

The Effect of Environmental Awareness and Perceptions of Quality, Price, and Organic Labeling on the Intention to Purchase Organic Rice, with Trust as a Moderating Variable Trust

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Keywords:	Abstract
organic rice; purchase intention; Trust; organic label.	Organic rice consumption in Indonesia is increasing alongside growing health and environmental awareness; however, purchase intention remains inconsistent because consumers continue to have concerns regarding price, quality, labeling credibility, and trust. This study aimed to examine the effects of environmental awareness, perceived quality, perceived price, and perceived organic labeling on organic rice purchase intention, as well as the moderating role of trust. A quantitative explanatory design with a cross-sectional survey was employed. Data were collected from 184 organic rice consumers across Java using purposive sampling and a seven-point Likert-scale questionnaire. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 and bootstrapping with 5,000 subsamples. The results showed that perceived organic labeling had a significant positive effect on purchase intention ($\beta = 0.31$, $p < 0.05$), while trust also had a significant direct effect ($\beta = 0.26$, $p < 0.05$). Environmental awareness, perceived quality, and perceived price had no significant effects on purchase intention. Moreover, trust did not significantly moderate any of the proposed relationships. The model explained 50.5% of the variance in purchase intention. These findings indicate that credibility, particularly through trustworthy organic certification and consumer trust, is a primary factor shaping organic rice purchase intention in Indonesia.

INTRODUCTION

The rice sector plays a strategic role in meeting the staple food needs of the Indonesian population, with national rice consumption reaching 94.9 kg per capita per year in 2023 (BPS, 2023). At the same time, the consumption of organic products in Indonesia continues to grow in line with increasing public awareness of health and environmental issues. Data from the Indonesian Organic Agriculture Statistics (SPOI, 2023) show that organic rice has become one of the leading organic commodities produced and consumed nationally. Nevertheless, the price of organic rice remains considerably higher than that of conventional rice, meaning that organic rice consumers are still concentrated within specific market segments (Sa'diah et al., 2023). Packaging, labeling, and perceived quality are also important determinants of purchase decisions, particularly among younger Indonesian consumers (Prasetyo et al., 2023).

Java represents Indonesia's largest organic food market, with a consumer profile dominated by educated, middle-income households with access to organic food products (Najib et al., 2020). Jakarta and West Java together account for the largest share of national organic consumption (Elizabeth et al., 2022). Even so, studies conducted in various cities and regions

of Java—Surakarta (Rayanda & Isa, 2025), Blitar (Anggraeni et al., 2022), and Jabodetabek (Firmansyah et al., 2021)—indicate that consumer purchase intentions and behaviors toward organic rice remain highly variable and have not been comprehensively examined by simultaneously considering environmental awareness, perceived quality, perceived price, perceived organic labeling, and the moderating role of trust. This gap strengthens the rationale for conducting research in Java as a relevant setting for examining these relationships.

Although environmental awareness has increased, not all consumers consistently purchase organic rice. Kim et al. (2023) found that environmental knowledge, perceived consumer effectiveness, and situational factors influence actual purchase behavior; however, a persistent gap remains between environmental awareness and consumers' actual purchasing behavior, commonly known as the intention–behavior gap. This suggests the potential need for a moderating mechanism such as trust to explain when positive environmental perceptions are translated into purchase intention or behavior. Data from the Indonesian Organic Alliance (AOI, 2023) show that Indonesia's certified organic farmland covers only about 72,543 hectares, or approximately 0.27% of total agricultural land, far below the global average of 1.6%. A Nielsen Indonesia (2022) survey similarly reported that although 68% of urban Indonesian consumers claimed to care about environmental issues, only 12% consistently purchased organic food products, again indicating a substantial intention–behavior gap in which trust in organic claims may function as an important facilitating or inhibiting factor.

Previous academic findings regarding the key determinants of organic purchase intention remain inconsistent. Regarding environmental awareness, Kim et al. (2023) found a significant positive effect, whereas Wierzbinski et al. (2021) found that environmental awareness does not always translate into purchase intention because of the persistent intention–behavior gap. Regarding organic labeling, Liu (2022) and Ma et al. (2022) demonstrated the positive influence of credible certification labels on purchase intention, whereas Lukmawan and Wulandari (2024) found that eco-labels did not directly affect purchase intention but instead operated through attitude and perceived behavioral control. These inconsistencies indicate the need for research incorporating trust as a moderating variable to clarify when and under what conditions these factors influence organic rice purchase intention. Sa'diah et al. (2023) found that cleanliness, pesticide-free attributes, and social media promotion were considered important by consumers, whereas taste and packaging received relatively low evaluations. Alfinda and Haryanto (2023), studying consumers in Batam, found that social, quality, and emotional values, price, and trust significantly affected organic purchase intention. Ar-Rozi et al. (2020), studying consumers in Depok, found that perceptions of organic rice attributes—including price, taste, aroma, color, nutritional value, authenticity, and certification—fell within the “moderate” category, reflecting continued hesitation regarding consistent purchases. Meanwhile, Prasetyo et al. (2023) found that young consumers were satisfied with product-protection and labeling attributes, although packaging aesthetics still required improvement. Winterstein et al. (2024), comparing Germany and Thailand, found that German consumers emphasized environmental health and social responsibility, whereas Thai consumers emphasized family responsibility, indicating that personal values shape organic purchase intention differently across cultural contexts. Chang and Chen (2022) found that organic labeling was a key determinant of purchase intention in Asian markets, while Baş et al. (2024) found that high perceived prices remained a major barrier despite positive consumer attitudes toward organic products in Turkey.

Trust may serve as a moderating mechanism because, in the context of green and organic products, the information available to consumers is often limited and may be perceived as uncertain or biased. Song et al. (2024) found that low-carbon labels not only enhanced perceived environmental, functional, and emotional value but also strengthened trust in sustainability claims. This trust functioned as an important mechanism linking perceived value to purchase intention because consumers who doubted label credibility were less likely to translate positive perceptions into purchase decisions. Accordingly, trust is expected to strengthen or weaken the relationships between environmental awareness, perceived quality, perceived price, and perceived organic labeling, on the one hand, and organic rice purchase intention, on the other. This study is grounded in consumer behavior theory, which emphasizes the role of environmental awareness, perceived quality, perceived price, and organic labeling in shaping purchase intention. Therefore, examining these relationships is important for identifying the factors that influence organic rice purchase decisions and for supporting the development of a more sustainable agricultural industry.

Based on the background described above, this study aims to examine and analyze the factors influencing organic rice purchase intention. Specifically, it investigates the effects of environmental awareness, perceived quality, perceived price, and perceived organic labeling on consumers' intention to purchase organic rice. Furthermore, the study examines the moderating role of trust in strengthening or weakening the relationships between these factors and organic rice purchase intention. More specifically, it examines the moderating effects of trust on the relationships between environmental awareness and organic rice purchase intention, perceived quality and organic rice purchase intention, perceived price and organic rice purchase intention, and perceived organic labeling and organic rice purchase intention.

METHOD

Research Design

This study employed a quantitative explanatory approach to examine the causal relationships among the research variables. A cross-sectional design was used, with data collected at a single point in time to test the proposed relationships and the moderating role of trust (Creswell, 2009). The study was conducted among organic rice consumers on Java Island, Indonesia. Java was selected because it contains the largest share of Indonesia's population (55%; BPS, 2026) and includes several major organic food markets, such as Jakarta, Bandung, Semarang, and Surabaya (Najib et al., 2020). The study examined environmental awareness, perceived quality, perceived price, and perceived organic labeling as independent variables; trust as the moderating variable; and organic rice purchase intention as the dependent variable. Data were collected through a structured survey instrument and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized relationships and moderation effects (Hair et al., 2022).

Table 1. Stages of the Research Process

Stage	Researcher's Activities	Respondent's Activities
1	Identify the research problem and select a relevant topic	—

Stage	Researcher's Activities	Respondent's Activities
2	Develop the theoretical framework based on literature and prior studies	—
3	Design the study, including selecting the appropriate method (survey)	—
4	Prepare the questionnaire and input it into Google Forms	Receive information about the research topic
5	Distribute the questionnaire link to respondents via WhatsApp and Instagram	Complete the questionnaire on Google Forms
6	Collect and code the completed responses	—
7	Process and analyze the data using PLS-SEM	—
8	Interpret the results and compile the final research report	—

Source: Processed by the researcher, 2025.

Variable Operationalization

Variables in this study are defined as measurable characteristics or attributes that can vary across observations (Hair et al., 2022), and are used to test causal or correlational relationships among the factors examined (Zeithaml, 1988; Liu et al., 2025). The study involves four independent variables (Environmental Awareness, Perceived Quality, Perceived Price, and Perceived Organic Label), one dependent variable (Organic Rice Purchase Intention), and one moderating variable (Trust). Each construct and its indicators, adapted from prior studies, are summarized in Table 2.

Table 2. Variable Definitions and Operationalization

No.	Variable	Conceptual Definition	Indicators	Source
1	Environmental Awareness (X1)	Consumers' tendency to engage in environmentally friendly behavior, including knowledge of environmental issues, support for resolving them, and willingness to engage personally in responsible consumption.	Knowledge of environmental issues; emotional involvement; willingness to act responsibly	Kim et al. (2023); Song et al. (2024)
2	Perceived Quality (X2)	A direct determinant of purchase intention that also mediates the relationship between label, price, and trust attributes and purchase intention.	Intrinsic attributes (taste, aroma, texture); food safety; nutritional and health value	Bai et al. (2023); Xu et al. (2023)
3	Perceived Price (X3)	Consumers' assessment of the value obtained from a product's price, rather than merely the actual price paid.	Price consciousness; value consciousness; price-quality schema	Chu (2018)
4	Perceived Organic Label (X4)	A communication tool between producers and consumers that conveys information on health, safety, and environmental protection, typically certified by a third party or government body.	Label credibility/trust; safety and environmental information; visual identification	Bauer et al. (2013); Wong & Tzeng (2021); Toussaint et al. (2021)
5	Organic Rice Purchase Intention (Y)	Consumers' desire or tendency to act, prior to actually making a purchase.	Willingness to buy; purchase plan; product preference	Chu (2018); Wongsachia et al. (2022)

No.	Variable	Conceptual Definition	Indicators	Source
6	Trust (M)	Consumers' subjective assessment of the reliability, credibility, and integrity of product and producer information.	Reliability; information credibility; sense of security	Song et al. (2024)

Source: Processed by the researcher, 2025.

Measurement

All constructs were measured using a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree), which broadens response distribution and enhances the sensitivity of the estimation model in PLS-SEM (Hair et al., 2022).

Population and Sample

The population comprises organic rice consumers residing in the provinces of Java Island (DKI Jakarta, Banten, West Java, Central Java, D.I. Yogyakarta, and East Java) aged 17–45 years, who have purchased, intend to purchase, or are familiar with organic rice products. This age range was selected because it represents consumers who are active on social media and possess meaningful purchasing power (Najib et al., 2020). A purposive sampling technique was applied. Following Hair et al. (2019), the minimum recommended sample size for PLS-SEM is five to ten times the number of indicators; accordingly, this study targeted a minimum of 180 respondents. Data were collected online via Google Forms distributed through WhatsApp and Instagram between April and May 2025. Of 208 questionnaires received, 184 met the inclusion criteria and were retained for analysis, while 24 were excluded for failing to meet the domicile, age, or product-familiarity criteria.

Data Analysis

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the aid of SmartPLS 4.0. Analysis proceeded in two stages: evaluation of the measurement model (outer model)—covering convergent validity (outer loading ≥ 0.60 , or retained at ≥ 0.50 when theoretically justified), composite reliability (> 0.70), average variance extracted (AVE > 0.50), and discriminant validity (HTMT)—followed by evaluation of the structural model (inner model), covering the coefficient of determination (R^2), effect size (f^2), and model fit (SRMR). Hypotheses were tested through a bootstrapping procedure with 5,000 subsamples, using the criteria of t-statistic > 1.96 and p-value < 0.05 (Hair et al., 2022).

RESULTS AND DISCUSSION

Respondent Profile

Of the 184 valid respondents, 101 (54.9%) were male and 83 (45.1%) were female. Respondents were distributed across Java Island, with the largest share domiciled in DKI Jakarta (39.7%), followed by West Java (24.5%), Central Java (15.2%), Banten (10.9%), East Java (8.2%), and D.I. Yogyakarta (1.6%). The dominant age group was above 45 years (38.0%), followed by 35–44 years (37.5%), 25–34 years (21.2%), and 17–24 years (3.3%). Regarding education, 60.3% held a Diploma/Bachelor's degree, 25.0% held a Master's degree, 12.0% completed senior high school, and 2.7% held a Doctoral degree. By occupation, private-sector employees were the largest group (39.1%), followed by entrepreneurs (28.8%), civil servants (6.0%), and other categories including housewives, retirees, and students (26.1%).

combined). Monthly income was concentrated above IDR 20,000,000 (39.7%), followed by IDR 5,000,000–<10,000,000 (21.7%), IDR 10,000,000–<15,000,000 (13.0%), below IDR 5,000,000 (15.2%), and IDR 15,000,000–<20,000,000 (10.3%). A large majority (84.2%) reported having previously purchased organic rice, and all 184 respondents (100%) reported being familiar with organic rice products.

Table 3. Respondent Demographic Profile (n = 184)

Characteristic	Category	n	%
Gender	Male	101	54.9
	Female	83	45.1
Age	17–24 years	6	3.3
	25–34 years	39	21.2
	35–44 years	69	37.5
	> 45 years	70	38.0
Education	Senior high school	22	12.0
	Diploma / Bachelor's (D3/S1)	111	60.3
	Master's (S2)	46	25.0
	Doctoral (S3)	5	2.7
Occupation	Private employee	72	39.1
	Entrepreneur	53	28.8
	Civil servant	11	6.0
	Housewife	12	6.5
	Other (retired, student, professional, etc.)	36	19.6
Monthly income	< IDR 5,000,000	28	15.2
	IDR 5,000,000 – < 10,000,000	40	21.7
	IDR 10,000,000 – < 15,000,000	24	13.0
	IDR 15,000,000 – < 20,000,000	19	10.3
	> IDR 20,000,000	73	39.7
Domicile (province)	DKI Jakarta	73	39.7
	West Java	45	24.5
	Central Java	28	15.2
	Banten	20	10.9
	East Java	15	8.2
	D.I. Yogyakarta	3	1.6
Prior organic rice purchase	Yes	155	84.2
	No	29	15.8

Source: Primary data, processed 2025.

Measurement Model (Outer Model)

Convergent validity was assessed using outer loadings, with a threshold of ≥ 0.60 . After model purification, four indicators fell below this threshold (KL2 = 0.35, PH1 = 0.31, KL1 = 0.55, PLO3 = 0.57); KL2 and PH1 were removed for being below 0.50, while KL1 and PLO3 were retained given their proximity to the threshold and the limited number of indicators per construct, a limitation acknowledged in this study. Reliability and convergent validity were then evaluated using Composite Reliability (CR > 0.70) and Average Variance Extracted (AVE > 0.50), as shown in Table 4.

Table 4. Construct Reliability and Validity

Construct	Composite Reliability (ρ_c)	AVE
Trust	0.93	0.83
Environmental Awareness	0.68	0.53
Organic Rice Purchase Intention	0.86	0.68
Perceived Price	0.85	0.73
Perceived Quality	0.90	0.74
Perceived Organic Label	0.80	0.57

Source: SmartPLS 4 output, processed 2025.

All constructs met the AVE criterion (> 0.50). Five constructs also met the Composite Reliability criterion (> 0.70); Environmental Awareness was slightly below this threshold (0.68) but remains acceptable given its adequate AVE (0.53) and the limited number of retained indicators. Discriminant validity, assessed via the Heterotrait–Monotrait ratio (HTMT), was satisfactory for most construct pairs, although the Environmental Awareness construct exhibited relatively high HTMT values, suggesting some conceptual overlap with related constructs that warrants attention in interpreting the results.

Structural Model (Inner Model) and Hypothesis Testing

The coefficient of determination (R^2) for Organic Rice Purchase Intention was 0.505, indicating that the model explains approximately 50.5% of the variance in purchase intention—a moderate level of explanatory power. The model fit index, SRMR, was 0.080, within the acceptable range (< 0.10). Hypotheses were tested via bootstrapping with 5,000 subsamples, using the criteria of t-statistic > 1.96 and p-value < 0.05 . The results are presented in Table 5.

Table 5. Hypothesis Testing Results (Path Coefficients)

Hypothesis	Path	β (O)	t-statistic	p-value	Decision
H1	Environmental Awareness $\rightarrow$ Purchase Intention	0.11	1.53	0.13	Rejected
H2	Perceived Quality $\rightarrow$ Purchase Intention	0.09	1.37	0.17	Rejected
H3	Perceived Price $\rightarrow$ Purchase Intention	0.15	1.68	0.09	Rejected
H4	Perceived Organic Label $\rightarrow$ Purchase Intention	0.31	2.84	0.00	Accepted
—	Trust $\rightarrow$ Purchase Intention (direct effect)	0.26	3.81	0.00	Significant
H5	Trust $\times$ Environmental Awareness $\rightarrow$ Purchase Intention	−0.05	0.71	0.48	Rejected
H6	Trust $\times$ Perceived Quality $\rightarrow$ Purchase Intention	−0.15	1.86	0.06	Rejected
H7	Trust $\times$ Perceived Price $\rightarrow$ Purchase Intention	0.06	0.59	0.55	Rejected
H8	Trust $\times$ Perceived Organic Label $\rightarrow$ Purchase Intention	0.08	0.67	0.50	Rejected

Source: SmartPLS 4 bootstrapping output (5,000 subsamples), 2025.

Table 6. Effect Size (f^2)

Path	f^2	Interpretation
Perceived Organic Label $\rightarrow$ Purchase Intention	0.130	Small–medium
Trust $\rightarrow$ Purchase Intention	0.089	Small
Perceived Price $\rightarrow$ Purchase Intention	0.029	Very small
Trust $\times$ Perceived Quality	0.025	Very small
Environmental Awareness $\rightarrow$ Purchase Intention	0.017	Very small

Path	f ²	Interpretation
Perceived Quality → Purchase Intention	0.010	Very small
Trust × Perceived Organic Label	0.008	Negligible
Trust × Perceived Price	0.005	Negligible
Trust × Environmental Awareness	0.004	Negligible

Source: SmartPLS 4 output, processed 2025.

Overall, the model demonstrates an acceptable goodness of fit. Only two direct paths—Perceived Organic Label and Trust—are statistically significant, together accounting for the largest share of explained variance, while the remaining direct paths and all four moderation paths are not significant.

H1: Environmental Awareness on Purchase Intention.

Environmental awareness has no significant effect on organic rice purchase intention ($\beta = 0.11$, $t = 1.53$, $p = 0.13$); H1 is rejected, although the coefficient direction remains positive as predicted. This can be explained through the Theory of Planned Behavior (Ajzen, 1991), which holds that a positive attitude does not necessarily translate into strong intention when barriers such as limited information or low product confidence persist, and through the Stimulus–Organism–Response (SOR) framework, in which the stimulus must first be processed psychologically before producing a behavioral response. This finding is consistent with Wierzbinski et al. (2021) and Wong and Tzeng (2021), who found that environmental awareness alone does not directly increase purchase intention, and with Zayed et al. (2022) and Ghali (2026), who found that structural and informational barriers—rather than weak environmental concern—are the dominant obstacles to organic consumption in developing countries. The contrasting results reported by studies finding a significant effect may stem from differences in product category (high-involvement or socially expressive products versus a low-involvement daily staple such as rice) and from the relatively homogeneous, well-informed, higher-income profile of this study’s sample. Comparable evidence from the Indonesian context reinforces this interpretation. Murtiningsih et al. (2024), using PLS analysis on 110 respondents, found that green marketing affected neither purchase intention nor brand image, whereas brand awareness and brand image—constructs grounded in brand recognition and credibility rather than environmental concern—were the significant drivers. Consistently, Wulandari et al. (2012), surveying 408 potential consumers of ecolabel-certified products in Jakarta and its surrounding areas, concluded that a green marketing strategy cannot expand market share when the target market is confined to consumers who already favor environmental sustainability, and that consumer stratification is therefore required. Both findings reinforce the present result that environmental awareness does not automatically function as a driver of purchase intention for a certified staple food such as organic rice.

H2: Perceived Quality on Purchase Intention.

Perceived quality has no significant effect on purchase intention ($\beta = 0.09$, $t = 1.37$, $p = 0.17$); H2 is rejected. Because organic-rice quality cannot be directly observed prior to purchase, Signaling Theory suggests that a quality signal only influences behavior when consumers trust its credibility. This result parallels Tan et al. (2025) and is reinforced by Kun and Kiss (2021), who showed that organic labeling operates through a halo mechanism that reshapes consumers’ evaluation of attributes they cannot verify themselves, effectively

substituting for an independent quality assessment. It contrasts with Garcia-Salirrosas (2024), Dharma et al. (2021), and Bai et al. (2023), who found perceived quality to be a significant driver—likely because those studies examined products, such as fresh produce, with more visibly apparent quality differences than rice. The still-unsettled role of perceived quality is likewise reflected in Murtiningsih et al. (2024), who recommend further testing of brand trust, perceived quality, price, and customer satisfaction in explaining purchase intention.

H3: Perceived Price on Purchase Intention.

Perceived price has no significant effect on purchase intention ($\beta = 0.15$, $t = 1.68$, $p = 0.09$); H3 is rejected. According to Perceived Value Theory, consumers weigh perceived benefits against the price paid; in this sample, price appears to have already been internalized as a reasonable consequence of certification rather than a barrier. This contrasts with Baş et al. (2024), Ar-Rozi et al. (2020), and Ghali (2026), who identify premium pricing as the principal obstacle to organic consumption, particularly in developing-country and general-population samples, but aligns with Saragi (2025) and Zheng et al. (2021), who found that price sensitivity does not diminish purchase intention among literate, higher-income consumer segments. This divergence suggests two distinct market layers: for the general population, price remains a barrier, whereas for organically literate, higher-purchasing-power consumers such as this study's sample, price is no longer a binding constraint.

H4: Perceived Organic Label on Purchase Intention.

Perceived organic label has a significant positive effect on purchase intention ($\beta = 0.31$, $t = 2.84$, $p = 0.00$); H4 is accepted, and this path represents the strongest direct effect in the model. This finding is consistent with Signaling Theory, whereby the organic label reduces information asymmetry between producers and consumers, and with the Stimulus–Organism–Response framework, in which the label functions as an external stimulus shaping a positive consumer response. The result aligns with Liu (2022), Ma et al. (2022), Chang and Chen (2022), Xu et al. (2023), Bai et al. (2023), and Najib et al. (2020), all of whom found certification labeling to be a critical determinant of organic purchase intention, and with Nurmahdi et al. (2025), who found that authentic green-marketing efforts strengthen brand credibility while greenwashing skepticism erodes it—implying that a label's effectiveness rests on the credibility of the certifying system rather than the logo itself. Organic rice is a credence good, that is, a product whose central quality attributes cannot be verified by consumers even after consumption (Darby & Karni, 1973); the organic label therefore becomes the primary information source that reduces uncertainty and strengthens consumer confidence in the safety, quality, and authenticity of the product.

Direct Effect of Trust and H5–H8: Moderating Role of Trust.

Although included as a moderator, Trust also shows a significant positive direct effect on purchase intention ($\beta = 0.26$, $t = 3.81$, $p = 0.00$), the second-largest path in the model, consistent with Commitment–Trust Theory (Morgan & Hunt, 1994) and with Chen (2010), Song et al. (2024), Liu et al. (2025), and Alfinda and Haryanto (2023). However, all four moderation hypotheses are rejected: Trust $\times$ Environmental Awareness ($\beta = -0.05$, $p = 0.48$), Trust $\times$ Perceived Quality ($\beta = -0.15$, $p = 0.06$), Trust $\times$ Perceived Price ($\beta = 0.06$, $p = 0.55$), and Trust $\times$ Perceived Organic Label ($\beta = 0.08$, $p = 0.50$), with all interaction effect sizes negligible ($f^2 \approx 0.004$). Several complementary explanations are offered. Theoretically, within the SOR framework, Trust occupies the position of “organism”—a psychological state shaped

by stimuli and, in turn, shaping response—so its structural role is mediation rather than moderation, consistent with the suggestion that more theoretically appropriate moderators lie outside this causal chain, such as government support (Marman & Nurmahdi, 2025) or purchase convenience and eco-label credibility (Kim & Lee, 2023). Methodologically, Söderlund (2023) and Xu and Shiau (2026) note that moderation analyses in consumer research are frequently under-specified, with over half of published moderation studies failing to probe the interaction adequately, suggesting the difficulty in detecting moderation here may reflect a broader disciplinary pattern rather than a weakness specific to this study. Substantively, following Sarstedt (2026), the near-zero f^2 values (≈ 0.004 , below Cohen's 0.02 threshold for a small effect) qualify as “informative nulls”—positive evidence that any moderating effect of Trust, if it exists, is too small to be practically meaningful. Empirically, comparable studies such as Arslan (2025), Zheng et al. (2023), Saragi (2025), and Marman and Nurmahdi (2025) report similarly partial, path-specific, or absent moderation effects of Trust and related constructs. Notably, the marginal negative interaction between Trust and Perceived Quality ($\beta = -0.15$, $p = 0.06$) is theoretically suggestive of a cognitive-substitution mechanism: at high levels of Trust, consumers may cease evaluating quality independently, delegating that judgment entirely to the certification system they trust.

Synthesis: A Single Credibility Mechanism.

Taken together, the findings reveal a coherent pattern rather than a set of disconnected results. Of the five direct paths tested, only two are significant—Perceived Organic Label ($\beta = 0.31$) and Trust ($\beta = 0.26$)—and both represent facets of a single underlying mechanism: credibility. The organic label constitutes institutionalized, third-party-verified credibility, whereas Trust constitutes credibility internalized within the consumer's mind. The three non-significant paths (environmental awareness, perceived quality, and perceived price) represent affective-normative and evaluative-rational determinants that require deep, independent information processing—processing that appears not to occur for a low-involvement credence good such as rice (Darby & Karni, 1973). Instead, consumers appear to rely on a cognitive shortcut: if the product is certified and the certifying body is trusted, the product is judged worth buying without separately weighing other attributes. The rejection of seven of eight hypotheses therefore does not indicate a loss of explanatory power: $R^2 = 0.505$ shows the model still explains 50.5% of the variance in purchase intention; that explanatory power is simply concentrated in a single mechanism rather than distributed across five parallel determinants.

Managerial and Policy Implications

These findings carry several practical implications. First, government bodies and certification institutions should strengthen oversight of organic labeling to prevent certification misuse, label counterfeiting, and greenwashing, since label credibility is the strongest driver of purchase intention. Second, public education on the meaning of organic certification—covering the certification process and health and environmental benefits—should be expanded so the label is perceived as a genuine quality guarantee rather than a mere logo. Third, producers should prioritize building Trust through production transparency, traceability, laboratory test disclosure, and consistent certification communication, rather than relying primarily on price or generic quality claims. Fourth, promotional communication should emphasize concrete, verifiable benefits—food safety, pesticide-free status, family health, and verifiable certification—rather than broad environmental-concern messaging alone. Finally,

industry development should be balanced with strengthened certification institutions and consumer literacy across the organic-rice supply chain to support sustainable growth of the sector. In addition, marketing efforts should move beyond targeting environmentally oriented consumers alone. Wulandari et al. (2012) concluded that market stratification is necessary so that marketing strategies can be applied appropriately to each layer of the market, with satisfaction, safety, socialization, and sustainability serving as components for framing messages to distinct consumer segments. Complementing this, Murtiningsih et al. (2024) showed that brand awareness and brand image drive purchase intention more effectively than green marketing claims, which suggests that communication budgets for certified organic rice are better allocated to building brand recognition and brand image—with certification evidence positioned as a constitutive element of that image—than to foregrounding environmental appeals.

CONCLUSION

This study examined the effects of environmental awareness, perceived quality, perceived price, and perceived organic labeling on organic rice purchase intention, with trust as a moderating variable, among 184 consumers on Java Island. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with bootstrapping based on 5,000 subsamples. The results showed that purchase intention was influenced primarily by credibility-related factors rather than by an accumulation of marketing attributes. Only perceived organic labeling ($\beta = 0.31$, $p < 0.001$) and trust ($\beta = 0.26$, $p < 0.001$) had significant direct effects on purchase intention, while the model explained 50.5% of the variance in purchase intention ($R^2 = 0.505$). Environmental awareness ($\beta = 0.11$, $p = 0.13$), perceived quality ($\beta = 0.09$, $p = 0.17$), and perceived price ($\beta = 0.15$, $p = 0.09$) had no significant effects despite their positive coefficients. All four moderation hypotheses were rejected, with negligible interaction effect sizes ($f^2 \approx 0.004$), indicating that trust functioned as a direct determinant rather than as a moderator. The marginally negative interaction between trust and perceived quality ($\beta = -0.15$, $p = 0.06$) may suggest a cognitive substitution mechanism in which highly trusting consumers rely more heavily on certification and consequently engage less in independent quality evaluation. These findings indicate that, for a credence product such as organic rice, purchase intention may depend less on environmental concern, perceived quality, or perceived price than on the credibility of organic claims. Certification bodies should therefore strengthen oversight to prevent label misuse and greenwashing, while producers should prioritize transparency and traceability to strengthen consumer trust. Public education should also emphasize the verifiability and credibility of organic certification rather than relying solely on general environmental appeals. Future research should examine more heterogeneous consumer segments, refine the measurement of environmental awareness to strengthen discriminant validity, and test alternative moderators outside the Stimulus–Organism–Response framework, such as government support or eco-label credibility, to better explain the conditions under which environmental, quality, and price cues translate into organic rice purchase intention.

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