

The influence of consumer perceptions, preferences and purchase intentions on purchasing decision process of organic rice in Pati District, Pati Regency

[Pengaruh persepsi, preferensi dan niat beli konsumen terhadap pengambilan keputusan pembelian beras organik di Kecamatan Pati, Kabupaten Pati]

Mesiastri Prisnia Isabella^{1*}, Budi Setiawan², and Riyanti Isaskar²

¹ Agribusiness Master's Study Program, Brawijaya University, Malang, East Java, Indonesia

² Agriculture Socio-Economic Department, Faculty of Agriculture, Brawijaya University, Malang, East Java, Indonesia

*Correspondence email: mesiastri.isabella@gmail.com

Received: 9 March 2025, Revised: 4 September 2025, Accepted: 12 September 2025, DOI: 10.23960/jthp.v31i1.74-86

ABSTRACT

Demand for organic products, particularly organic rice, has been increasing as consumers increasingly pursue healthier and more sustainable lifestyles. Organic rice, which is cultivated without the use of chemical fertilizers or pesticides, is favored for its superior attributes, including a fluffier texture, a more fragrant aroma, and a sweeter taste compared to conventional rice. Despite these advantages, the organic rice market continues to face significant marketing challenges, such as difficulties in identifying potential consumers, limited distribution channels, and unstable selling prices. To address these challenges, Pati Regency in Central Java, one of Indonesia's major agricultural regions, has committed to the development of an organic farming system. The region now produces a diverse range of organic rice varieties, including fragrant red rice, pearl mentik, basmati, japonica, and black rice, to meet growing consumer demand. This study aimed to analyze the influence of consumer perceptions, preferences, and purchase intentions on organic rice purchasing decisions in Pati Regency. A quantitative research approach with a descriptive design was employed. Data were collected using accidental sampling from 100 respondents who met the selection criteria, namely individuals aged over 17 years who had purchased and consumed rice. The data were analyzed using Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) with the assistance of WarpPLS 7.0 software. The results indicated that perception, preference, and purchase intention had a positive and significant influence on organic rice purchasing decisions. These findings highlight the importance of marketing strategies that enhance consumer awareness, strengthen product image, and expand market access to support the growth of the organic rice market.

Keywords: perception, preference, purchase intention, purchasing decision, organic rice

ABSTRAK

Produk organik semakin diminati oleh masyarakat karena dinilai mampu mendukung gaya hidup yang lebih sehat dan berkelanjutan. Salah satu produk yang banyak diminati konsumen adalah beras organik, yang dihasilkan melalui proses budidaya tanpa penggunaan pupuk dan pestisida kimia sintetis. Beras organik diketahui memiliki sejumlah keunggulan dibandingkan beras konvensional, antara lain tekstur yang lebih pulen, aroma yang lebih harum, serta cita rasa yang lebih manis. Meskipun memiliki keunggulan tersebut, pemasaran beras organik masih menghadapi berbagai kendala, seperti kesulitan dalam mengidentifikasi konsumen potensial, keterbatasan jaringan pemasaran, serta fluktuasi harga jual. Kabupaten Pati, sebagai salah satu sentra pertanian di Jawa Tengah, telah berupaya mengembangkan sistem pertanian organik melalui produksi berbagai varietas beras organik, antara lain beras merah wangi, mentik mutiara, basmati, japonica, mentik wangi, IPB 3S, dan beras hitam. Penelitian ini bertujuan untuk menganalisis pengaruh persepsi, preferensi, dan niat beli terhadap keputusan pembelian beras organik di Kabupaten Pati. Penelitian menggunakan pendekatan kuantitatif dengan desain deskriptif. Pengambilan sampel dilakukan menggunakan metode accidental sampling terhadap 100 responden yang memenuhi kriteria, yaitu berusia lebih dari 17 tahun serta pernah membeli dan mengonsumsi beras. Analisis data dilakukan menggunakan *Structural Equation Modeling* (SEM) berbasis *Partial Least Squares* (PLS) dengan bantuan perangkat lunak WarpPLS 7.0. Hasil penelitian menunjukkan bahwa variabel persepsi, preferensi, dan niat beli berpengaruh positif dan signifikan terhadap keputusan pembelian beras organik. Temuan ini menegaskan

pentingnya penerapan strategi pemasaran yang berfokus pada peningkatan kesadaran konsumen, penguatan citra produk, serta perluasan akses pasar guna mendorong pertumbuhan pasar beras organik.

Kata kunci: beras organik, keputusan pembelian, niat beli, persepsi, preferensi

Introduction

The global impact of the COVID-19 pandemic has significantly influenced people's lifestyle choices, particularly in the pursuit of better health. One widely adopted approach to achieving a healthier lifestyle is the consumption of organic products. The pandemic has encouraged individuals to develop healthier habits and become more attentive to their well-being, making organic food consumption increasingly popular (Lutfiadi et al., 2023). Organic rice has emerged as a preferred choice among consumers because it is produced through farming practices that exclude chemical fertilizers and pesticides, rendering it a more natural and environmentally friendly alternative to conventional rice (Smiglak-krajewska & Wojciechowska-solis, 2021; Wang et al., 2024). However, organic rice is generally more expensive than conventional rice due to its complex cultivation process, which reduces its competitiveness in the market (Analia et al., 2023). The price of organic rice typically ranges from IDR 15,000 to IDR 17,000 per kilogram (Haried et al., 2024).

According to a consumer survey conducted in 2022, organic rice was among the products most frequently considered for purchase. Nevertheless, the high price of organic products (65%) was cited by 23% of respondents as the primary reason for not consuming them. Consumers also reported difficulties in accessing organic food and perceived the variety of available products as limited. Health benefits were identified as the main motivation for choosing organic food, followed by environmental and health concerns (51.71%), health and social considerations (31.57%), and health and product origin (23.43%). Consumers generally perceive organic products as safer and healthier because they are free from pesticide residues and other chemical substances (SPOI, 2023; Durbul et al., 2021). In addition to offering health and safety benefits for consumers, organic rice supports sustainable agricultural practices and provides better economic value for farmers. With its premium quality and increasing demand in both local and international markets, organic rice contributes positively to environmental conservation and the welfare of farming communities. The consumption of organic rice continues to rise as public awareness of health maintenance and environmental preservation increases (Cristina & Melo, 2021).

Pati Regency, located in Central Java, is one of the region's prominent agricultural centers, recognized for its strong agricultural potential. The area is rich in various food crops, including mung beans, peanuts, corn, rice, soybeans, sweet potatoes, and cassava. In recent years, agricultural practices in Pati Regency have shifted toward organic farming, particularly in organic rice production. Organic rice varieties produced by local farmers include fragrant red rice, mentik mutiara white rice, basmati rice, japonica rice, mentik wangi rice, IPB 3S white rice, and black rice. Despite the increasing production of organic rice, marketers continue to face challenges in distribution and market penetration. Difficulties in reaching consumers and limited marketing channels remain significant obstacles. Another challenge is the relatively low selling price of organic rice in certain areas, which in some cases is comparable to that of conventional rice. Generally, organic rice is priced between IDR 14,000 and IDR 20,000 per kilogram; however, in some regions it is sold at approximately IDR 12,000 per kilogram, similar to conventional rice prices. In contrast, the price of organic rice in Palembang City ranges from IDR 32,500 to IDR 50,000 per kilogram, while non-organic rice is priced between IDR 9,000 and IDR 12,000 per kilogram (Dadas et al., 2022). To enhance organic rice sales, marketers need to improve consumer perceptions, preferences, and purchase intentions by aligning marketing strategies with consumer expectations. Therefore, this study aims to analyze the influence of perception, preference, and purchase intention on the purchasing decision process of organic rice in Pati Subdistrict, Pati Regency.

Materials and methods

Collected data

The study area was located in Pati Regency, which is a major producer of organic rice. The population in this study consisted of 100 respondents, based on Hair et al. (2021) study, which suggests that a research sample size of 30 to 500 is considered adequate. Data collection was carried out in October 2023 using an accidental sampling technique. Accidental sampling is a non-probability sampling method in which respondents are selected based on chance encounters, provided that they meet the predetermined criteria. This technique was chosen because it allowed the researcher to efficiently identify respondents who were relevant to the research objectives. The criteria for sample selection included individuals who had previously purchased and consumed organic rice and were at least 17 years old.

Descriptive statistical analysis

Descriptive analysis was employed to summarize and describe the characteristics of the research data, including data dispersion and distribution patterns. This analysis was used to identify the frequency distribution of respondents' answers as well as the mean values for each research variable. Respondents' perceptions were measured using a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree, representing the minimum and maximum scale values. To interpret the mean scores, classification criteria were applied, where mean values of 1.00–1.50 indicated very low, >1.50–2.50 low, >2.50–3.50 moderate, >3.50–4.50 high, and >4.50 very high levels (Sugiyono, 2021; Sekaran & Bougie, 2020)

Data analysis using SEM-PLS with the WarpPLS 7.0 application. This study involves four variables: perception, preference, purchase intention, and purchase decision. The steps for SEM-PLS analysis according to Hair et al. (2021) are designing the inner model, designing the outer model, constructing the path diagram, estimating the outer model and inner model, evaluating the Goodness of Fit (GoF), and hypothesis testing (resampling), validity test, and reliability test.

1. Designing the inner model

The first step in the SEM-PLS analysis was the development of the inner (structural) model. The inner model represents the relationships among latent variables based on the substantive framework of the study and is developed by considering empirical conditions and relevant theoretical foundations (Hair et al., 2021; Henseler, 2020). The inner model in this study is presented in Figure 1.

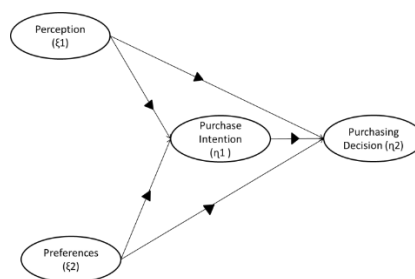


Figure 1. Inner model

The inner model equation of this research is as follows:

$$\eta_1 = \gamma_1 \xi_1 + \gamma_2 \xi_2 + \zeta_1$$

$$\eta_2 = \beta_1 \eta_1 + \gamma_1 \xi_1 + \gamma_2 \xi_2 + \zeta_2$$

Description: η_1 (purchase intention variable), η_2 (purchase decision variable), β_1 (purchase intention variable coefficient), ξ_1 (perception variable), ξ_2 (preference variable), γ_1 (perception variable coefficient), γ_2 (preference variable coefficient), ζ_1 (Zeta, residual or standard error of purchase intention), ζ_2 (Zeta, residual or standard error of purchase decision).

2. Designing the outer model

The outer model describes the relationships between latent variables and their observed indicators, which define the characteristics of the manifest variables. The development of the outer model aims to explain how each indicator represents its corresponding latent construct (Hair et al., 2021). The outer model specification used in this study is presented in Table 1.

Table 1. Outer model equation

Variable type	Construct	Outer model equation
Exogenous	Perception (ξ_1)	$X_{1,1} = \lambda X_{1,1} \xi_1 + \delta_{1,1}$
		$X_{1,2} = \lambda X_{1,2} \xi_1 + \delta_{1,2}$
	Preferences (ξ_2)	$X_{2,1} = \lambda X_{2,1} \xi_2 + \delta_{2,1}$
		$X_{2,2} = \lambda X_{2,2} \xi_2 + \delta_{2,2}$
		$X_{2,3} = \lambda X_{2,3} \xi_2 + \delta_{2,3}$
		$X_{2,4} = \lambda X_{2,4} \xi_2 + \delta_{2,4}$
Endogen	Purchase intention (η_1)	$X_{2,5} = \lambda X_{2,5} \xi_1 + \delta_{2,5}$
		$Z_{1,1} = \lambda Z_{1,1} \eta_1 + \epsilon_{1,1}$
		$Z_{1,2} = \lambda Z_{1,2} \eta_1 + \epsilon_{1,2}$
		$Z_{1,3} = \lambda Z_{1,3} \eta_1 + \epsilon_{1,3}$
	Purchase decision (η_2)	$Y_{1,1} = \lambda Y_{1,1} \eta_2 + \epsilon_{1,1}$

Description: λX and λY denote the loading factors of exogenous and endogenous latent variables, respectively; ξ represents exogenous latent variables; η represents endogenous latent variables; δ and ϵ indicate measurement errors of exogenous and endogenous latent variables, respectively. Indicators X1.1–X1.2 measure perception, X2.1–X2.5 measure preference, Z1.1–Z1.3 measure purchase intention, and Y1.1 measures purchase decision.

3. Constructing the path diagram

After designing the structural model and measurement model, the next step is to design the path diagram.

4. Estimating the outer model and inner model

The evaluation of the measurement model (outer model) involves assessing the quality of the constructs based on their observed indicators. This evaluation consists of three stages: examining convergent validity, assessing discriminant validity, and evaluating the composite reliability of the measurement instruments (Ghozali, 2021).

5. Evaluating the Goodness of Fit (GoF)

The model in the inner model consists of several tests to measure the level of suitability. These tests include model fit, Q2, and R2. The model suitability test is used to evaluate whether the model fits the existing data (Henseler, 2020; Hair et al., 2021).

6. Hypothesis testing (resampling)

Hypothesis testing was performed using a bootstrapping resampling procedure with a t-test approach at a 5% significance level ($\alpha = 0.05$), where p-value less than or equal to 0.05 indicate statistically significant effects. In the outer model, statistically significant results confirm the validity of the measurement indicators, while in the inner (structural) model, significant results indicate meaningful relationships among latent variables.

The hypothesis testing results were used to examine the direct and indirect effects among exogenous and endogenous variables. The significance of each hypothesis was assessed based on p-value, and path coefficients were used to evaluate the strength and direction of the relationships. As presented in Table 2, all proposed hypotheses were supported ($p < 0.001$), except for the direct effect of perception on purchase intention, which was positive but not statistically significant, and the indirect effect of perception on purchase decision through purchase intention, which was also positive but not statistically significant.

Table 2. Hypothesis test result

H	Path correlation	Path coefficient	p-value	Description
Direct influence				
H1	Perception → Purchase decision	0.253	0.004	Accepted
H2	Perception → Purchase intention	0.136	0.081	Rejected
H3	Preference → Purchase decision	0.229	0.008	Accepted
H4	Preference → Purchase intention	0.503	<0.001	Accepted
H5	Purchase intention → Purchase decision	0.335	<0.001	Accepted
Indirect influence				
H6	Perception → Purchase intention → Purchase decision	0.046	0.258	Rejected
H7	Preference → Purchase intention → Purchase decision	0.168	0.007	Accepted

7. Validity test

Validity testing included convergent validity and discriminant validity. The results presented in Table 3 show that all indicators have loading factor values exceeding 0.70, indicating that the convergent validity criteria are satisfied. Furthermore, Table 4 shows that the square root of the Average Variance Extracted (AVE) for each construct is greater than its correlations with other constructs, confirming that the discriminant validity criteria are met.

Table 3. Convergent validity

Variable	Indicator		Loadings factor	p-value
Perception (X1)	X1.1	Promotion		
	X1.1.1	• Organic rice expo	(0.728)	<0.001
	X1.1.2	• Give discount	(0.730)	<0.001
	X1.2	Product value		
	X1.2.1	• Benefits of organic rice	(0.734)	<0.001
	X1.2.2	• Eco-friendly	(0.726)	<0.001
	X1.2.3	• Certified	(0.720)	<0.001
	X1.2.4	• Pesticide free	(0.736)	<0.001
	X1.2.5	• Durability	(0.742)	<0.001
Preference (X2)	X2.1	Price		
	X2.1.1	• Price according to product quality	(0.736)	<0.001
	X2.1.2	• Price according to weight of contents	(0.726)	<0.001
	X2.1.3	• Price is very affordable	(0.725)	
	X2.1.4	• Price according to product benefits	(0.726)	<0.001
	X2.2	Product availability		
	X2.2.1	• Easy to get organic rice	(0.731)	<0.001
	X2.2.2	• Available at all times	(0.721)	<0.001
	X2.2.3	• Organic rice is easy to reach	(0.727)	<0.001
	X2.3	Product aspects		
	X2.3.1	• Organic rice has a whiter color	(0.738)	<0.001
	X2.3.2	• Organic rice has a better taste	(0.735)	<0.001
	X2.3.3	• Organic rice has a more fragrant	(0.724)	<0.001
	X2.3.4	• Organic rice is more sticky	(0.731)	<0.001
	X2.3.5	• Organic rice grains	(0.729)	<0.001
	X2.4	Social factor		
	X2.4.1	• Receiving information from family	(0.731)	<0.001
	X2.4.2	• Receiving information from friends	(0.729)	<0.001
	X2.4.3	• Receiving information from neighbors	(0.721)	<0.001
	X2.5	Habit		
	X2.5.1	• Consumer's preference for consuming organic rice	(0.735)	<0.001
	X2.5.2	• Consumer's interest in organic rice	(0.732)	<0.001
Purchase intention (Z)	Z1.1	Interest		
	Z1.1.2	• Source of organic rice information	(0.728)	<0.001

Variable	Indicator	Loadings factor	p-value
	Z1.1.3	• Intensity of organic rice search	(0.730)
	Z1.2	Product value	
	Z1.2.1	• Desire to have organic rice	(0.734)
	Z1.2.2	• Desire to try organic rice	(0.726)
	Z1.3	Belief	
	Z1.3.1	• Considering purchasing organic rice	(0.733)
	Z1.3.2	• Confidence in the safety of organic rice	(0.735)
Purchase intention (Y)	Y1.1	Purchase decision	
	Y1.1.1	• Willingness to buy organic rice	(0.837)
	Y1.1.2	• Willingness to recommend organic rice	(0.844)
	Y1.1.3	• Willingness to repurchase	(0.871)

Table 4. Discriminant variables of ave root value and the correlation between latent variables

Variable	X1	X2	Z	Y	Explanation
X1 (Perception)	(0.731)	0.516	0.391	0.484	Valid
X2 (Preferences)	0.516	(0.729)	0.573	0.524	Valid
Z (Purchase Intention)	0.391	0.573	(0.740)	0.558	Valid
Y (Purchase Intention)	0.484	0.524	0.558	(0.851)	Valid

Reliability test

All variables have a Composite Reliability value > 0.7 and a Cronbach's Alpha value > 0.5, meaning that all research variables are declared reliable (Table 5). Table 6 presents the goodness-of-fit test results, indicating that the model is fit and adequate.

Table 5. Reliability test

Reliability	X1	X2	Z	Y
Composite reliability	0.889	0.951	0.879	0.887
Category	Very High	Very High	Very High	Very High
Cronbach's alpha	0.855	0.945	0.834	0.809
Category	Very High	Very High	Very High	Very High

Table 6. Goodness of Fit test results

Model Fit Indicator	Test Results	Definition	Information
Average path coefficient (APC)	0.291, p<0.001	p<0.05	Good
Average R-squared (ARS)	0.388, p<0.001	p<0.05	Good
Average block VIF (AVIF)	1.436	AVIF<5	Good
Average Adjusted R-squared (AARS)	0.373, p<0.001	p<0.05	Good
Average Full Collinearity VIF (AFVIF)	1.688	AFVIF<5	Good
Tenenhaus GoF (GoF)	0.476	Small = 0.1-0.24 Medium = 0.25-0.35 Large = GoF > 0.36	Large
Simpson's Paradox Ratio (SPR)	1.000	SPR > 0.7	Good
R-squared Contribution Ratio (RSCR)	1.000	RSCR > 0.9	Good
Statistical Suppression Ratio (SSR)	1.000	SSR > 0.7	Good
Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	1.000	NLBCDR > 0.7	Good

Research parameters

The parameters in this study including perception, preference, purchase intention, and purchase decisions. Based on this, the following indicators and measurement variables presented in Table 7.

Table 7. Indicators and measurement variables

Research variables	Research dimensions	Research indicators
Perception	Promotion	1. Organic rice expo 2. Give discount

Research variables	Research dimensions	Research indicators
Research variables (Adewijaya & Sitinjak, 2023)	Product value	1. Benefits of organic rice
		2. Eco-friendly
		3. Certified
		4. Pesticide free
		5. Durability of organic rice
	Price	1. Price according to product quality 2. Price according to weight of contents 3. Price is very affordable 4. Price according to product benefits
Preferences (Muflikh et al., 2024)	Product availability	1. Easy to get organic rice 2. Available at all times 3. Organic rice is easy to reach
	Product aspects	1. Organic rice has a whiter color 2. Organic rice has a better taste 3. Organic rice has a more fragrant 4. Organic rice is more sticky 5. Organic rice grains
	Social factor	1. Receiving information from family 2. Receiving information from friends 3. Receiving information from neighbors
	Habit	1. Consumer's preference for consuming organic rice 2. Consumer's interest in organic rice
	Interest	1. Source of organic rice information 2. Intensity of organic rice search
	Desire	1. Desire to have organic rice 2. Desire to try organic rice
Purchase intention (Wendy, 2024)	Belief	1. Considering purchasing organic rice 2. Confidence in the safety of organic rice
	Purchase reliability	1. Willingness to buy organic rice
	Recommend	2. Willingness to recommend organic rice
Purchase decision (Satdiah et al., 2023)	Repeat purchase	3. Willingness to repurchase (buy again)

Result and discussion

Respondent characteristics

Female respondents slightly outnumbered male respondents (55%). Based on age distribution, the majority of respondents were in the 46–55 age group (32%), which represents a productive age category. In terms of education level, most respondents held a bachelor's degree (52%). Regarding occupation, civil servants and teachers constituted the largest group (47%). With respect to income, 74% of respondents reported earning more than IDR 3,000,000 per month. Most respondents were married (72%). In terms of household size, 79% had between three and five family members. Regarding purchase frequency, 55% of respondents purchased organic rice every two to five months

Descriptive statistical analysis

Based on the descriptive statistical analysis (Table 8), the perception variable had a mean score of 3.92, categorized as high according to the criteria proposed by Sugiyono (2021) and Sekaran & Bougie (2020). The highest mean score was observed for the promotion indicator, indicating that promotional activities influenced respondents' perceptions in the purchasing decision process. In this study, promotional strategies primarily involved price discounts, which attracted consumers' attention and stimulated purchase interest. Discounts also served as informational cues regarding the availability and benefits of organic rice.

The preference variable had a mean score of 3.69 (Table 9), also categorized as high (Sugiyono, 2021; Sekaran & Bougie, 2020). The highest mean value (3.85) was found for the product availability indicator,

suggesting that product availability significantly shaped respondents' preferences. Consistent product availability may encourage repeat purchasing behavior and strengthen consumer preference for organic rice.

Table 8. Results of descriptive statistical data analysis of perception variables (X1)

Indicator	N	Min	Max	Mean
X _{1,1} Promotion	100	2	5	3.95
1. Organic rice expo	100	2	5	3.8
2. Give discount	100	2	5	4.09
X _{1,2} Product value	100	2	5	3.89
1. Benefits of organic rice	100	2	5	3.92
2. Eco-friendly	100	2	5	3.9
3. Certified	100	2	5	3.81
4. Pesticide free	100	3	5	3.98
5. Durability of organic rice	100	2	5	3.84
Total	100	2	5	3.92

Table 9. Results of descriptive statistical data analysis of preference variables (X2)

Indicator	N	Min	Max	Mean
X _{2,1} Price	100	1	5	3.58
1. Price according to product quality	100	1	5	3.78
2. Price according to weight of contents	100	1	5	3.49
3. Price is very affordable	100	2	5	3.36
4. Price according to product benefits	100	1	5	3.69
X _{2,2} Product availability	100	1	5	3.85
1. Easy to get organic rice	100	1	5	3.71
2. Available at all times	100	1	5	4.05
3. Organic rice is easy to reach	100	1	5	3.78
X _{2,3} Product aspects	100	2	5	3.71
1. Organic rice has a whiter color	100	1	5	3.61
2. Organic rice has a better taste	100	1	5	3.8
3. Organic rice has a more fragrant	100	2	5	3.69
4. Organic rice is more sticky	100	2	5	3.78
5. Organic rice grains	100	2	5	3.67
X _{2,4} Social factor	100	1	5	3.48
1. Receiving information from family	100	1	5	3.39
2. Receiving information from friends	100	1	5	3.72
3. Receiving information from neighbors	100	1	5	3.33
X _{2,5} Habit	100	2	5	3.83
1. Consumer's preference for consuming organic rice	100	1	5	3.79
2. Consumer's interest in organic rice	100	2	5	3.87
Total	100	1	5	3.69

Table 10. Results of descriptive statistical data analysis of purchase intentions variables (Z)

Indicator	N	Min	Max	Mean
Z _{1,1} Interest	100	1	5	3.21
1. Source of organic rice information	100	1	5	3.18
2. Intensity of organic rice search	100	1	5	3.23
Z _{1,2} Desire	100	2	5	3.75
1. Desire to have organic rice	100	1	5	3.85
2. Desire to try organic rice	100	2	5	3.65
Z _{1,3} Belief	100	2	5	3.83
1. Considering purchasing organic rice	100	1	5	3.65
2. Confidence in the safety of organic rice	100	2	5	4.01
Total	100	1	5	3.60

Table 11. Results of descriptive statistical data analysis of purchase decision variables (Y)

Indicator		N	Min	Max	Mean
Y _{1.1}	Purchase decision	100	2	5	3.72
1.	Willingness to buy rice	100	2	5	3.82
2.	Willingness to recommend organic rice	100	1	5	3.66
3.	Willingness to repurchase (buy again)	100	2	5	3.69
Total		100	2	5	3.72

The purchase intention variable (Table 10) showed a mean score of 3.60, categorized as high (Sugiyono, 2021; Sekaran & Bougie, 2020). The highest mean score (3.83) was observed for the belief indicator. This finding indicates that respondents' confidence in the benefits and safety of organic rice influenced their intention to purchase. Respondents expressed trust in the health benefits and consumption safety of organic rice, which may have been reinforced by prior purchasing and consumption experiences.

The purchasing decision variable (Table 11) had a mean score of 3.72, also classified as high according to Solimun et al. (2017). The highest mean value (3.82) was found for the health consideration indicator, suggesting that health concerns played a dominant role in respondents' purchasing decisions. Respondents tended to evaluate product composition and safety before purchasing. Products perceived as containing harmful substances were generally avoided in favor of safer alternatives.

Path diagram results

The structural model was analyzed using WarpPLS 7.0. The resulting path diagram, which displays standardized path coefficients and corresponding p-value for each hypothesized relationship, is presented in Figure 2. As illustrated in Figure 2, most structural paths demonstrated positive and statistically significant effects ($p < 0.01$). However, the direct effect of perception on purchase intention, although positive, was not statistically significant ($p = 0.08$). These findings indicate that while perceptions generally contribute to the structural model, their direct influence on purchase intention was not sufficiently strong to reach conventional significance levels.

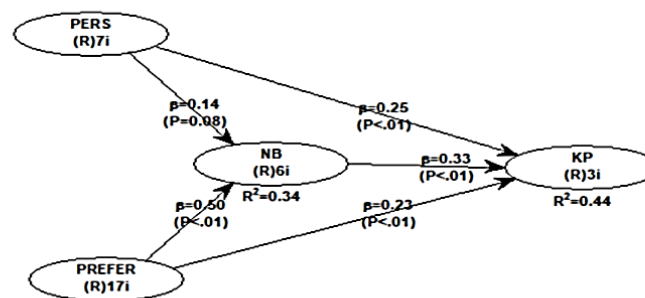


Figure 2. Path diagram

The influence of perception on purchasing decision

Based on the results presented in Table 2, the relationship between perception and purchasing decisions yielded a p-value of 0.004, indicating a positive and statistically significant effect. Therefore, Hypothesis 1 (H1) is accepted. Promotion and product value were found to influence consumer perceptions. In this study, consumers purchased and decided to try consuming organic rice because they were influenced by promotional activities. This finding is consistent with Sari & Supiandi (2022), who reported that promotion has a significant effect on purchasing decisions for Darul Qur'an hydroponic vegetables.

The value of organic rice products may include attributes such as environmental friendliness, product certification, product benefits, being pesticide-free, and product durability. If consumers perceive that organic rice provides the expected benefits, they are more likely to decide to purchase it. Conversely, if the perceived benefits do not meet expectations, consumers are less likely to buy organic rice. Manopo et al.

(2021) found that product durability influences purchasing decisions. The better the product durability, the greater the consumers' confidence and trust in the quality of organic rice. Similarly, Edyansyah & Ahyar (2021), reported that perception has a positive and significant effect on purchasing decisions. Consumer perception reflects an evaluation of a product that shapes satisfaction and comfort in purchasing behavior.

The influence of perception on purchase intention

Differences in consumer perceptions toward a product may influence purchase intentions. However, as shown in Table 2, the relationship between perception and purchase intention yielded a p-value of 0.081, indicating a positive but statistically non-significant effect. Therefore, Hypothesis 2 (H2) is rejected. In this study, some consumers perceived organic rice and non-organic rice as similar products. A lack of information and knowledge may contribute to less favorable perceptions of organic rice. According to Febriyanti (2024), incorrect information about a product can negatively affect consumer perception. Consumers who frequently consume organic rice tend to believe that it offers numerous health benefits, is safer for consumption, and is more environmentally friendly. To generate purchase intention, consumers must first develop a favorable perception and interest in the product. The results of this study are inconsistent with the findings of Wang et al. (2023), who reported that perception has a positive and significant effect on purchase intention. Their study suggests that higher perception leads to higher purchase intention, whereas lower perception results in lower purchase intention.

The influence of consumer preferences on purchasing decisions

Table 2 indicates that the relationship between consumer preferences and purchasing decisions yielded a p-value of 0.007, demonstrating a positive and statistically significant effect. Therefore, Hypothesis 3 (H3) is accepted. Several factors were considered by consumers in this study, including product availability, product attributes, and price. The ease or difficulty of obtaining a product may influence its price (Sugiharto & Renata, 2020). Consumers are generally willing to pay a higher price if the perceived product quality and ease of access meet their expectations.

However, for consumers who do not have a strong preference for organic rice, the relatively high price becomes a barrier in choosing and deciding to purchase the product. Some consumers remain uncertain about the additional benefits of organic rice compared to non-organic rice. They perceive that the benefits offered are not proportional to the higher price. Product taste also represents a concern for certain consumers. When no significant taste difference is perceived between organic and non-organic rice, the higher price of organic rice is considered unjustified relative to its perceived benefits.

The influence of consumer preferences on purchase intentions

The relationship between consumer preference and purchase intention, as shown in Table 2, yielded a p-value of < 0.001 , indicating a positive and statistically significant effect. Therefore, Hypothesis 4 (H4) is accepted. Interest, desire, and belief in a product contribute to the formation of purchase intention. Conversely, negative perceptions may reduce consumer preference. In this study, several consumers perceived organic rice as beneficial, environmentally friendly, and safer for consumption, despite its higher price compared to non-organic rice. This perception appears to be influenced by consumers' knowledge of organic rice and their confidence in selecting it, which strengthens positive preferences and subsequently enhances purchase intention. Consumers with strong positive preferences demonstrated more favorable attitudes toward organic rice, which further increased their intention to purchase.

The influence of consumer purchase intentions on purchasing decisions

Purchase intention arises from consumers' perceptions and preferences toward a product, which subsequently lead to purchasing decisions. The results presented in Table 2 indicate that the relationship between purchase intention and purchasing decision yielded a p-value of < 0.001 , demonstrating a positive and statistically significant effect. Therefore, Hypothesis 5 (H5) is accepted. Some consumers in

this study exhibited strong purchase intentions because they were interested in organic rice, believed in its benefits, and were confident in its safety. As a result, they decided to purchase and consume organic rice. Furthermore, consumers were willing to recommend organic rice to neighbors, family members, or friends, reflecting their intention to share positive consumption experiences. These findings are consistent with Amboningtyas et al. (2020) and Sari (2020), who reported that purchase intention has a positive and significant effect on purchasing decisions. This suggests that purchase intention plays a crucial role in determining consumers' purchasing decisions.

The influence of perception through consumer purchase intention on purchasing decisions

Table 2 shows that the indirect effect of perception on purchasing decision through purchase intention yielded a p-value of 0.258, indicating a non-significant effect. Therefore, Hypothesis 6 (H6) is rejected. This result suggests that purchase intention does not mediate the relationship between perception and purchasing decision. Some consumers demonstrated low purchase intentions, which may be associated with negative perceptions of organic rice. Consequently, these consumers were less motivated to seek information about organic rice. In line with Dangi et al. (2021), information search was found not to influence purchase intention in the context of Shopee. However, when consumers hold highly positive perceptions of organic rice, they may experience a stronger emotional drive to acquire the product, which can directly influence purchasing decisions.

The influence of preferences through purchase intentions on purchasing decisions

The indirect relationship between preference and purchasing decision through purchase intention (Table 2) yielded a p-value of 0.007, indicating a positive and statistically significant effect. Thus, Hypothesis 7 (H7) is accepted. Several consumers in this study exhibited strong preferences for organic rice and tended to make repeat purchases due to the perceived benefits. Consumer loyalty contributed to repeat purchasing behavior, as strong purchase intentions toward organic rice reinforced purchasing decisions and provided advantages for organic rice marketers. This finding is consistent with Hermawan et al. (2020), who stated that loyal consumers demonstrate strong commitment and positive preferences toward a product. Strong consumer preferences for organic rice were also influenced by social factors, such as recommendations from family members, friends, and neighbors. These social influences enhanced purchase intention, which subsequently affected purchasing decisions.

Conclusion

Perception, preference, and purchase intention were found to have significant effects on organic rice purchasing decisions. Perception positively influenced purchasing decisions through promotional activities and perceived product value, indicating that effective promotion plays a crucial role in enhancing consumer awareness and understanding of organic rice and its associated benefits. Preference also demonstrated a positive and significant influence on purchasing decisions, particularly through factors such as product availability, product attributes, and price. These findings suggest that ensuring consistent product availability, maintaining desirable product characteristics, and offering appropriate pricing strategies are essential to encourage consumer purchases. Furthermore, purchase intention showed a positive and significant effect on purchasing decisions, as reflected in consumers' interest, desire, and belief in organic rice. Overall, these results underscore the importance of marketing strategies that strengthen consumer perceptions, preferences, and purchase intentions to support the sustainable development of the organic rice market.

References

- Adewijaya, D., & Sitinjak, T. (2023). Pengaruh persepsi harga, persepsi kemudahan, kepercayaan, dan persepsi risiko terhadap keputusan pembelian melalui online shop di JABODETABEK (Studi Kasus Pada Marketplace Shopee). *Jurnal Ilmiah Hospitality*, 12(2), 795–805. <https://stp-mataram.e-journal.id/JIH/article/view/2965>
- Amboningtyas, D., Hasiholan, L. B., & Rusmawati, Y. (2020). Peran keputusan pembelian dalam memediasi persepsi risiko terhadap niat beli online pada online shop SHOPEE. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 3(2), 389–395. <https://doi.org/10.36778/jesya.v3i2.219>
- Analia, D., Sa'diah, E. L., & Ildal, I. (2023). Analysis of customer perception of organic rice in Pasabaru (Fresh Market) Padang. *Journal of Integrated Agribusiness*, 5(1), 20–27. <https://doi.org/10.33019/jia.v5i1.3676>
- As'ad, M., & Putri, A. . N. (2023). Analisis strategi pemasaran pada penjualan beras organik Hariku di PT Sembada Inti Pangan Jakarta Pusat. *Jurnal Administrasi Bisnis*, 3(1), 104–118. <https://ojs.stiami.ac.id/index.php/JUMABI/article/view/3077>
- Cristina, M., & Melo, F. (2021). Organic rice production and consumption to sustain food security in oriental Mindoro, Philippines. *Review of Integrative Business and Economics Research*, 10(3), 338–354. https://sibresearch.org/uploads/3/4/0/9/34097180/riber_10-s3_24_s21-088_338-354.pdf
- Dangi, A., Saini, C. P., Singh, V., & Hooda, J. (2021). Customer perception, purchase intention and buying decision for branded products: measuring the role of price discounts. *Journal of Revenue and Pricing Management*, 20(2), 194–203. <https://doi.org/10.1057/s41272-021-00300-7>
- Durbul, A., Fertő, I., & Zaien, S. (2021). Is organic food good for health and the environment?. *Regional and Business Studies*, 13(2), 11–30. <https://doi.org/10.33568/rbs.2919>
- Edyansyah, T., & Ahyar, J. (2021). Pengaruh faktor persepsi dan sikap konsumen terhadap keputusan pembelian rokok mild di Kecamatan Banda Sakti Kota Lhokseumawe. *Jurnal Visioner & Strategis*, 10(1), 69–78.
- Febriyanti, D. (2024). Persepsi kualitas dan citra merek dalam memediasi pengaruh e-wom terhadap minat beli. *Jurnal Bisnis & Akuntansi* (Vol. 14, Issue 1). <https://doi.org/10.24929/feb.v14i1.3353>
- Ghozali, I. (2021). *Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.2.9 untuk Penelitian Empiris* (3rd ed.). Universitas Diponegoro.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). Sage Publications.
- Haried, D., Muhaimin, A., Andriani, D., & Yulianti, N. (2024). Risk management in developing marketing strategy for organic rice in Kediri Regency. *Jurnal Teknologi & Industri Hasil Pertanian* 30(1), 35-49. <http://dx.doi.org/10.23960/jtihp.v30i1.35-49>
- Henseler, J. (2020). Partial least squares path modeling: Quo vadis? *Quality & Quantity*, 54(1), 1–12. <https://doi.org/10.1007/s11135-019-00903-7>
- Hermawan, T., Hidayat, N., & Fadillah Fidhyallah, N. (2020). Pengaruh kepuasan pelanggan dan niat membeli kembali terhadap loyalitas pelanggan pada pelanggan oli motor X. *Jurnal Bisnis, Manajemen, Keuangan*, 2(1), 190–218. <https://journal.unj.ac.id/unj/index.php/jbmk/article/view/30040>
- Lutfiadi, R., Kamilah, A., & Danapriatna, N. (2023). Willingness to pay the organic vegetable: the impact of Covid-19 Pandemic in Indonesian experience. *International Journal of Environmental, Sustainability, and Social Science*, 4(3), 885–898. <https://doi.org/10.38142/ijesss.v4i3.598>
- Manopo, C., & Tampi, J. R. E. (2021). Pengaruh kualitas produk terhadap keputusan pembelian produk oriflame Kota Manado. *Productivity*, 2(6). <https://ejournal.unsrat.ac.id/v3/index.php/productivity/article/view/36359>
- Muflikh, Y. N., Zamborita, D. Z., & Burhani, A.-M. A. I. (2024). Purchasing decisions and consumer preferences of millennials and zoomers at coffee shops. *Journal of Consumer Sciences*, 9(1), 102–121. <https://doi.org/10.29244/jcs.9.1.102-121>

- Sari, G. L., & Supiandi. (2022). Pengaruh harga, promosi dan green product terhadap keputusan pembelian sayuran hidroponik darul qur'an bengkel. *Retorika*, 1(1), 36–42. <http://dx.doi.org/10.69503/econetica.v4i1.259>
- Sari, R. M. (2020). Pengaruh kualitas produk dan promosi terhadap kepuasan pelanggan dengan minat beli sebagai intervening (Studi kasus pada pelanggan toko Rabbani). Skripsi. Sekolah Tinggi Ilmu Ekonomi Indonesia.
- Satdiah, A., Siska, E., & Indra, N. (2023). Pengaruh harga dan kualitas produk terhadap keputusan pembelian konsumen pada toko cat de'lucent paint. *CiDEA Journal*, 2(1), 24–37. <https://doi.org/10.56444/cideajournal.v2i2.775>
- Sekaran, U., & Bougie, R. (2020). *Research Methods for Business: A Skill-Building Approach* (8th ed.). Wiley
- Smiglak-krajewska, M., & Wojciechowska-solis, J. (2021). Consumer versus organic products in the covid-19 Pandemic. *Sustainable Agriculture and Food Supply: Scientific, Economic and Policy Analysis*, 14(17), 1–22. <https://doi.org/10.3390/en14175566>
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta
- SPOI. (2023). *Statistik Pertanian Organik Indonesia 2023*. Sekretariat Pertanian Organik Indonesia.
- Sugiharto, S., & Renata, M. (2020). Pengaruh ketersediaan produk dan harga terhadap pembelian ulang dengan kepuasan pelanggan sebagai variabel intervening dalam study kasus Air Minum Dalam Kemasan (AMDK) CLEO di Kelurahan Gunung Anyar Surabaya. *Jurnal Strategi Pemasaran*, 7(1), 1–11. <https://publication.petra.ac.id/index.php/manajemen-pemasaran/article/view/10124>
- Wang, C., Guo, J., Huang, W., Tang, Y., Man Li, R. Y., & Yue, X. (2024). Health-driven mechanism of organic food consumption: A structural equation modelling approach. *Heliyon*, 10(5), e27144. <https://doi.org/10.1016/j.heliyon.2024.e27144>
- Wang, C., Liu, T., Zhu, Y., Wang, H., Wang, X., & Zhao, S. (2023). The influence of consumer perception on purchase intention: Evidence from cross-border E-commerce platforms. *Heliyon*, 9(11), e21617. <https://doi.org/10.1016/j.heliyon.2023.e21617>
- Wendy, M. A. (2024). Pengaruh daya tarik iklan, citra merek, persepsi harga terhadap niat beli dan keputusan pembelian netflix. *Jurnal Riset Ekonomi dan Akuntansi*, 2(3), 65–82. <https://doi.org/10.54066/jrea-itb.v2i3.2149>