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Green Product Knowledge, Eco-Label Transparency and Brand Trust towards Consumer Awareness through Green Product Innovation as Mediating Variables on Consumers of OMEO Indonesia's eco-printed shopping bag products

Diana Noer Aqiyah[1], Nikma Yucha[2]
[12] Program Studi Manajemen Fakultas Ekonomi dan Bisnis Universitas Maarif Hasyim Latif
Corresponding Author e-mail: diana_noer_aqiyah@student.umaha.ac.id , nikma@dosen.umaha.ac.id

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Abstract: *This study examines the relationships of Green Product Knowledge, Eco-Label Transparency, and Brand Trust with Consumer Awareness, with Green Product Innovation as a mediating variable among consumers of OMEO Indonesia's eco-printed shopping bags. A quantitative explanatory approach was applied, involving 100 respondents selected through purposive sampling. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The results indicate that Green Product Knowledge and Eco-Label Transparency are positively and significantly associated with Green Product Innovation, while Brand Trust is not significant. Green Product Innovation is positively and significantly associated with Consumer Awareness. The direct relationships of Green Product Knowledge, Eco-Label Transparency, and Brand Trust with Consumer Awareness are not statistically significant under the study's stated criterion of $p < 0.05$. Regarding mediation, only the indirect relationship between Eco-Label Transparency and Consumer Awareness through Green Product Innovation is statistically significant. These findings highlight the importance of transparent environmental information supported by tangible green product innovation in strengthening consumer awareness.*

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Introduction

Lifestyle changes toward sustainable consumption are influencing how consumers choose products. Consumers consider not only price and quality, but also environmental concerns and a company's commitment to sustainability (Puspa Novita Sari, 2023). This trend is driving the adoption

of green marketing and increasing interest in eco-friendly products, including reusable shopping bags (Nuraisyah et al., 2025; Faza et al., 2024).

The increasing use of single-use plastics has become a global environmental issue because they are difficult to decompose and can pollute the environment (OECD, 2022; The World of Plastic Waste: A Review, 2024; Shabihah et al., 2024). This situation also occurs in Asia and Indonesia, with increasing waste generation and limited plastic waste management (OECD, 2025; Ministry of Environment and Forestry, 2024). This has driven the demand for reusable products, including eco-printed shopping bags.

The research problem relates to the unclear factors that shape consumer awareness of environmentally friendly products. Green product knowledge can encourage consumers to switch from single-use plastic bags to reusable ones (Ishak et al., 2023). Consumers are also increasingly considering products that support plastic waste reduction and sustainable consumption (Khan et al., 2023; Arias, C., et al., 2024).

In addition to product knowledge, information transparency through eco-labels and brand trust are also important factors. Eco-label information can help consumers evaluate environmentally friendly products (Marsella et al., 2023), while the clarity of environmental information and the consistency of green marketing can shape consumer perceptions and trust (Haryono et al., 2025; Damanik et al., 2024). However, studies linking eco-label transparency and brand trust with consumer awareness are still limited.

Another issue relates to the role of green product innovation. Sustainable design, eco-friendly materials, and functional features can increase acceptance of green products (Setiawan et al., 2024), while sustainable practices in the supply chain contribute to consumer awareness (Puspitasari et al., 2025). However, research that positions green product innovation as a mediating variable between green product knowledge, eco-label transparency, and brand trust on consumer awareness, particularly regarding eco-printed shopping bags, is still limited.

This study aims to analyze the influence of green product knowledge, eco-label transparency, and brand trust on consumer awareness through green product innovation as a mediating variable in consumers of OMEO Indonesia eco-printed shopping bags. This research is important to strengthen the study of green consumer behavior and provide input for sustainable marketing strategies. Its novelty lies in testing these three factors on consumer awareness through green product innovation in the specific context of OMEO Indonesia eco-printed shopping bags.

Research methods

This study uses a quantitative approach with a descriptive explanatory research type to analyze the influence of Green Product Knowledge, Eco-Label Transparency, and Brand Trust on Consumer Awareness with Green Product Innovation as a mediating variable on consumers of OMEO Indonesia Eco Printing Shopping Bags. The quantitative approach uses numerical data that is analyzed statistically to test hypotheses, while descriptive research is used to describe the condition of variables based on facts obtained in the field (Sugiyono, 2023; Asra et al., 2023).

The research population was all consumers of OMEO Indonesia Eco Printing Shopping Bags who had made online purchases and were domiciled in Gresik Regency, Sidoarjo Regency, and Surabaya City, East Java Province, with an unknown population size. The sample determination used the Lemeshow formula to obtain 96.6 and rounded up to 100 respondents. The sampling technique used was non-probability sampling with a purposive sampling method based on the criteria of respondents being at least 17 years old, domiciled in the research area, and having purchased OMEO Indonesia Eco Printing Shopping Bags online at least twice (Sugiyono, 2023; Amin et al., 2023; Asrulla et al., 2023).

The research instrument was a closed questionnaire used to measure Green Product Knowledge, Eco-Label Transparency, Brand Trust, Consumer Awareness, and Green Product Innovation. Measurements were conducted using a Likert Scale of 1 to 5, namely strongly disagree to strongly agree (Sugiyono, 2023). Variable indicators refer to Sinha et al. (2022) in Puspitasari et al. (2025), Józwik-Pruska et al. (2022), Febrianto et al. (2020) in Zuhriyah et al. (2024), Sumarwan in Nisrina et al. (2025), and Wang et al. (2021) in Theresia et al. (2023).

Data analysis was conducted quantitatively using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the help of SmartPLS version 4. The analysis included testing the outer

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model through convergent validity, discriminant validity, composite reliability, and Cronbach's Alpha, as well as the inner model through R-Square, F-Square, and path analysis (Yarsasi et al., 2025; Hair, 2022). Hypothesis testing was conducted using bootstrapping by looking at the t-statistic and p-value values at a significance level of 5%, with the criteria of t-statistic > 1.96 or p-value < 0.05 (Hair, 2022).

The research procedure begins with identifying phenomena and problems regarding consumer behavior towards environmentally friendly products, followed by formulating the problem, objectives, theoretical analysis, and research model. Next, the researcher determined the population, sample, and respondent criteria, compiled and distributed an online questionnaire to 100 respondents, and then tabulated and analyzed the data using SmartPLS version 4. The final stage was carried out by testing the measurement model, structural model, and direct and indirect influence hypotheses to obtain research conclusions.

Research results

Respondent Descriptive

Table 1 Respondent Frequency Characteristics by Gender

Information	Frequency	Presentation
Man	22	22%
Woman	78	78%
TOTAL	**100**	**100%**

Based on Table 1, of the 100 participants involved in the study, 22 were male and 78 were female. Therefore, the majority of respondents were female.

Table 2 Frequency Characteristics of Respondents by Age

Information	Frequency	Percentage
Age 17 years - 20 years	6	6%
Age 20 – 25 years	84	84%
Age 26 – 30 years	5	5%
Age > 30 years	5	5%
TOTAL	**100**	**100%**

Based on Table 2, the age composition of this study shows that the majority of participants were in the 20–25 age range, namely 84 people. Meanwhile, the 17–20 age group consisted of 6 people, while 5 people each fell into the 26–30 age group and 30+ age group. Therefore, the majority of respondents were aged 20–25.

Table 3 Frequency Characteristics of Respondents by Domicile

Information	Frequency	Percentage
Gresik Regency	33	33%
Sidoarjo Regency	29	29%
Surabaya City	38	38%
TOTAL	**100**	**100%**

Based on the table above, the number of respondents in Gresik Regency was 33, in Sidoarjo Regency 29, and in Surabaya City 38. Therefore, the largest number of respondents was in Surabaya City.

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Table 4 Frequency Characteristics of Respondents According to Last Education

Information	Frequency	Percentage
JUNIOR HIGH SCHOOL	3	3%
High School/Vocational School	71	71%
Diploma	4	4%
Bachelor	21	21%
Postgraduate	1	1%
TOTAL	**100**	**100%**

The participants' educational attainment was dominated by high school/vocational school graduates, with 71 participants. Furthermore, 21 participants had a bachelor's degree, 4 had a diploma, 3 respondents had a junior high school degree, and 1 respondent had a postgraduate degree.

Table 5 Frequency Characteristics of Respondents by Occupation

Information	Frequency	Percentage
Students	57	57%
Private sector employee	29	29%
ASN	3	3%
Businessman	8	8%
Other	3	3%
TOTAL	**100**	**100%**

Referring to the information presented in the table, we can see the picture of the respondent data if the occupation of students/university students is 57 respondents, private employees are 29 respondents, ASN are 3 respondents, entrepreneurs are 8 respondents, and others are 3 respondents.

Table 6 Frequency Characteristics of Respondents According to Income

Information	Frequency	Percentage
<2,000,000	48	48%
2,000,000 – 4,000,000	34	34%
4,000,000 – 6,000,000	12	12%
>6,000,000	6	6%
TOTAL	**100**	**100%**

Referring to the information presented in the table, it can be seen that the respondent data is illustrated if the number of respondents whose income is <2,000,000 is 48 respondents, 2,000,000 – 4,000,000 is 34 respondents, 4,000,000 – 6,000,000 is 12 respondents, and >6,000,000 is 6 respondents, so that the largest number of respondents is those with income <2,000,000.

Descriptive Analysis

Table 7 Respondents' Achievement Level

NO	Respondent Reach Rate (TCR)	Criteria
1	90% - 100%	Very good
2	80% - 89%	Good
3	65% - 79%	Pretty good
4	55% - 64%	Not good
5	0% - 54%	Not good

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Table 8 Total Respondent Responses to the Green Product Knowledge Variable (X1)

Indicator	1	2	3	4	5	N	Total Score	Mean	TCR	Information
X1.1.1	2	4	14	43	37	100	409	4.09	82%	Good
X1.1.2	2	4	12	47	35	100	409	4.09	82%	Good
X1.2.1	2	5	21	40	32	100	395	3.95	79%	Pretty good
X1.2.2	3	5	16	42	34	100	399	3.99	80%	Good
X1.3.1	3	4	13	43	37	100	407	4.07	81%	Good
X1.3.2	1	4	8	32	55	100	436	4.36	87%	Good
X1.4.1	4	7	16	38	35	100	393	3.93	79%	Pretty good
X1.4.2	1	4	17	33	45	100	417	4.17	83%	Good
AVERAGE									**81%**	**Good**

Table 9 Total Respondent Responses to the Eco-Label Transparency Variable (X2)

Indicator	1	2	3	4	5	N	Total Score	Mean	TCR	Information
X2.1.1	3	9	17	50	21	100	377	3.77	75%	Pretty good
X2.1.2	1	6	15	46	32	100	402	4.02	80%	Good
X2.2.1	2	4	20	48	26	100	392	3.92	78%	Pretty good
X2.2.2	2	3	16	45	34	100	406	4.06	81%	Good
X2.3.1	3	4	11	50	32	100	404	4.04	81%	Good
X2.3.2	0	7	10	45	38	100	414	4.14	83%	Good
X2.4.1	2	2	15	42	39	100	414	4.14	83%	Good
X2.4.2	2	3	13	41	41	100	416	4.16	83%	Good
AVERAGE									**80%**	**Good**

Table 10 Total Respondent Responses to Brand Trust Variable (X3)

Indicator	1	2	3	4	5	N	Total Score	Mean	TCR	Information
X3.1.1	5	6	13	45	31	100	391	3.91	78%	Pretty good
X3.1.2	1	6	15	49	29	100	399	3.99	80%	Good
X3.2.1	1	5	21	47	26	100	392	3.92	78%	Pretty good
X3.2.2	4	4	11	43	38	100	407	4.07	81%	Good
X3.3.1	5	2	12	43	38	100	407	4.07	81%	Good
X3.3.2	2	5	16	34	43	100	41	4.11	82%	Good
AVERAGE									**80%**	**Good**

Table 11 Total Respondent Responses to Green Product Innovation Variable (Z)

Indicator	1	2	3	4	5	N	Total Score	Mean	TCR	Information
Z.1.1	2	6	16	38	38	100	404	4.04	81%	Good
Z.1.2	3	4	14	44	35	100	404	4.04	81%	Good
Z.2.1	1	5	16	43	35	100	406	4.06	81%	Good
Z.2.2	3	4	9	43	41	100	415	4.15	83%	Good
Z.3.1	3	8	20	37	32	100	387	3.87	77%	Pretty good
Z.3.2	2	4	13	36	45	100	418	4.18	84%	Good
Z.4.1	2	3	15	47	33	100	414	4.06	81%	Good
Z.4.2	4	3	18	39	36	100	400	4.00	80%	Good
AVERAGE									**81%**	**Good**

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Table 12 Total Respondent Responses to Consumer Awareness Variable (Y)

Indicator	1	2	3	4	5	N	Total Score	Mean	TCR	Information
Y.1.1	2	8	15	35	40	100	403	4.03	81%	Good
Y.1.2	2	2	8	42	46	100	428	4.28	86%	Good
Y.2.1	1	5	14	43	37	100	410	4.1	82%	Good
Y.2.2	4	5	8	41	42	100	412	4.12	82%	Good
Y.3.1	3	4	15	51	27	100	395	3.87	79%	Pretty good
Y.3.2	3	2	16	36	43	100	414	4.14	83%	Good
AVERAGE									**82%**	**Good**

Measurement Model Analysis Results

Table 13 Validity Test Results

Construct	Calculate r value	Table r Value	Information
X1.1.1	0.780	0.196	Valid
X1.1.2	0.796	0.196	Valid
X1.2.1	0.729	0.196	Valid
X1.2.2	0.724	0.196	Valid
X1.3.1	0.759	0.196	Valid
X1.3.2	0.736	0.196	Valid
X1.4.1	0.708	0.196	Valid
X2.1.2	0.786	0.196	Valid
X2.2.1	0.808	0.196	Valid
X2.3.1	0.731	0.196	Valid
X2.3.2	0.754	0.196	Valid
X2.4.2	0.819	0.196	Valid
X3.1.1	0.746	0.196	Valid
X3.1.2	0.757	0.196	Valid
X3.2.1	0.737	0.196	Valid
X3.2.2	0.775	0.196	Valid
X3.3.1	0.757	0.196	Valid
X3.3.2	0.763	0.196	Valid
Y.1.2	0.810	0.196	Valid
Y.2.1	0.793	0.196	Valid
Y.2.2	0.743	0.196	Valid
Y.3.1	0.737	0.196	Valid
Y.3.2	0.798	0.196	Valid
Z.1.1	0.765	0.196	Valid
Z.1.2	0.804	0.196	Valid
Z.2.1	0.787	0.196	Valid
Z.3.2	0.759	0.196	Valid
Z.4.1	0.728	0.196	Valid
Z.4.2	0.784	0.196	Valid

Based on Table 13, all statement items have a calculated r value > r table (0.196). Thus, all items in variables X1, X2, X3, and Y are declared valid and suitable for use in research.

Table 14 Reliability Test Results

No	Variables	Cronbach's Alpha	Cronbach's Alpha value implied	Information
1	*Green Product Knowledge*	0.869	0.7	Reliable
2	*Eco-Label Transparency*	0.839	0.7	Reliable
3	*Brand Trust*	0.850	0.7	Reliable
4	Consumer Awareness	0.836	0.7	Reliable
5	Green Product Innovation	0.864	0.7	Reliable

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Based on Table 14, all variables have a Cronbach's Alpha value > 0.7, namely X1 of 0.869, X2 of 0.839, X3 of 0.850, Y of 0.836, and Z of 0.864. Thus, all research instruments are declared reliable and suitable for use..

Measurement Model Test or Outer Model

Table 15 Convergent Validity Test Results

Variables	Indicator	Outer Loading	The required Outer Loading value	Information
***Green Product Knowledge*(X1)**	X1.1.1	0.780	0.7	Valid
	X1.1.2	0.796	0.7	Valid
	X1.2.1	0.729	0.7	Valid
	X1.2.2	0.724	0.7	Valid
	X1.3.1	0.759	0.7	Valid
	X1.3.2	0.736	0.7	Valid
	X1.4.1	0.708	0.7	Valid
***Eco-Label Transparency*(X2)**	X2.1.2	0.786	0.7	Valid
	X2.2.1	0.808	0.7	Valid
	X2.3.1	0.731	0.7	Valid
	X2.3.2	0.754	0.7	Valid
	X2.4.2	0.819	0.7	Valid
***Brand Trust*(X3)**	X3.1.1	0.746	0.7	Valid
	X3.1.2	0.757	0.7	Valid
	X3.2.1	0.737	0.7	Valid
	X3.2.2	0.775	0.7	Valid
	X3.3.1	0.757	0.7	Valid
	X3.3.2	0.763	0.7	Valid
Consumer Awareness (Y)	Y.1.2	0.810	0.7	Valid
	Y.2.1	0.793	0.7	Valid
	Y.2.2	0.743	0.7	Valid
	Y.3.1	0.737	0.7	Valid
	Y.3.2	0.798	0.7	Valid
Green Product Innovation (Z)	Z.1.1	0.765	0.7	Valid
	Z.1.2	0.804	0.7	Valid
	Z.2.1	0.787	0.7	Valid
	Z.3.2	0.759	0.7	Valid
	Z.4.1	0.728	0.7	Valid
	Z.4.2	0.784	0.7	Valid

Based on Table 15, all indicators have loading factor values >0.7 for the variables Green Product Knowledge, Eco-Label Transparency, Brand Trust, Consumer Awareness, and Green Product Innovation. Thus, all indicators are declared valid and able to represent the constructs being measured.

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Table 16 Results of Discriminant Validity Testing

Indicator	*Green Product Knowledge*(X1)	*Eco-Label Transparency*(X2)	*Brand Trust*(X3)	Consumer Awareness (Y)	Green Product Innovation (Z)
X1.1.1	**0.780**	0.637	0.658	0.593	0.730
X1.1.2	**0.796**	0.662	0.675	0.661	0.660
X1.2.1	**0.729**	0.594	0.554	0.592	0.578
X1.2.2	**0.724**	0.576	0.660	0.590	0.668
X1.3.1	**0.759**	0.607	0.628	0.638	0.635
X1.3.2	**0.736**	0.602	0.580	0.644	0.580
X1.4.1	**0.708**	0.600	0.634	0.574	0.525
X2.1.2	0.635	**0.786**	0.684	0.654	0.634
X2.2.1	0.640	**0.808**	0.656	0.576	0.658
X2.3.1	0.577	**0.731**	0.655	0.623	0.665
X2.3.2	0.628	**0.754**	0.647	0.572	0.619
X2.4.2	0.705	**0.819**	0.665	0.655	0.662
X3.1.1	0.636	0.619	**0.746**	0.611	0.571
X3.1.2	0.655	0.572	**0.757**	0.642	0.561
X3.2.1	0.545	0.618	**0.737**	0.514	0.524
X3.2.2	0.686	0.686	**0.775**	0.607	0.688
X3.3.1	0.649	0.680	**0.757**	0.587	0.692
X3.3.2	0.617	0.666	**0.763**	0.620	0.602
Y.1.2	0.721	0.649	0.680	**0.810**	0.663
Y.2.1	0.675	0.704	0.640	**0.793**	0.670
Y.2.2	0.567	0.561	0.600	**0.743**	0.557
Y.3.1	0.539	0.454	0.443	**0.737**	0.517
Y.3.2	0.655	0.667	0.676	**0.798**	0.708
Z.1.1	0.654	0.632	0.614	0.614	**0.765**
Z.1.2	0.635	0.687	0.643	0.730	**0.804**
Z.2.1	0.660	0.644	0.604	0.687	**0.787**
Z.3.2	0.662	0.625	0.636	0.554	**0.759**
Z.4.1	0.623	0.596	0.616	0.577	**0.728**
Z.4.2	0.657	0.661	0.626	0.571	**0.784**

Table 16 shows that the cross-loading value of each indicator within each construct is higher than the other constructs. This applies to Green Product Knowledge, Eco-Label Transparency, Brand Trust, Consumer Awareness, and Green Product Innovation. Thus, all indicators are able to differentiate the constructs being measured and have met the criteria for discriminant validity.

Table 17 Discriminant Validity Test Results Average Variance Extracted (AVE) Method

No	Variables	*Average Variance Extracted*(AVE)	The implied AVE value	Information
1	*Green Product Knowledge*(X1)	0.560	0.5	Valid
2	*Eco-Label Transparency*(X2)	0.609	0.5	Valid
3	*Brand Trust*(X3)	0.571	0.5	Valid
4	Consumer Awareness (Y)	0.604	0.5	Valid
5	Green Product Innovation (Z)	0.595	0.5	Valid

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Table 17 shows that all constructs have AVE values above 0.50, namely Green Product Knowledge 0.560, Eco-Label Transparency 0.609, Brand Trust 0.571, Consumer Awareness 0.604, and Green Product Innovation 0.595. Thus, all constructs have met the convergent validity criteria..

Table 18 Composite Reliability Test Results

No	Variables	*Composite Reliability*	The implied AVE value	Information
1	*Green Product Knowledge*(X1)	0.871	0.7	Reliable
2	*Eco-Label Transparency*(X2)	0.839	0.7	Reliable
3	*Brand Trust*(X3)	0.852	0.7	Reliable
4	Consumer Awareness (Y)	0.844	0.7	Reliable
5	Green Product Innovation (Z)	0.866	0.7	Reliable

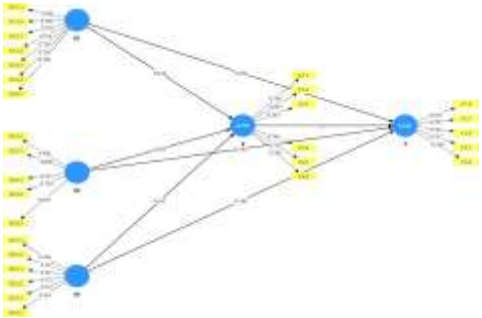
Table 18 shows that all constructs have Composite Reliability values above 0.7, namely Green Product Knowledge 0.871, Eco-Label Transparency 0.839, Brand Trust 0.852, Consumer Awareness 0.844, and Green Product Innovation 0.866. Thus, all constructs have met the reliability criteria and are declared reliable.

Table 19 Cronbach's Alpha Test Results

No	Variables	Cronbach's Alpha	Cronbach's Alpha value implied	Information
1	*Green Product Knowledge*	0.869	0.7	Reliable
2	*Eco-Label Transparency*	0.839	0.7	Reliable
3	*Brand Trust*	0.850	0.7	Reliable
4	Consumer Awareness	0.836	0.7	Reliable
5	Green Product Innovation	0.864	0.7	Reliable

Based on Table 19, all constructs have Cronbach's Alpha values above 0.7, namely Green Product Knowledge 0.869, Eco-Label Transparency 0.839, Brand Trust 0.850, Consumer Awareness 0.836, and Green Product Innovation 0.864. Thus, all constructs have met the reliability criteria and are declared reliable.

Structural Model or Inner Model Test



Picture 1 Structural Equation Modeling (SEM) Model

Causal Model

Based on the structural model presented in Figure 1, the following causal equations are obtained:

Structural Equation I

$Z = 0.418X_1 + 0.365X_2 + 0.147X_3 + e_1$

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The equation indicates that the Green Product Innovation variable is influenced by *Green Product Knowledge, Eco-Label Transparency,* and *Brand Trust*.

Structural Equation II

$$Y = 0.316X_1 + 0.165X_2 + 0.166X_3 + 0.273Z + e_2$$

The equation indicates that the Consumer Awareness variable is influenced by *Green Product Knowledge, Eco-Label Transparency, Brand Trust,* and Green Product Innovation.

Table 20 R-Square Test Results

Variables	R-square	R-square adjusted
Consumer Awareness (Y)	0.742	0.732
Green Product Innovation (Z)	0.773	0.766

Table 20 shows an R-Square value of 0.742 for Consumer Awareness and 0.773 for Green Product Innovation. Both are considered strong, with explanatory power of 74.2% and 77.3%, respectively, with the remainder influenced by factors outside the model.

Table 21 F-Square Test Results

Variables	Green Product Innovation	Consumer Awareness
Green Product Knowledge	0.198	0.083
Eco-Label Transparency	0.142	0.023
Brand Trust	0.020	0.023
Green Product Innovation		0.066
Consumer Awareness		

Table 21 shows that most of the relationships between variables have F-Square values in the small influence category, namely in the relationship between Green Product Knowledge, Eco-Label Transparency, and Brand Trust on Consumer Awareness and Green Product Innovation. Only the influence of Green Product Knowledge on Green Product Innovation has a moderate effect with an F^2 value of 0.198. Thus, the model is dominated by small influences with one relationship in the medium category.

Table 22 Path Analysis Test Results

Variables	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	KET
Green Product Knowledge-> Consumer Awareness	0.316	0.291	0.162	1,959	0.050	Positive & Insignificant
Eco-Label Transparency-> Consumer Awareness	0.165	0.171	0.141	1,173	0.241	Positive & Insignificant
Brand Trust-> Consumer Awareness	0.166	0.174	0.141	1,177	0.239	Positive & Insignificant
Green Product Knowledge-> Green Product Innovation	0.418	0.418	0.100	4.185	0.000	Positive & Significant
Eco-Label Transparency-> Green Product Innovation	0.365	0.361	0.100	3,646	0.000	Positive & Significant

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Brand Trust-> Green Product Innovation	0.147	0.149	0.123	1,194	0.233	Positive & Insignificant
Green Product Innovation -> Consumer Awareness	0.273	0.282	0.130	2,097	0.036	Positive & Significant
Green Product Knowledge-> Green Product Innovation -> Consumer Awareness	0.114	0.119	0.066	1,720	0.085	Positive & Insignificant
Eco-Label Transparency-> Green Product Innovation -> Consumer Awareness	0.100	0.097	0.047	2,117	0.034	Positive & Significant
Brand Trust-> Green Product Innovation -> Consumer Awareness	0.040	0.045	0.046	0.866	0.386	Positive & Insignificant

Results*path analysis*The results showed four positive and significant relationships, while the other six relationships were positive but insignificant. Significant relationships include Green Product Knowledge and Eco-Label Transparency on Green Product Innovation, Green Product Innovation on Consumer Awareness, and the indirect effect of Eco-Label Transparency on Consumer Awareness.

Hypothesis Testing

Table 23 Hypothesis Test Results

No	Hypothesis	Information
1	*Green Product Knowledge*has a positive and significant effect on Consumer Awareness	Rejected
2	*Eco-Label Transparency*has a positive and significant effect on Consumer Awareness	Rejected
3	*Brand Trust*has a positive and significant effect on Consumer Awareness	Rejected
4	*Green Product Knowledge*has a positive and significant effect on Green Product Innovation	Accepted
5	*Eco-Label Transparency*has a positive and significant effect on Green Product Innovation	Accepted
6	*Brand Trust*has a positive and significant effect on Green Product Innovation	Rejected
7	Green Product Innovation has a positive and significant impact on Consumer Awareness	Accepted
8	*Green Product Knowledge*has an indirect effect on Consumer Awareness through Green Product Innovation	Rejected

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9	*Eco-Label Transparency*has an indirect effect on Consumer Awareness through Green Product Innovation	Accepted
10	*Brand Trust*has an indirect effect on Consumer Awareness through Green Product Innovation	Rejected

Discussion

1. **The Influence of Green Product Knowledge on Consumer Awareness**
   The test results show that Green Product Knowledge has a positive but insignificant effect on Consumer Awareness, with a coefficient value of 0.316, a T-statistic of 1.959, and a P-value of 0.050. Thus, H1 is rejected. Consumer knowledge about green products is not enough to increase awareness because it is still influenced by other factors such as trust, experience, and product innovation. This finding is in line with Dewi (2026) who stated that green product knowledge does not necessarily encourage consumer response without being supported by consumer trust and consumer attitude.
2. **The Influence of Eco-Label Transparency on Consumer Awareness**
   The test results show that Eco-Label Transparency has a positive but insignificant effect on Consumer Awareness, with a coefficient of 0.165, a T-statistic of 1.173, and a P-value of 0.241. Thus, H2 is rejected. Eco-label information has not been able to significantly increase awareness because consumers consider the design, quality, function, and uniqueness of the product more. This finding is in line with Shafira et al. (2022) who stated that the presence of an eco-label does not automatically influence consumer responses without adequate understanding.
3. **The Influence of Brand Trust on Consumer Awareness**
   The test results show that Brand Trust has a positive but insignificant effect on Consumer Awareness, with a coefficient of 0.166, a T-statistic of 1.177, and a P-value of 0.239. Thus, H3 is rejected. Consumer trust in OMEO Indonesia is more related to quality, design, and user experience than environmental concerns. This finding is in line with Junarsin et al. (2022) who showed that brand trust does not necessarily directly influence consumer responses without other supporting factors.
4. **The Influence of Green Product Knowledge on Green Product Innovation**
   The test results show that Green Product Knowledge has a positive and significant effect on Green Product Innovation, with a coefficient of 0.418, a T-statistic of 4.185, and a P-value of 0.000. Thus, H4 is accepted. Consumer knowledge about environmentally friendly products makes it easier for them to recognize and appreciate innovations such as the use of natural dyes, original leaf motifs, and environmentally friendly materials in OMEO Indonesia products. This finding is in line with Rehman et al. (2024) who stated that knowledge plays a role in encouraging green innovation.
5. **The Influence of Eco-Label Transparency on Green Product Innovation**
   The test results show that Eco-Label Transparency has a positive and significant effect on Green Product Innovation, with a coefficient of 0.365, a T-statistic of 3.646, and a P-value of 0.000. Thus, H5 is accepted. Transparent information regarding ingredients, production processes, and environmental benefits helps consumers understand and assess the green innovation implemented by OMEO Indonesia. This finding is in line with Lou et al. (2024) that transparent eco-labels can increase consumer understanding and support the development of green products.
6. **The Influence of Brand Trust on Green Product Innovation**
   The test results show that Brand Trust has a positive but insignificant effect on Green Product Innovation, with a coefficient of 0.147, a T-statistic of 1.194, and a P-value of 0.233. Thus, H6 is rejected. Consumer trust in OMEO Indonesia is based more on quality, design, and user satisfaction than on green innovation. This finding is in line with Purnama et al. (2021) who showed that trust and green product innovation do not always have a direct relationship.
7. **The Influence of Green Product Innovation on Consumer Awareness**
   The test results show that Green Product Innovation has a positive and significant effect on Consumer Awareness, with a coefficient of 0.273, a T-statistic of 2.097, and a P-value of 0.036. Thus, H7 is accepted. Innovations in the form of the use of native leaves, natural dyes, and environmentally friendly production processes can increase consumer awareness of environmental sustainability. This finding is in line with Panopoulos et al. (2023) who stated that the characteristics

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and innovation of green products can increase consumer understanding and concern for the environment.

8. **The Influence of Green Product Knowledge on Consumer Awareness through Green Product Innovation**
   The test results show that Green Product Innovation has not been able to mediate the relationship between Green Product Knowledge and Consumer Awareness, with a Specific Indirect Effect of 0.114, a T-statistic of 1.720, and a P-value of 0.085. Thus, H8 is rejected. Consumer knowledge about green products is not enough to increase awareness through innovation because consumers still need more tangible benefits and experiences of innovation. This finding is in line with Setyabudi et al. (2022) that green product knowledge does not necessarily result in consumer responses without other supporting factors.
9. **The Influence of Eco-Label Transparency on Consumer Awareness through Green Product Innovation**
   The test results show that Eco-Label Transparency has a positive and significant effect on Consumer Awareness through Green Product Innovation, with a Specific Indirect Effect of 0.100, a T-statistic of 2.117, and a P-value of 0.034. Thus, H9 is accepted. Transparency of information regarding ingredients, production processes, and environmental benefits becomes more effective in increasing awareness when supported by real green product innovation. This finding is in line with Cavusoglu (2026) who stated that clear and reliable eco-label information can increase consumer understanding and awareness of environmentally friendly products.
10. **The Influence of Brand Trust on Consumer Awareness through Green Product Innovation**
    The test results show that Green Product Innovation has not been able to mediate the relationship between Brand Trust and Consumer Awareness, with a Specific Indirect Effect of 0.040, a T-statistic of 0.866, and a P-value of 0.386. Thus, H10 is rejected. Consumer trust in OMEO Indonesia is not enough to increase awareness through green product innovation because consumers consider the product's direct benefits more. This finding is in line with Setyabudi et al. (2022) who showed that mediating variables do not always strengthen the relationship between variables if the underlying relationship is not strong enough.

Conclusion

This study shows that Green Product Knowledge, Eco-Label Transparency, and Brand Trust do not have a significant direct effect on Consumer Awareness among consumers of OMEO Indonesia eco-printed shopping bags. On the other hand, Green Product Knowledge and Eco-Label Transparency are proven to have a positive and significant effect on Green Product Innovation, while Brand Trust does not show a significant effect. Green Product Innovation then has a positive and significant effect on Consumer Awareness. In the mediation relationship, Green Product Innovation is only able to significantly mediate the effect of Eco-Label Transparency on Consumer Awareness, while mediation on the relationship between Green Product Knowledge and Brand Trust is not proven to be significant. This finding confirms that environmental information transparency will be more effective in building consumer awareness if supported by real green product innovation and its benefits can be felt.

This study has limitations in the relatively limited sample size of 100 respondents, as well as the use of purposive sampling, which means the results cannot be broadly generalized to all consumers of environmentally friendly products. Furthermore, the research object only focused on consumers of OMEO Indonesia's eco-printed shopping bags in Gresik, Sidoarjo, and Surabaya, so the characteristics of consumers in other regions or brands are not yet represented. Future research is recommended to expand the research area, increase the number of samples, use more representative sampling techniques, and consider other variables such as environmental attitude, perceived value, green perceived quality, and purchase intention. Practically, OMEO Indonesia needs to increase the transparency of information regarding materials, production processes, environmental benefits, and strengthen product innovation through sustainable materials, designs, and production processes. This strategy can help transform

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environmental information into a more tangible product experience, ultimately increasing consumer awareness of sustainability.

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