Jurnal Ilmiah
Bisnis dan Ekonomi Asia
e-ISSN: 2620-875X
Institut Teknologi dan Bisnis Asia Malang

When Ecolabeling is Not Enough: The Importance of Green Brand Awareness in Influencing Purchase Decisions

Venita Venita[1], Yulia Hamdaini Putri[1*], Aslamia Rosa[1]
[1]Universitas Sriwijaya, Indonesia

*Correspondence: yuliahamdaini@unsri.ac.id

Article History

Submitted	09-01-2026
Reviewed	15-05-2026
Revised	31-05-2026
Accepted	03-06-2026
Copyedited	09-06-2026

Keywords:

Awareness; Ecolabeling; Green Brand; Purchase Decisions

Abstract

This study investigates the impact of ecolabeling on college students' purchasing decisions for ecologically friendly paper products in Palembang City, with green brand awareness serving as a mediating variable. The applied methodology is quantitative, involving purposive sample approaches with 100 respondents who have previously purchased go green labeled paper. We employed SEM-PLS to examine the correlations among the variables in the data analysis. The research findings demonstrate that ecolabeling does not directly affect purchase decisions; yet, it significantly influences them through green brand awareness, indicating a total mediation effect. The findings indicate that eco-friendly labels are beneficial only when customers comprehend the significance of brand sustainability. This research highlights the need for corporations to augment education on ecolabels and to elevate environmental literacy via more informed and pertinent communication methods directed at the younger generation. Theoretically, this research reinforces signaling theory and green marketing theory within the context of environmentally conscious consumer behavior.

How to Cite

Venita, V., Hamdaini Putri, Y., & Rosa, A. When Ecolabeling is Not Enough: The Importance of Green Brand Awareness in Influencing Purchase Decisions . Jurnal Ilmiah Bisnis Dan Ekonomi Asia, 20(2), 138–150. https://doi.org/10.32815/jibeka.v20i2.2448

DOI: https://doi.org/10.32815/jibeka.v20i2.2448

Introduction

The escalation of worldwide environmental issues has heightened public awareness regarding the significance of utilizing eco-friendly items (Gaspar Ferreira & Fernandes, 2022). Companies demonstrate their environmental commitment by affixing ecolabels or "go green" labels to their products. Individuals in Indonesia are increasingly using paper with eco-friendly labeling for printing, academic assignments, and various administrative activities. However, current observations indicate that eco-friendly labels are not currently a significant consideration for customers in their purchasing decisions.

Paper is necessary for school, work, business, and printing, which means that Indonesia's paper use is always going up. By 2023, it will have reached well over 5 million tons. As consumption rises, more people are becoming aware of the negative effects of paper production on the environment. Increasing awareness has led many companies to adopt eco-friendly standards through ecolabeling. Many companies in the pulp and paper industry have gotten sustainability certifications like FSC and PEFC to show that they are committed to managing forests in a responsible way. Most paper products on the market today have this certification to show that their raw materials come from sources that are managed in a way that is beneficial for the environment. However, the paper industry has seen changes in domestic sales over the past five years, which can be linked to changing consumer behavior and increasing digitalization, according to data from the Indonesia Stock Exchange.

Paper is still the most popular choice for customers, especially in Palembang City, which has a long history of using it and a growing need for it in the education and MSME sectors. Even so, businesses need to improve their marketing strategies that focus on sustainability because of competition between products and the fact that people are using less paper because of digitalization (Handayani et al., 2018). Ecolabeling is an important strategy because it can make people think better about the environment and trust businesses more. People are more likely to believe that a product is safe, of better quality, and made in an ethical way when it has labels like FSC, PEFC, SNI, ISO, ILW, and other environmentally friendly certifications (Arjoni, 2014). However, the effectiveness of ecolabeling in influencing purchasing decisions necessitates additional investigation, as some studies suggest that a portion of consumers still prioritize the functional benefits and value of a product over its environmental sustainability features.

The city of Palembang was chosen as the research location because it is one of the largest educational centers in South Sumatra, with a high level of paper product usage among students for assignments, reports, and learning materials. Many educational institutions in Palembang still rely on printed documents due to the uneven implementation of digital infrastructure, while several metropolitan cities in Indonesia are starting to adopt digital and paperless learning systems. This phenomenon makes Palembang a relevant context for studying the influence of ecolabels on purchasing decisions for paper products, particularly among young consumers who generally have environmental awareness but, in practice, still tend to consider factors such as price, print quality, and ease of obtaining the product over environmental attributes(Benyamin & Siagian, 2021)(Muslimin et al., 2025). This condition indicates a gap between environmental awareness and the actual purchasing behavior of young consumers. However, according to signaling theory, the effectiveness of environmental signals highly depends on consumers' ability to recognize, understand, and interpret those signals (Potter et al., 2024). Signals in the form of ecolabels, sustainability messages, or environmental claims will only have a significant impact if consumers understand the meaning and purpose of the displayed symbols (Zubair et al., 2020).

In this context, green brand awareness serves as a crucial element that connects ecolabels to purchasing decisions. Green brand awareness refers to the degree to which consumers identify, comprehend, and acknowledge a brand's dedication to sustainable practices. When consumers recognize that ecolabels signify a company's dedication to sustainability, awareness of the environmentally friendly brand image will rise (Singhal & Malik, 2018). This awareness can subsequently cultivate favorable impressions, augment consumer trust, and promote a preference

for products considered to exhibit superior environmental responsibility (Tandon et al., 2020) (Junarsin et al., 2022). The choice to buy eco-friendly items is affected by both the visibility of ecolabels as indicators and the extent of consumer understanding of the brand's sustainability ideals (Hassan et al., 2025).

Numerous prior research studies have demonstrated that ecolabels can improve the purchasing behavior of environmentally friendly products by elevating green brand awareness. Nevertheless, several studies have indicated that ecolabels do not consistently influence purchasing decisions when consumers possess a limited comprehension of the environmental label's significance (D'Souza et al., 2022). This suggests that green brand knowledge may serve as a significant mediating variable in elucidating the impact of ecolabels on the purchase choices of young customers. This study seeks to evaluate the impact of ecolabeling on the purchasing choices of environmentally friendly paper goods among students in Palembang and to investigate the function of green brand awareness as a mediating variable. This research aims to enhance the advancement of signaling theory and green marketing concerning environmentally conscious consumer behavior, while also offering practical insights for companies to formulate more effective sustainability communication strategies targeted at the younger generation.

Research Methods

This research method employs a quantitative methodology to analyze the impact of ecolabeling and product quality on paper purchasing decisions. This research is causal, as it seeks to elucidate the cause-and-effect relationship among variables. The study population comprises active students in Palembang City who have previously acquired paper products. Students were selected as responders due to their active engagement with paper in academic pursuits, their high level of information literacy, and their sensitivity to sustainability concerns, rendering them pertinent for evaluating ecolabeling and product quality. The sampling method employed was purposive sampling based on specified criteria: (1) currently enrolled students, (2) individuals who have purchased and utilized paper products during the past six months, and (3) those who comprehend the fundamental function of ecolabeling on paper products.

A data filtering process was undertaken on the distributed online questionnaire to obtain the final sample. The screening encompassed verifying the completeness of responses, the consistency of item completion, the lack of recurrent extreme responses (straight-lining), and adherence to inclusion criteria. Following the data cleansing procedure, 100 respondents were identified who satisfied the requirements for analysis.

The examined variables include ecolabeling, green brand awareness, and purchase decisions, each assessed by standardized indicators utilizing a Likert scale. Primary data were acquired through the dissemination of online surveys. The investigation employed Structural Equation Modeling based on Partial Least Squares (SEM-PLS) due to its ability to assess the correlations among latent variables while concurrently evaluating the model's overall quality, even with a limited sample size. SEM-PLS is appropriate for research models that incorporate reflecting indicators and intricate variables. The analysis phase encompasses the evaluation of the measurement model (outer model) through assessments of convergent validity, discriminant validity, and composite reliability. The structural model (inner model) was subsequently evaluated to investigate the correlations among variables through path coefficient values, R-squared, and predictive significance. Hypothesis testing was performed utilizing the t-statistic and p-value via a bootstrapping process. This study employs the SEM-PLS method to deliver a thorough empirical analysis of the impact of ecolabeling via green brand awareness on consumer purchasing decisions.

Result

This study involved 100 students from Palembang City, all of whom had acquired and utilized paper products for academic purposes. Of the respondents surveyed, 80 indicated awareness of environmental labels on paper items, while 20 were not cognizant of this information. The demographic profile of the respondents included 54 males and 46 females.

The demographic profile indicates that most respondents were aged 17–19 years (56 respondents), followed by those aged 20–23 years (44 respondents). Most respondents belonged to the 2022 cohort (59 respondents), while 41 respondents were from the 2021 cohort. Regarding monthly expenditures, 43 respondents reported spending less than Rp1,000,000 per month, 30 respondents spent between Rp1,000,000 and Rp2,000,000, and 27 respondents reported expenditures exceeding Rp2,000,000. As university students, the respondents represent a relevant consumer segment for examining purchasing decisions related to eco-friendly paper products, as paper remains widely used for academic purposes despite the increasing adoption of digital technologies.

The dominance of younger respondents suggests that the sample consists primarily of consumers who are generally more exposed to environmental issues and sustainability campaigns. In the context of environmentally friendly paper products, positive attitudes toward environmental conservation may encourage consumers to prefer products carrying ecolabel certifications. Furthermore, the high proportion of respondents from the 2022 cohort indicates that awareness of sustainable consumption practices may play an important role in shaping their purchasing behavior.

The expenditure profile reveals that a considerable proportion of respondents have limited monthly budgets, with 43% spending less than Rp1,000,000 per month. This finding suggests that purchasing decisions may not be determined solely by the presence of an ecolabel, particularly when environmentally friendly products are perceived as pricier than conventional alternatives. Consistent with brand knowledge theory developed by Kevin Lane Keller (Keller, 2013), consumers are more likely to choose brand that they recognize and trust. Recent empirical studies indicate that while eco-labels can positively influence purchase behavior, their effectiveness increases substantially when consumers possess strong awareness and familiarity with green brand (Illahi et al., 2024)(Kurniawan et al., 2025). Furthermore, a highly credible eco-label and solid green product knowledge are proven to reinforce green brand equity, which ultimately drives actual sustainable purchasing decisions (Kautsar et al., 2025)(Illahi et al., 2024). Therefore, the characteristics of the respondents provide an appropriate context for examining whether eco-labelling alone is sufficient to influence purchasing decisions or whether green brand awareness plays a more important role in encouraging the purchase of go-green paper products.

A total of 28 respondents (28%) acquired paper fewer than once monthly, signifying they are intensive users. Individuals in this category usually maintain a demanding academic schedule, including report preparation, practical assignments, or participation in student organizations necessitating regular document printing. This intensive pattern aligns with recent findings by Yusoff et al. (Yusoff et al., 2025), who noted that heavy consumption behavior in sustainable retailing contexts is heavily driven by immediate behavioral and situational motivations, such as pressing academic or professional obligations. Simultaneously, 25 respondents (25%) made purchases within a 1–3 month period, signifying moderate and not very urgent requirements. The 12 respondents (12%) who purchased paper more than once every six months exhibited a low utilization rate, likely due to a preference for digital media or infrequent printing of documents. This low utilization cohort reflects the ongoing institutional shift toward paperless classrooms and digital document management frameworks within higher education, which substantially minimizes routine paper consumption among the tech-savvy student demographic (Valdivia et al., 2025).

Stationery stores constitute the predominant buying channel, with 50 responses (50%), suggesting that students prefer locations that are accessible, offer a diverse range of products, and

maintain reasonably inexpensive costs. Twenty-seven respondents (27%) utilized photocopy shops for purchases, suggesting that certain students engage in impulsive buying when printing or duplicating documents, hence reflecting practicality and immediate necessity. Alternative purchasing locations exhibit reduced figures. Ten respondents (10%) made purchases at department stores, whereas seven respondents (7%) made purchases at shopping centers/malls. This suggests that neither location is the preferred option, potentially owing to cost or accessibility considerations. Simultaneously, just 6 respondents (6%) made purchases through online platforms, suggesting that digital channels are not currently the predominant choice for acquiring paper products, potentially due to shipping expenses or immediate need. The data reveal that students predominantly purchase paper directly from physical stores, with purchase frequency fluctuating according to the severity of paper usage in academic activities.

According to the outcomes of the reliability and construct validity assessments, all variables in this study—green brand awareness, ecolabeling, and purchase decision—satisfied the necessary criteria for subsequent analysis. The Cronbach's Alpha and Composite Reliability ratings for each construct exceed the minimum threshold of 0.70, signifying good to outstanding internal consistency. Furthermore, all Average Variation Extracted (AVE) values surpassed the 0.50 threshold, signifying that each construct sufficiently accounts for its indicator variation and satisfies convergent validity. Consequently, all indicators have been evaluated as reliable and valid measures, rendering this research model appropriate for advancing to the structural testing phase (inner model) in subsequent analyses.

Table 1. Results of Reliability and Validity Assessments

construct	Cronbach's Alpha	Composite Reliability (rho_c)	AVE	Remarks
A (Green Brand Awareness)	0.855	0.897	0.638	Valid & reliable
EC (Ecolabeling)	0.711	0.825	0.612	Valid & reliable
Y (Purchase Decision)	0.789	0.855	0.542	Valid & reliable

Table 1 presents the reliability test results, demonstrating that all constructs possess Cronbach's Alpha and Composite Reliability values over 0.70, the minimum criterion as recommended by Hair et al. (2019). The green brand awareness construct exhibits the highest reliability value (Cronbach's Alpha = 0.855), signifying exceptional consistency in respondents' responses. The ecolabeling and purchase choice constructions satisfy the reliability criteria (0.711 and 0.789, respectively); hence, all variables are deemed reliable.

The Composite Reliability (rho_c) values indicate satisfactory results, as all constructions are above the required threshold of 0.70. Consequently, it can be inferred that all indicators reliably assess the targeted construct. The Average variation Extracted (AVE) values for all constructions exceed 0.50, signifying that each construct accounts for over 50% of its indicator variation. The construction of brand awareness has the highest AVE value (0.638), signifying that the employed indicators are highly effective in quantifying this variable. Simultaneously, ecolabeling (0.612) and purchase choice (0.542) satisfy the criteria for convergent validity. These results indicate that all study variables satisfy the criteria for validity and reliability, allowing the analysis to advance to the structural analysis phase (inner model).

The reliability test results indicate that all constructs in this study possess Cronbach's Alpha and Composite Reliability values over 0.70, thereby confirming their dependability. The Average Variance Extracted (AVE) values for all variables exceed 0.50, confirming the fulfillment of convergent validity. Consequently, the complete framework is appropriate for further structural model evaluation.

The cross-loading testing results in this study seek to confirm that each indicator exhibits a greater correlation with its respective concept than with other constructs. Establishing discriminant validity is essential to validate the appropriateness of the measurement model. Cross-loading that meets the criteria demonstrates that each indication effectively differentiates the construct it represents, avoiding variable overlap. Consequently, the test results instill confidence that the

indicator structure in the study is suitable for progression to a more advanced structural model testing phase.

Table 2. Cross-loading

	a	ec	y
a1	0.714	0.415	0.309
a2	0.896	0.477	0.344
a3	0.751	0.341	0.259
a4	0.709	0.253	0.350
a5	0.901	0.467	0.354
ec1	0.214	0.752	0.249
ec2	0.253	0.755	0.254
ec3	0.574	0.837	0.212
y1	0.239	0.134	0.673
y2	0.310	0.173	0.774
y3	0.268	0.271	0.721
y4	0.296	0.244	0.752
y5	0.356	0.239	0.755

Table 2 presents the outcomes of the discriminant validity assessment using cross-loading, demonstrating that all indicators exhibit superior loading values for their corresponding constructs in comparison to other constructs. The indicator variables Awareness of Green Brand (a1–a5), Ecolabeling (ec1–ec3), and Purchase Decision (y1–y5) exhibit primary loading values of ≥ 0.70 or in proximity to that threshold. Consequently, all indicators are deemed genuine and proficient in distinguishing across constructs inside the model.

This study ran an outer loading test to evaluate how effectively each indicator represents the construct it assesses. This assessment is crucial for appraising the measurement model, as elevated outer loading values signify that the indicators significantly and validly contribute to the development of latent variables. This study ensures that all indicators adhere to the required appropriateness limits, hence guaranteeing the instrument's quality prior to the structural analysis phase. Proper outer loading assessments enhance convergent validity and establish a robust basis for assessing the relationships among variables in the study model. See table 3.

Table 3. Outer Loading

	a	ec	y
a1	0.714		
a2	0.896		
a3	0.751		
a4	0.709		
a5	0.901		
ec1		0.752	
ec2		0.755	
ec3		0.837	
y1			0.673
y2			0.774
y3			0.721
y4			0.752
y5			0.755

Table 3 presents the findings of the outer model analysis; all indicators for the variables Awareness of Green Brand (a), Ecolabeling (ec), and Purchase Decision (y) have outer loading values exceeding 0.70. This signifies that each indication significantly contributes to representing its latent concept. The outer loading values for the Green Brand Awareness variable vary from 0.709 to 0.901, with the highest value attributed to indicator a5 (0.901), followed by a2 (0.896), signifying that these two indicators are the most effective in elucidating green brand awareness among respondents.

The indicator with the lowest value, a4 (0.709), remains within acceptable parameters; hence, it is appropriate for inclusion in the model. Subsequently, for the ecolabeling variable, the outer loading values for indicators ec1, ec2, and ec3 are 0.752, 0.755, and 0.837, respectively. This signifies that all indicators effectively capture the ecolabeling construct, with indicator ec3 (0.837) being the most robust item reflecting respondents' impressions of eco-friendly labels on paper products. The Purchase Decision variable's indicators, y1 to y5, have outer loading values ranging from 0.673 to 0.774. Despite indicator y1 (0.673) being marginally lower than the other indicators, it remains acceptable since it exceeds the minimum criterion of 0.60 for exploratory research and is corroborated by satisfactory AVE and construct reliability values. Consequently, all indications inside the purchase decision variable are deemed convergently valid. Consequently, it may be inferred that all indicators for the three variables satisfy the criterion for convergent validity, as the outer loading values predominantly exceed 0.70 and no indications require removal. The measuring model is deemed satisfactory and may advance to the assessment phase of the inner model to analyze the links among latent constructs in this study.

Adjusted R-squared is a modified form of R^2 that considers the quantity of independent variables used in the model. This number is more cautious than R^2 as it considers model complexity; if excessive variables are included without enhancing predictive quality, the adjusted R^2 may decline. Consequently, modified R^2 is regarded as more precise in evaluating the model's overall fit, particularly in analyses with multiple independent variables. Both measurements offer critical insights into the model's predictive capability and the construct's efficacy in elucidating the dependent variable. The adjusted R-squared value for variable a is 0.242, whereas for variable y it is 0.158. This value is marginally inferior to the pure R-squared, as it has been modified for the quantity of predictors in the model; yet it still signifies consistent outcomes. The R-square values for both variables are categorized as low to moderate, rendering this study exploratory and predictive, in alignment with the attributes of SEM-PLS. Subsequently, see the table of results illustrating the correlations among variables:

Table 4. Correlations Among Variables

Correlations	Coefficient (O)	T-Statistics	P-Values	Result	Hypothesis
a → y	0.344	1.980	0.048	Supported	H3
ec → a	0.500	5.117	0.000	Supported	H2
ec → y	0.121	0.626	0.531	Not Supported	H1
ec-a-y	VAF = 0.172 / 0.293 = 0.588 (58.8%)			Supported	H4

Table 4 indicates that the direct effect of ecolabeling (EC) on purchasing decisions (y) is comparatively small, with a coefficient of 0.121, suggesting that this link is probably not significant. Ecolabeling exerts a considerable impact on green brand awareness (a), evidenced by a coefficient of 0.500, indicating that this link is likely meaningful. The variable of awareness demonstrates a substantial impact on purchase decisions, with a value of 0.344, signifying its importance in that context. The findings suggest that ecolabeling influences purchasing decisions primarily through the mediating factor of green brand awareness, indicating that ecolabeling does not directly impact purchasing choices but is more effective when it first enhances consumer awareness of the product's environmentally sustainable characteristics. For further information, refer to the photographs of the research findings Figure 1.

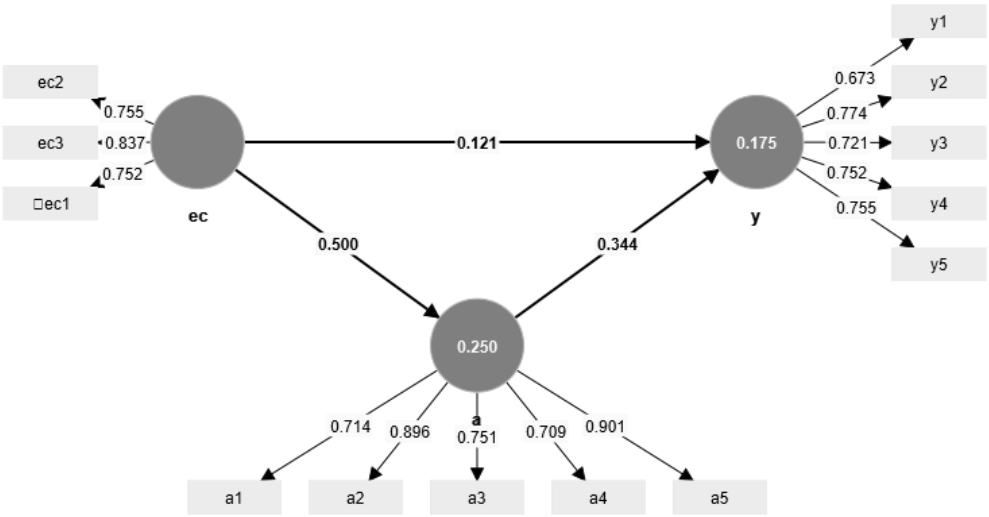

Figure 1: Research Model

Based on figure 1, the mediation test results indicate that the influence of ecolabeling on purchasing decisions becomes negligible when the variable of green brand awareness is incorporated into the model. The impact of ecolabeling on green brand awareness is substantial, as is the influence of green brand awareness on purchasing decisions. The indirect effect is 0.172 and is statistically significant according to the bootstrap results. Consequently, green brand awareness serves as a complete mediator in the association between ecolabeling and purchasing decisions.

Discussion

The discourse integrates empirical findings with pertinent ideas and prior research outcomes, thus offering a thorough comprehension of the influence of ecolabeling, green brand awareness, and purchasing decisions regarding environmentally sustainable paper products. The analysis seeks to elucidate the importance of each influence pathway, both direct and indirect, while offering a comprehensive interpretation of consumer behavior patterns, especially among students, a demographic distinguished by its unique characteristics in comprehending and reacting to sustainability information. This section offers theoretical and practical consequences along with recommendations for future research. This document delineates the research findings pertaining to each relationship among the variables.

The findings of this study reveal that ecolabeling does not significantly influence consumers' purchase decisions for paper products (H_1 rejected). This result suggests that, for these items, factors such as price, quality, and brand may outweigh environmental considerations during the purchasing process. The low involvement typically associated with paper product purchases may lead consumers to overlook ecolabels altogether. This contrast with previous research, A systematic review of 56 interventions across food and drink products found that 60 out of 76 interventions reported positive effects of ecolabels on selection, purchase, or consumption. This suggests a generally favorable impact of ecolabeling on consumer behavior (Potter et al., 2021). The other research, Potter et al. (2024) stated a randomized controlled trial using an experimental online supermarket (UK-based, N = 1,051) showed that ecolabels reduced the environmental impact score of consumers' choices by approximately 3–4 percentiles across multiple indicator formats. This indicates that ecolabels can effectively steer consumers toward more sustainable selections.

Moreover, a lack of awareness or understanding of ecolabels could contribute to their limited impact. If consumers are unfamiliar with the meaning or importance of ecolabeling, it is unlikely to affect their choices (Ketelsen et al., 2020). Ultimately, these results indicate that while ecolabeling is a valuable tool for promoting sustainability, it may not be sufficient on its own to

change purchasing behavior in the paper product sector. Further efforts to raise awareness and enhance the perceived value of ecolabels may be necessary to encourage more environmentally responsible consumption (Zheng et al., 2021). This highlights the need for increased consumer education about environmental certifications.

Ecolabeling is a sort of environmental information that is added to items in order to indicate that they are following criteria that are ecologically beneficial. According to the Signaling Theory (Yeeun Huh & Kim, 2024), environmental labels serve as signals that assist customers in improving their understanding of the quality and sustainability of the things they purchase. Additionally, according to Green Marketing Theory, features of environmentally friendly products, such as ecolabeling, have the potential to raise consumers' awareness of a brand (Sun et al., 2021)(Khuan et al., 2024). Students are provided with visual evidence that the product supports environmental sustainability with ecolabeling in the context of green-labeled paper products. This raises awareness of the brand's commitment to sustainability (H_2 accepted).

This finding supports the research conducted by Schmidt et al. (2017), which argues that ecolabeling has a major influence on establishing green brand awareness for ecologically friendly products. In addition, Mahmoud et al.(27) discovered that younger customers tend to be more receptive to environmental information that is presented in a clear and transparent manner on product packaging. Students in the age range of 18 to 22 years old, which includes members of Generation Z, are known to have a high level of awareness for social and environmental issues, which makes them well-equipped to comprehend the signals that are associated with eco-labeling (Dragolea et al., 2023)

Research by Uehara et al.(2016) revealed contradicting findings, indicating that ecolabeling did not influence brand recognition due to consumers' insufficient comprehension of the label's significance. This suggests that the efficacy of ecolabeling is contingent upon the degree of consumer environmental literacy (Kashi, 2020). Consequently, firms should incorporate labeling and enhance public education.

Future studies should incorporate moderating variables such as ecological knowledge and environmental concern to provide a more comprehensive understanding of consumers' responses toward ecolabeling and green purchasing behavior. The effectiveness of ecolabels may depend not only on the presence of environmental information but also on consumers' ability to interpret and value sustainability-related messages (Zubair et al., 2020). Therefore, companies need to implement more integrated and educational green marketing strategies, particularly those targeting younger consumers through social media campaigns, environmental literacy programs, and collaborations with educational institutions. In addition, sustainability-oriented initiatives should be consistently integrated into business operations across various industries, including the paper industry, through the adoption of energy-efficient production technologies, optimization of raw material use and waste reduction, implementation of sustainable manufacturing practices, and the communication of environmental values through ecolabels, packaging, and other sustainability-related product information. Such strategies can strengthen green brand awareness and enhance consumer trust in environmentally responsible products(Suryana & Ruspitasari, 2022).

Diniso (2025) asserts that awareness of a product's advantages favorably affects buying intention and behavior. Green brand awareness signifies customers' comprehension of the significance of eco-friendly products. Zubair et al. (2020) posited that consumers with heightened sustainability awareness are predisposed to choose products that conform to social and environmental standards. In the context of this research, students aware of the importance of sustainability are more likely to choose paper products with environmentally friendly characteristics (H_3 accepted).

This study's results corroborate the findings of Sambo and Oludipe (2025), indicating that green brand knowledge positively influences green product purchasing decisions among students. A strong understanding of a brand leads to positive associations with it, improves its environmental reputation, and reduces customers' doubts about the quality of its products. Consumers

experience psychological engagement in environmental initiatives through the acquisition of eco-friendly products.

On the other hand, research conducted by Riva et al(34) demonstrates that awareness of a green brand does not guarantee purchasing decisions to be made if the product is regarded to be expensive or difficult to locate. This is significant since the prices of paper products that are classified as green are typically higher than the prices of conventional products. For this reason, it is necessary to provide accessibility and reasonable pricing in order to support awareness.

It is suggested that future studies incorporate perceived price or perceived quality as an intervening or moderating element. Such an approach is something that should be considered carefully. The implementation of student pricing methods, the provision of special promotions for students, and the intensification of environmental efforts in partnership with faculties and student organizations are all additional possible options for businesses.

The research findings suggest that ecolabeling does not directly influence purchase decisions; nonetheless, it is relevant through the mediation of green brand awareness. Such an outcome signifies complete mediation. Lestari et al. (2021) assert that ecolabeling is successful solely when it enhances brand awareness initially. Students do not base their judgments exclusively on environmental labeling; rather, they consider if the brand's sustainability vision aligns with their personal beliefs (Seal et al., 2024).

This research corroborates the findings of Junarsin et al. (2022), who asserted that ecolabeling indirectly affects purchase decisions by enhancing environmental awareness. A global study by Dragolea et al. (2023) supports the findings. It showed that young customers prefer ecologically sustainable products when they are first told about the environmental benefits of the product. Ecolabeling serves as a teaching tool, not a direct purchase incentive.

In contrast, research by Toldos & Agredano (2025) demonstrates that ecolabeling can directly affect purchase decisions when the label possesses high credibility (e.g., government or international certification). This suggests that the effectiveness of ecolabels depends on the trust customers have in the organization that issues them (Riva et al., 2024).

Future research should incorporate faith in ecolabels or environmental awareness as an additional variable. The company is recommended to enhance the openness and legitimacy of ecolabeling by incorporating authentic certifications and offering digital elucidations (e.g., QR codes with sustainability information). Marketing campaigns centered on environmental education for kids can enhance the efficacy of promoting green brand recognition.

Conclusion

The findings reveal that ecolabeling does not exert a direct influence on consumers' purchase propensity; however, it exerts a substantial effect on their perceptions of environmentally responsible brand. This empirical pattern substantiates the presence of perfect mediation, indicating that the influence of ecolabeling on purchase decisions operates exclusively through heightened awareness of a product's environmental attributes. In the context of paper products, ecolabels therefore function effectively only when consumers possess sufficient awareness to decode and internalize the sustainability cues embedded within these labels. The association between ecolabeling and students' purchase decisions consequently depends on the degree to which brand-related environmental information is cognitively processed, positioning brand awareness as a pivotal mediating construct.

From a managerial perspective, the results imply that firms stand to benefit from adopting communication strategies that are more transparent, instructive, and cognitively accessible to young consumers. Such strategies may include sustainability-focused digital campaigns, packaging designs enriched with explanatory graphics, or QR codes that provide immediate access to product-level environmental information. Enhancing consumer eco-literacy and ensuring the credibility of environmental labels through recognized certifications also constitute essential

strategic measures, particularly given that students represent a frequent user group of paper-based products. Theoretically, the study reinforces signaling theory and green marketing theory by demonstrating that the effectiveness of environmental signals hinges on consumers' ability to interpret and assign meaning to these cues.

References

Arjoni. (2014). Sertifikasi Forest Steardship Council dI PT SUPARMA TBK Sebagai Strategi Penguatan Daya Saing Produk. Jurnal Ilmu Dan Riset Manajemen, 1–18.

Benyamin, B., & Siagian, D. (2021). Why environmental consciousness does not affect intention to buy? Jurnal Ekonomi Perusahaan, 28(2), 52–56. https://doi.org/10.46806/jep.v28i2.832

Diniso, C. (2025). The influence of brand awareness , brand image and perceived quality on Generation Y ' s brand satisfaction and brand love : a Samsung smartphone case study. (November). https://doi.org/10.1108/AJEMS-02-2025-0092

Dragolea, L., Butnaru, G. I., Kot, S., Gabriela, C., Nu, A., Nu, F., & Cristea, S. (2023). Determining factors in shaping the sustainable behavior of the generation Z consumer. (January), 1–21. https://doi.org/10.3389/fenvs.2023.1096183

D'Souza, C., Ahmed, T., Khashru, M. A., Ahmed, R., Ratten, V., & Jayaratne, M. (2022). The complexity of stakeholder pressures and their influence on social and environmental responsibilities. Journal of Cleaner Production, 358(September 2021), 132038. https://doi.org/10.1016/j.jclepro.2022.132038

Gaspar Ferreira, A., & Fernandes, M. E. (2022). Sustainable advertising or ecolabels: Which is the best for your brand and for consumers' environmental consciousness? Journal of Marketing Theory and Practice, 30(1), 20–36. https://doi.org/10.1080/10696679.2021.1882864

Hair, J., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Handayani, N. U., Suliantoro, H., & Ansari, S. D. (2018). Faktor Penentu Kesadaran Dalam Pembelian Produk Kertas Bertanda Ecolabel. MIX: Jurnal Ilmiah Manjemen, 8(3), 477–503.

Hassan, H., Zainuddin, Z., & Bakar Sade, A. (2025). Green skincare branding in Malaysia. International Journal of Green Economics, 19(1), 93–107. https://doi.org/10.1504/IJGE.2025.146426

Illahi, U. N., Sari, D. K., & Ambarwati, R. (2024). Influencing Generation Z ' s Green Purchase Intention : Roles of Awareness and Eco-Labels. Jurnal Ilmu Sosial Mamangan, 13(1), 13–29.

Junarsin, E., Pangaribuan, C. H., Wahyuni, M., Hidayat, D., Putra, O. P. B., Maulida, P., & Soedarmono, W. (2022). Analyzing the relationship between consumer trust, awareness, brand preference, and purchase intention in green marketing. International Journal of Data and Network Science, 6(3), 915–920. https://doi.org/10.5267/j.ijdns.2022.2.005

Kashi, A. N. (2020). Green purchase intention: A conceptual model of factors influencing green purchase of Iranian consumers. Journal of Islamic Marketing, 11(6), 1389–1403. https://doi.org/10.1108/JIMA-06-2019-0120

Kautsar, D., Minah, M., & Slamet, A. S. (2025). The Impact of Green Marketing, Ecolabel Awareness, Green Brand Image, Green Trust on Purchasing Decisions of Aqua Life Products. Indonesian Interdisciplanry Journal Of Sharia Economics (IIJSE), 8(3), 14127–14137.

Keller, K. L. (2013). Conceptualizing, Meauring, Managing Customer-Based Brand Equity. Journal of Marketing, 57(1), 1–22.

Ketelsen, M., Janssen, M., & Hamm, U. (2020). Consumers' response to environmentally-friendly food packaging - A systematic review. In Journal of Cleaner Production (Vol. 254). https://doi.org/10.1016/j.jclepro.2020.120123

Khuan, H., Marnoto, M., Tapaningsih, W. I. D. A., & Purwoko, B. (2024). Sustainable Marketing Strategies and Their Influence on Consumer Preferences for Eco-Friendly Products in Indonesia: The Mediating Role of Environmental Awareness. International Journal of Business, Law, and Education, 5(1), 1212–1220. https://doi.org/10.56442/ijble.v5i1.538

Kikuchi-Uehara, E., Nakatani, J., & Hirao, M. (2016). Analysis of factors influencing consumers' proenvironmental behavior based on life cycle thinking. Part I: Effect of environmental awareness and trust in environmental information on product choice. Journal of Cleaner Production, 117, 10–18. https://doi.org/10.1016/j.jclepro.2015.12.030

Kurniawan, A. Z., Nabila, A., & Kamalia, K. (2025). Pengaruh Eco-Labeling , Green Packaging , dan Green Product terhadap Green Purchase Intention melalui Mediasi Customer Belief Toward The Environment pada Produk Air Mineral Nestlé Pure Life. Sanskara Manajemen Dan Bisnis, 4(01), 256–288. https://doi.org/10.58812/smb.v4i01

Lestari, E. R., Septifani, R., & Nisak, K. (2021). Green awareness and green purchase intention: The moderating role of corporate image. IOP Conference Series: Earth and Environmental Science, 924(1). https://doi.org/10.1088/1755-1315/924/1/012051

Mahmoud, M. A., Tsetse, E. K. K., Tulasi, E. E., & Muddey, D. K. (2022). Green Packaging, Environmental Awareness, Willingness to Pay and Consumers' Purchase Decisions. Sustainability (Switzerland), 14(23), 1–14. https://doi.org/10.3390/su142316091

Muslimin, M., Muhajirin, M., & Purnama, I. (2025). Pengaruh Kualitas Desain, Kualitas Produk, dan Harga Terhadap Keputusan Pembelian Pada Percetakan Global Print. Jurnal Penkomi: Kajian Pendidikan Dan Ekonomi, 8(2), 253–267.

Potter, C., Bastounis, A., Hartmann-boyce, J., Stewart, C., Frie, K., Tudor, K., Bianchi, F., Cartwright, E., Cook, B., Rayner, M., & Jebb, S. A. (2021). The Effects of Environmental Sustainability Labels on Selection , Purchase , and Consumption of Food and Drink Products : A Systematic Review. https://doi.org/10.1177/0013916521995473

Potter, C., Id, R. P., Clark, M., Frie, K., Id, P. A. B., Cook, B., Stewart, C., Piernas, C., Lynch, J., Rayner, M., Poore, J., & Jebb, S. A. (2024). Effects of environmental impact labels on the sustainability of food purchases : A randomised controlled trial in an experimental online supermarket. 1–13. https://doi.org/10.1371/journal.pone.0309386

Riva, F., Magrizos, S., Rizomyliotis, I., & Uddin, M. R. (2024). Beyond the hype: Deciphering brand trust amid sustainability skepticism. Business Strategy and the Environment, 33(7), 6491–6506. https://doi.org/10.1002/bse.3829

Sambo, U. I., & Oludipe, O. E. (2025). Exploring Gen Z ' s awareness of green promotion in developing markets. 2(1), 597–611. https://doi.org/10.1108/JRPC-12-2024-0064

Schmidt, S., Langner, S., Hennigs, N., Wiedmann, K.-P., Karampournioti, E., & Lischka, G. (2017). The green brand: Explicit and implicit framing effects of ecolabelling on brand knowledge. Cogent Psychology, 4(1). https://doi.org/10.1080/23311908.2017.1329191

Seal, D. B., Bag, S., & Mandal, K. (2024). Exploring Buying Intention and Brand Loyalty of Millennials and Gen Z Toward Sustainable Beauty and Personal Care Products Using a Green Mix Approach. In Sustainability in Marketing Practice: Strategies for Industry 4.0 (pp. 207–227).

Singhal, A., & Malik, G. (2018). The attitude and purchasing of female consumers towards green marketing related to cosmetic industry Aakanksha. Journal of Science and Technology Policy Management, 34(1), 1–5.

Sun, Y., Luo, B., Wang, S., & Fang, W. (2021). What you see is meaningful: Does green advertising change the intentions of consumers to purchase eco-labeled products? Business Strategy and the Environment, 30(1), 694–704. https://doi.org/10.1002/bse.2648

Suryana, A., & Ruspitasari, W. D. (2022). Green Dinamic Capability In Enchancing Performa Product Innovation In The Creative Industry Sector : The Moderating Effect Of Green Creativity. Jibeka, 18(3), 376–386. https://doi.org/10.32812/jibeka.v18i3.2322

Tandon, U., Mittal, A., & Manohar, S. (2020). Examining the impact of intangible product features and e-commerce institutional mechanics on consumer trust and repurchase intention. Electronic Markets, 31(4), 945–964. https://doi.org/10.1007/s12525-020-00436-1

Toldos, M. P., & Agredano, C. (2025). The impact of enjoying nature on sustainable consumption and its influence on local brand preference across cultures. European Business Review, (November), 1–34. https://doi.org/10.1108/EBR-01-2025-0033

Valdivia, C., Alarcón, R., & Germán, N. (2025). Transforming document management for environmental sustainability : the mediating effect of pro-environmental culture and service satisfaction in higher education institutions. Frontries in Sustainability, (January). https://doi.org/10.3389/frsus.2024.1479927

Yeeun Huh, J., & Kim, N. L. (2024). Green as the new status symbol: Examining green signaling effects among Gen Z and Millennial consumers. Journal of Fashion Marketing and Management, 28(6), 1237–1255. https://doi.org/10.1108/JFMM-07-2022-0159

Yusoff, N., Alias, M., & Ismail, N. (2025). Drivers of green purchasing behaviour : a systematic review and a research agenda. F1000Research, 12(1286).

Zheng, G. W., Siddik, A. B., Masukujjaman, M., Alam, S. S., & Akter, A. (2021). Perceived environmental responsibilities and green buying behavior: The mediating effect of attitude. Sustainability (Switzerland), 13(1), 1–27. https://doi.org/10.3390/su13010035

Zubair, M., Wang, X., Iqbal, S., Awais, M., & Wang, R. (2020). Attentional and emotional brain response to message framing in context of green marketing. Heliyon, 6(9), e04912. https://doi.org/10.1016/j.heliyon.2020.e04912