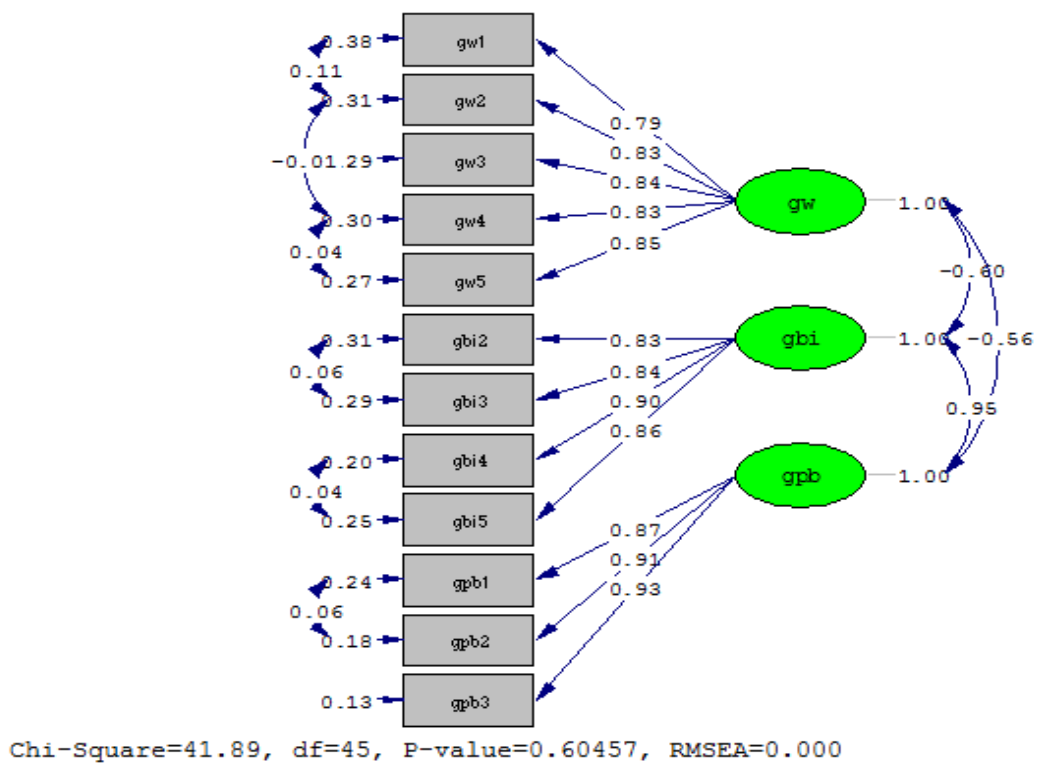


Figure 3. Standardized Solution Modification Model

Source: Data Processed

This research model has met the data's validity and reliability aspects and the goodness-of-fit test aspect. Thus, the next step of analysis is to test the hypothesis. The results are presented in Figure 4.

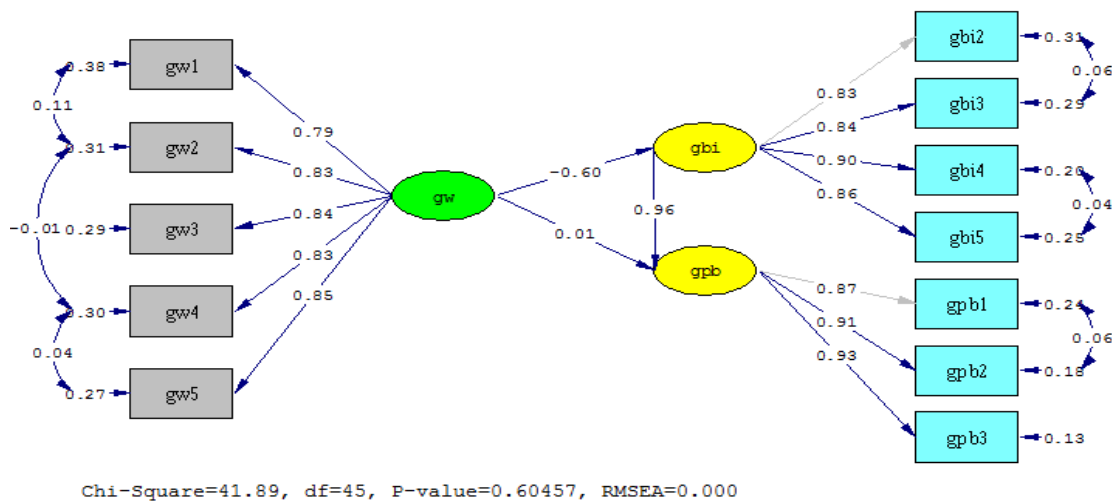


Figure 4. Result of Standardized Solution Structural Diagram

Source: Data Processed

The results of the t-value coefficients in each path from this study are presented in Figure 5.

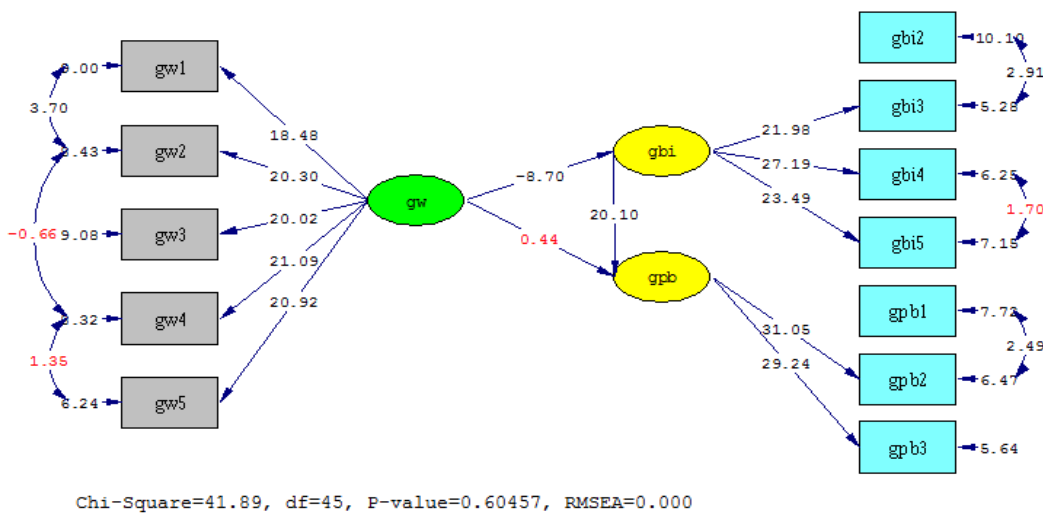


Figure 5. Results of The Structural T-Value Diagram

Source: Data Processed

Based on Figures 4 and 5, the complete results can be presented as a reference in testing the hypothesis related to the direct effect analysis. The results are shown in Table 3. As for the indirect effect analysis, the results are presented in Table 4.

Table 3. Direct Effect

Hypothesis	Path	t-value	Coefficient	Std. error	Conclusion
H1	gw → gbi	-8,70	-0,60	0,069	Supported
H2	gw → gpb	0,44	0,015	0,034	Not Supported
H3	gbi → gpb	20,10	0,96	0,048	Supported

Source: Data Processed

Table 3 shows the test results of the direct effect of greenwashing on green brand image and green purchase behavior, as well as the direct effect of green brand image on green purchase behavior. The result is known that greenwashing negatively and significantly affects green brand image. Thus, if the company is perceived as practicing greenwashing, it will reduce the green brand image of the company. This condition is certainly not expected to happen. Therefore, the company must implement its green marketing strategy so as not to endanger its green brand image of the company. When the company's green brand image is well maintained, it can significantly increase consumers' green purchase behavior. Therefore, for the green brand image to be maintained properly, companies must avoid practices that consumers will perceive as greenwashing.

Table 4. Indirect Effect

Hypothesis	Variable Relationship	T-value	Coefficient	Std. Error	Conclusion
H4	gw → gbi → gpb	-8,20	-0.57	0.07	Supported

Source: Data Processed

Table 4 shows that the test results of the indirect effect of greenwashing on green purchase behavior through the green brand image are known. The results show that green brand image has a significant role in mediating the effect of greenwashing on green purchase behavior. These results also emphasize the importance of companies properly implementing their green marketing strategies to avoid consumers' perceptions of greenwashing. The green brand image of the company can be weakened if the company is perceived as doing greenwashing by consumers. On the other hand, a strong green brand image from the company will increase consumers' green purchase behavior.

The "green" phrase or symbol can symbolize a variety of brand positioning techniques (such as energy efficiency, organic, and environmentally friendly). This typically depends on the company philosophy's resilience to change due to the execution of green marketing activities such as natural resource security advertising and reacting to green customers' requests. According to the green customer, a green brand image is a significant indication in this respect.

The company employs some marketing approaches, such as pricing or product quality, to increase brand image in customers' eyes. Its enhancement marketing plan is partnered with environmentally friendly issues, with the expectation that it may strengthen the company's green brand image. The influence of a green brand image can alter consumer behavior, such as purchasing interest and other behaviors. An essential factor is customer green awareness for environmentally friendly products. A green brand image is produced by a succession of client perceptions about a company's environmental commitment. It emphasizes that the green brand image connects to the products that customers access and the company's environmental conduct.

CONCLUSION

A comprehensive conclusion was obtained based on the research and discussion conducted in this study. Greenwashing has a negative effect on green brand image. The misleading practice of the company's green marketing strategy can be perceived as a greenwashing practice by consumers. If consumers perceive it as greenwashing, it can

be dangerous for the company. The company's green brand image will be disturbed to reduce consumers' green purchase behavior. In this case, green brand image has an essential role in mediating the effect of greenwashing on the green purchase behavior of consumers. This research has some limitations in scope and discussion. Therefore, further studies are needed to fill the existing research gaps. Further research is suggested to involve intention as an antecedent of behavior. This will make the research model more comprehensive.

REFERENCES

- Chang, C. (2013). Feeling Ambivalent About Going Green. *Journal of Advertising*, 40(4), 19–32. <https://doi.org/10.2753/JOA0091-3367400402>
- Chang, T. W., Chen, Y. S., Yeh, Y. L., & Li, H. X. (2020). Sustainable Consumption Models For Customers: Investigating The Significant Antecedents Of Green Purchase Behavior From The Perspective Of Information Asymmetry. *Journal of Environmental Planning and Management*, 64(9), 1668–1688. <https://doi.org/10.1080/09640568.2020.1837087>
- Chen, M. F., & Tung, P. J. (2014). Developing An Extended Theory Of Planned Behavior Model To Predict Consumers' Intention To Visit Green Hotels. *International Journal of Hospitality Management*, 36, 221–230. <https://doi.org/https://doi.org/10.1016/j.ijhm.2013.09.006>
- Chen, Y. S., & Chang, C. H. (2012a). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502–520. <https://doi.org/10.1108/00251741211216250>
- Chen, Y. S., & Chang, C. H. (2012b). Greenwash and Green Trust: The Mediation Effects Of Green Consumer Confusion And Green Perceived Risk. *Journal of Business Ethics*, 114(3), 489–500. <https://doi.org/10.1007/s10551-012-1360-0>
- Chen, Y. S., Huang, A. F., Wang, T. Y., & Chen, Y. R. (2018). Greenwash And Green Purchase Behavior: The Mediation Of Green Brand Image And Green Brand Loyalty. *Total Quality Management & Business Excellence*, 31(1–2), 194–209. <https://doi.org/10.1080/14783363.2018.1426450>
- Hafilah, E., Chaer, V., & Usman, O. (2019). The Effect of Brand Ambassador, Brand Image, Product Quality, and Price on Purchase Decisions Samsung Smartphones. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3314080>
- Hameed, I., Hyder, Z., Imran, M., & Shafiq, K. (2021). Greenwash and Green Purchase Behavior: an Environmentally Sustainable Perspective. *Environment, Development and Sustainability*, 23(9), 13113–13134. <https://doi.org/10.1007/s10668-020-01202-1>
- Hameed, I., Waris, I., & Haq, M. A. ul. (2019). Predicting Eco-Conscious Consumer Behavior Using Theory Of Planned Behavior In Pakistan. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-019-04967-9>
- Lee, T. H., Jan, F.-H., & Yang, C.-C. (2013). Conceptualizing And Measuring Environmentally Responsible Behaviors From The Perspective Of Community-Based Tourists. *Tourism Management*, 36, 454–468. <https://doi.org/10.1016/j.tourman.2012.09.012>

- Palupi, T., & Sawitri, D. R. (2017). Relationship Between Attitude And Pro-Environmental Behavior from The Perspective Of Theory of Planned Behavior. *Proceeding Biology Education Conference*, 14(1), 214–217.
- Tjiptono, F. (2015). *Marketing Strategy* (4 st). Yogyakarta: Andi Offset.
- Wu, T. J., Tsai, H. T., & Tai, Y. N. (2016). Would Corporate Social Responsibility Affect Consumers' Attitudes Towards Brand And Purchase Behavior? Buyer-Seller Guanxi As The Moderator. *Revista de Cercetare Si Interventie Sociala*, 53, 272–287.