

The Effect of Environmental Awareness, Green Product Value, Green Price Sensivity, and Green Product Trust on Green Purchase Behavior Mediated by Attitude to Eco-Friendly Products @Bumijo.Id (Structural Equation Modeling (SEM) Method – Patrial Least Square (PLS)

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ABSTRACT

Sustainable lifestyles are increasing on a global scale, despite having awareness and concern for the environment, consumers show differences between attitudes and concrete behavior when buying products. This study aims to determine consumer purchasing behavior towards Bumijo eco-friendly products. The sample in this study was 237 respondents, which were obtained by distributing questionnaires online. The data was processed and analyzed using the Structural Equation Modeling (SEM) method, SmartPLS 3 as a tool. The results showed that Environmental Awareness (X1), Green Product Value (X2), Green Price Sensivity (X3), and Green Product Trust (X4) have a positive and significant effect on Green Purchase Behavior (Y). Environmental Awareness (X1), Green Product Value (X2), Green Price Sensivity (X3), and Green Product Trust (X4) have a positive and significant effect on Attitude (Z). And Green Purchase Behavior (Y) has a positive and significant effect on Attitude (Z).

INTRODUCTION

Sustainable living is on the rise on a global scale. Increased awareness of the importance of the environment, encouraging Indonesians to start implementing an environmentally friendly lifestyle. According to Do Paco, et al, (2013) in Musa & Hartono, (2022) these behaviors include purchasing energy-efficient products, avoiding packaged goods, showing preference for biodegradable and recyclable goods. Sustainability is a socially relevant issue, with more and more consumers being aware and curious about what to consume and how those consumption habits impact the environment (Sharma, et al, 2022).

According to a GlobeScan survey, 60% of people around the world say they want to substantially improve their lifestyle to become healthier, but only 30% have made the transformation to do so. Despite environmental awareness and concern, consumers show a discrepancy between

attitudes and concrete behaviors when purchasing products. The adoption of products considered environmentally sustainable is at a low level, and the reason behind the problem is the instability of consumer purchase intentions and behavior (Naz, et al, 2020).

Several research findings have addressed the elements that drive green behavior, with a focus on green purchasing behavior (Ogiemwonyi, 2024; Naz, 2020; Mabkhot, 2024). Attitude, Green Product Trust, and Green Product Value are predictors of Green Purchase Behavior. However, previous research found that Green Purchase Behavior is not influenced by Attitude, the results of research by Naz, et al (2020) Green Purchase Behavior is more significantly influenced by Willingness to Pay.

Based on previous research gaps, this study considers the testing of variables that have different research results to other objects, the use of randomly selected samples from the general population, as well as considering the construct of mediation effects in research and the representation of more age groups (Mabkhot, 2024).

This study aims to determine consumer purchasing behavior towards Bumijo eco-friendly products that connect several variables, including, Environmental Awareness, Green Product Value, Green Price Sensivity, and Green Product Trust to Green Purchase Behavior mediated by Attitude variables. Unlike previous studies, this study examines consumer purchasing behavior towards green products, especially in social enterprises, which have not been widely studied. Therefore, this research is expected to provide information about green product purchasing behavior from various perspectives.

RESEARCH METHODS

This study uses a quantitative approach, by collecting primary data through an online questionnaire. The population in this study were consumers of eco-friendly products from @bumijo.id. From the total population of consumers, the sample used in the study was 237 respondents. Furthermore, the data was processed and analyzed using the PLS-SEM method, with Smart PLS 3.0 as a tool.

RESULTS AND DISCUSSION

Measurement Model (Outer Model)

There are two validity tests used in PLS including Convergent Validity and Discriminant validity. Indicators can be said to meet convergent validity if the cross loading value is > 0.70 as well as the level of validity (Hair, et al, 2020). While the Average Variance Extracted (AVE) value is > 0.50 . For Validity Assessment, the value of cross loading and Fornell Larcker criterion or HTMT > 0.70 , while the highest value is not allowed to be smaller than other values (Muhtarom, et al, 2022). The validity and reliability test results are shown in the table below.

Table 1 Validity and Reliability Test Results

Variable	Indicator	Loadings	Composite Reliability	Cronbach' Alpha	AVE
<i>Environmental Awareness (X1)</i>	X1.1	0.860	0.930	0.906	0.728
	X1.2	0.824			
	X1.3	0.840			
	X1.4	0.870			
	X1.5	0.871			
<i>Green Product Value (X2)</i>	X2.1	0.830	0.909	0.874	0.666
	X2.2	0.736			
	X2.3	0.807			
	X2.4	0.854			
	X2.5	0.847			

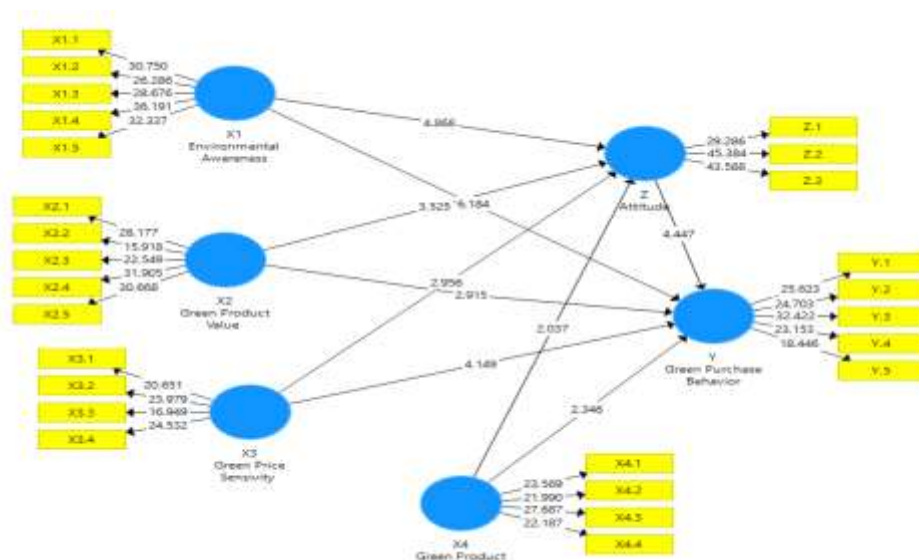
Variable	Indicator	Loadings	Composite Reliability	Cronbach' Alpha	AVE
Green Price Sensivity (X3)	X3.1	0.763	0.853	0.771	0.592
	X3.2	0.804			
	X3.3	0.716			
	X3.4	0.791			
Green Product Trust (X4)	X4.1	0.785	0.878	0.817	0.643
	X4.2	0.820			
	X4.3	0.801			
	X4.4	0.803			
Green Purchase Behavior (Y)	Y.1	0.831	0.912	0.879	0.674
	Y.2	0.814			
	Y.3	0.841			
	Y.4	0.823			
	Y.5	0.797			
Attitude (Z)	Z.1	0.853	0.907	0.846	0.764
	Z.2	0.882			
	Z.3	0.887			

Source: Primary data (2025)

The results of the validity and reliability tests of the Environmental Awareness (X1), Green Product Value (X2), Green Price Sensivity (X3), Green Product Trust (X4), Green Purchase Behavior, and Atitude (Z) variables are said to be valid and reliable, because each variable is above 0.7.

Structural Model (Inner Model)

The inertial model is a model used to determine the cause and effect relationships between latent variables.



Picture 1 Structural Model

This model is also used to view and analyze existing values. In the inner model, researchers use the R-Square test. According to jogiyanto in the book Hamid & Anwar, (2019: 43) The R-Square value is used to measure the level of variation in changes between variables with the following results:

R-Square

Table 2 R-Square Test

	R Square	R Square Adjusted
Green Purchase Behavior (Y)	0.864	0.862
Attitude (Z)	0.758	0.754

Source: Primary Data (2025)

The R-Square value jointly influences Environmental Awareness (X1), Green Product Value (X2), Green Price Sensivity (X3), and Green Product Trust (X4) on Green Purchase Behavior (Y) by 0.864, with an Adjusted R-Square value of 0.862, so it can be declared strong. The R-Square value of the Environmental Awareness (X1), Green Product Value (X2), Green Price Sensivity (X3), and Green Product Trust (X4) variables on Atitude (Z) is 0.758, this value is said to be mutually reinforcing. The Adjusted R-Square value is 0.754, so it can be stated as strong.

Hypothesis Testing

In this test, the hypothesis test can be seen from the T-Statistics or P-Values (Muhtarom, et al, 2022), the alpha value is 5% and the T-table value used is 1.970. By using the probability of being accepted or rejected, Ha is accepted and H0 is rejected if the P-Values <0.05, or the T-Statistic> 1.970. The results of hypothesis testing are shown in table 3 below.

Tabel 3 Hypothesis Testing

Variable Relationship	Hypothesis	Coeficcient	P value	T-Statistic	T-tabel	Conclusion
Environmental Awareness (X1) -> Attitude (Z)	H1	0.396	0.000	5.015	1.970	Accepted
Green Product Value (X2) -> Attitude (Z)	H2	0.288	0.001	3.345	1.970	Accepted
Green Price Sensivity (X3) -> Attitude (Z)	H3	0.177	0.002	3.088	1.970	Accepted
Green Product Trust (X4)-> Attitude (Z)	H4	0.097	0.036	2.407	1.970	Accepted
Environmental Awareness (X1)-> Green Purchase Behavior (Y)	H5	0.383	0.000	6.084	1.970	Accepted
Green Product Value (X2)-> Green Purchase Behavior (Y)	H6	0.179	0.003	2.964	1.970	Accepted
Green Price Sensivity (X3)-> Green Purchase Behavior (Y)	H7	0.147	0.000	4.306	1.970	Accepted
Green Product Trust (X4)-> Green Purchase Behavior (Y)	H8	0.081	0.016	2.407	1.970	Accepted
Green Purchase Behavior (Y)	H9	0.235	0.000	4.804	1.970	Accepted

Variable Relationship	Hypothesis	Coefficient	P value	T-Statistic	T-table	Conclusion
Behavior (Y)-> Attitude (Z)						

Source: Primary data (2025)

DISCUSSION

Hypothesis 1: The Effect of Environmental Awareness on Attitude

Table 3 shows the Coefficient value of $0.398 > 0.000$ with T-statistic $> T\text{-table}$ ($5.015 > 1.970$) and P-value $0.000 < 0.05$, then H_0 is rejected and H_{a1} is accepted, meaning that the Environmental Awareness variable has a positive and significant effect on Attitude. This shows the importance of consumer awareness in shaping a positive attitude towards environmentally friendly products that are considered more responsible for the environment. The findings in this study are supported by research conducted by Mabkhot, (2024). However, this research is not supported by research conducted by Ogiemwonyi, (2024).

Hypothesis 2: The Effect of Green Product Value on Attitude

Table 3 shows the Coefficient value of $0.288 > 0.000$ with T-statistic $> T\text{-table}$ ($3.345 > 1.970$) and P-value $0.001 < 0.05$, then H_0 is rejected and H_{a2} is accepted, meaning that the Green Product Value variable has a positive and significant effect on Attitude. In this case, consumers tend to form an attitude that prefers products that are considered to have added value to the environment. The findings in this study are supported by previous research conducted by Ogiemwonyi, (2024).

Hypothesis 3: The Effect of Green Price Sensivity on Attitude

Table 3 shows the coefficient value of $0.177 > 0.000$ with T-statistic $> T\text{-table}$ ($3.088 > 1.970$) and P-value $0.002 < 0.05$, then H_0 is rejected and H_{a3} is accepted, meaning that the Green Price Sensivity variable has a positive and significant effect on Attitude. Despite being price sensitive, consumers still have a positive attitude towards eco-friendly products. The findings in this study are supported by previous research conducted by Ogiemwonyi, (2024).

Hypothesis 4: The Effect of Green Product Trust on Attitude

Table 3 shows the coefficient value of $0.097 > 0.000$ with T-statistic $> T\text{-table}$ ($2.407 > 1.970$) and P-value $0.030 < 0.05$, then H_0 is rejected and H_{a4} is accepted, meaning that the Green Product Trust variable has a positive and significant effect on Attitude. Green Product Trust reflects the positive beliefs and attitudes of consumers of eco-friendly products that the products used actually fulfill environmentally friendly claims. The findings in this study are supported by previous research conducted by Ogiemwonyi, (2024).

Hypothesis 5: The Effect of Environmental Awareness on Green Purchase Behavior

Table 3 shows the Coefficient value of $0.383 > 0.000$ with T-statistic $> T\text{-table}$ ($6.084 > 1.970$) and P-value $0.000 < 0.05$, then H_0 is rejected and H_{a5} is accepted, meaning that the Environmental Awareness variable has a positive and significant effect on Green Purchase Behavior. Consumers who have a high level of environmental awareness are more moved to take action in environmental sustainability. The findings in this study support research conducted by Mabkhot, (2024) and Ogiemwonyi, (2022).

Hypothesis 6: The Effect of Green Product Value on Green Purchase Behavior

Table 3 shows the coefficient value of $0.179 > 0.000$ with T-statistic $> T\text{-table}$ ($2.964 > 1.970$) and P-value $0.003 < 0.05$, then H_0 is rejected and H_{a6} is accepted, meaning that the Green Product Value variable has a positive and significant effect on Green Purchase Behavior. In this case, the higher the consumer's perception of environmentally friendly products, the greater the likelihood of consumer desire to be involved in purchasing eco-friendly products.

The findings in this study support research conducted by Ogiemwonyi, (2022). However, this research is not supported by research conducted by Mabkhot, (2024).

Hypothesis 7: The Effect of Green Price Sensivity on Green Purchase Behavior

Table 3 shows the coefficient value of $0.147 > 0.000$ with T-statistic $> T\text{-table}$ ($4.306 > 1.970$) and P-value $0.000 < 0.05$, then H_0 is rejected and H_{a7} is accepted, meaning that the Green Price Sensivity variable has a positive and significant effect on Green Purchase Behavior. This shows that even though the price of environmentally friendly products is high, consumers of eco-friendly products still choose these products, considering that consumers consider the price of environmentally friendly products to be in accordance with the value of the products obtained. The findings in this study are not supported by research conducted by Mabkhot, (2024). In this study, Green Price Sensivity has a negative and insignificant effect on Green Purchase Behavior. However, research conducted by Ogiemwonyi, (2024) supports the findings in this study. Where Green Price Sensivity has a positive and significant effect on Green Purchase Behavior.

Hypothesis 8: The Effect of Green Product Trust on Green Purchase Behavior

Table 3 shows the coefficient value of $0.383 > 0.000$ with T-statistic $> T\text{-table}$ ($6.084 > 1.970$) and P-value $0.000 < 0.05$, then H_0 is rejected and H_{a8} is accepted, meaning that the Green Product Trust variable has a positive and significant effect on Green Purchase Behavior. In this case, consumers not only consider the price factor, but also see whether green products in general can be traded and claims in general can be trusted. The findings of this study are supported by previous research, conducted by Ogiemwonyi, (2024). In this study, Green Product Trust has a positive and significant influence on Green Purchase Behavior. However, research conducted by Mabkhot, (2024) does not support the findings in this study, because the results show that Green Product Trust has a negative and insignificant effect on Green Purchase Behavior.

Hypothesis 9: The Effect of Attitude on Green Purchase Behavior

Table 3 shows the coefficient value of $0.235 > 0.000$ with T-statistic $> T\text{-table}$ ($4.804 > 1.970$) and P-value $0.000 < 0.05$, then H_0 is rejected and H_{a9} is accepted, meaning that the Attitude variable has a positive and significant effect on Green Purchase Behavior. This shows that consumers' attitudes towards environmentally friendly products are an important factor in encouraging them to make purchases. In addition, consumers feel that there is a big difference between environmentally friendly consumption and ordinary consumption. The findings in this study are supported by previous research conducted by Chan & Ricky, (2021); Djajadiwangsa & Alversia, (2022); and Rahmadhanti, et al (2024). In this study, Attitude has a positive and significant effect on Green Purchase Behavior. However, the research by Apriyani, et al (2023), does not support these findings, because the results show that Attitude has a negative and insignificant effect on Green Purchase Behavior.

CONCLUSION

Overall, the findings of this study indicate that the variables of Environmental Awareness (X1), Green Product Value (X2), Green Price Sensivity (X3), and Green Product Trust (X4) have a positive and significant effect on Green Purchase Behavior, and each exogenous and endogenous variable has a positive and significant effect on Atitude (Z) as a mediating variable.

This study has several limitations that need to be considered for the interpretation of the results and the development of further research, including: the scope of the object is limited to one product brand, namely Bumijo, which is an eco-friendly product manufacturer. This limits the generalization of the results to other green products with different characteristics, such as organic food products or eco-friendly cosmetics. The data collection method using an online questionnaire may cause response bias.

