

## Perception Analysis of Consumers' Purchase Intentions for *Jatropha* Aromatherapy Candles

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### Abstract

*Perceived price, perceived value, and perceived quality are crucial in shaping the purchase intention of *Jatropha* aromatherapy candles. This study analyzes the characteristics of *Jatropha* aromatherapy candle consumers and the effect of perceived price, perceived value, and perceived quality on the purchase intention of *Jatropha* aromatherapy candles. The data analysis technique used in this research is a quantitative analysis using SEM PLS. The results of this study indicate that *Jatropha* customers are mostly female, with the highest age range of 15–25 years. Most occupations are college students, and most are domiciled in DKI Jakarta. Perceived quality positively and significantly affects the purchase intention of *Jatropha* aromatherapy candles. Meanwhile, perceived price and value do not affect the purchase intention of *Jatropha* aromatherapy candles.*

**Keywords:** *perceived quality, purchase intention, SEM-PLS*

### INTRODUCTION

Entrepreneurs who will sell their products, both goods and services, must be able to meet consumer needs so that they can provide better value than their competitors. Entrepreneurs must try to influence consumers in every way so that consumers are willing to buy the products offered, even those who originally did not want to buy. Because, in principle, consumers who refuse today do not necessarily refuse the next day, competition arises in offering quality products at prices that can compete in the market. Quality products at competitive prices are the main key to winning the competition, which in turn will be able to provide higher satisfaction value to consumers.

Consumers now have much greater and more diverse value demands because they are faced with a variety of choices in the form of goods and services that can be purchased. As a result, savvy entrepreneurs will aim to completely comprehend the customer decision-making process, which is based on the consumer's experience studying, selecting, and even using items. One of the alternative processes in decision-making is consumer purchase intention. This number of products consumers buy will boost marketing. Marketing is one of the keys to business sustainability, and success in marketing will have a direct impact on business turnover (Rudiatin, 2023).

Purchase intention is derived from a learning and mental process that results in a perception. This buy intention produces a motive that continues to be recorded in consumers'

minds and becomes a very powerful desire, and in the end, when a consumer wants to meet his demands, he will act on his thoughts. The purchasing process begins with consumers encountering a problem. Consumers who buy recognize the difference between the actual and desired condition, form an opinion about a product, become interested in it, and wish to purchase it. Purchase intention drives consumer decisions to acquire a product (Hidayat & Faramitha, 2022).

The aromatherapy candle industry has grown rapidly in recent years in Indonesia. Consumer demand for aromatherapy products, including aromatherapy candles, is increasing, along with public awareness of the importance of well-being and relaxation. As a result, micro, small, and medium enterprises (MSMEs) engaged in this sector began to compete to attract consumer attention. One of the MSMEs engaged in the aromatherapy candle sector is Jatropa. In this context, the analysis of perceived price, perceived value, and perceived quality has a crucial role in shaping consumer purchase intentions for aromatherapy candles.

Aromatherapy candles are usually used to reduce stress in the workplace and living environment (Utami & Tjandrawibawa, 2020). Aromatherapy candles are usually made of paraffin wax. However, Jatropa aromatherapy candles are made from soy wax. Aromatherapy candles made from soy wax have the advantage of a mixed blue and yellow flame, emit less non-combustible gas, and have a lower melting point, which causes soy wax to burn more slowly, while paraffin wax has a yellow flame, emits more combustible gas, and has a higher melting point, which causes paraffin wax to burn faster (Oktarina, Prabowo, & Narsa, 2021). Changes in the raw materials of aromatherapy candles will cause changes in perceived price, perceived value, and perceived quality, which will affect consumer purchase intention. The purpose of this study was to analyze the characteristics of Jatropa aromatherapy candle consumers and analyze the effect of perceived price, perceived value, and perceived quality on the purchase intention of Jatropa aromatherapy candles.

## **THEORETICAL FRAMEWORK**

### **Consumer Perception**

Consumer perception is the process by which a person selects, organizes, and translates the information received to create a picture of an object. Perception depends not only on the relationship of physical stimuli, but also on the relationship of stimuli to the field that surrounds them and the conditions within the person (Kotler & Armstrong, 2008). There are several perceptions in consumers as follows:

a. Perceived Price

Perceived price is the amount of value exchanged to obtain a product for sensitive consumers, usually low prices are an important source of satisfaction because they will get high value for money. According to Kotler & Armstrong (2008), there are four indicators used in measuring price perceptions, namely: price affordability, price compatibility with product and service quality, price competitiveness, price and benefit compatibility.

b. Perceived value

Perception of value, namely as an overall consumer assessment of the usefulness of a product or service based on the perception of what has been obtained. Perceived value consists of three dimensions, namely: emotional value, social value, and quality or performance value customer (Tjiptono, 2001).

c. Perceived quality

Perceived quality can be defined as customer perceptions of the overall quality or superiority of a product or service in relation to what customers expect. According to Kotler & Armstrong (2008), there are six dimensions of quality that need to be considered, namely: performance quality, reliability, features, durability, conformance quality, and style.

**Purchase Intention**

Purchase intention is a process that exists between alternative evaluations and purchasing decisions, after consumers evaluate existing alternatives, consumers have an interest in buying a product or service offered. Indicators that determine purchase interest are preferential interest and exploratory interest (Abzari, Ghassemi, & Vosta, 2014). Preferential interest is the interest in buying or using a product after hearing recommendations from others, while exploratory interest is wanting to find out more about the benefits of the product (Sahin, Zehir, & Kitapci, 2011).

**Hypothesis Development**

**1. Perceived Price Affects Purchase Intention.**

Consumer perceptions of a price can influence decisions to buy a product so that a company must be able to provide a good perception of the products or services they sell. This is supported by research by Retnowulan (2017) and Gunawan, Hardiansyah, & Fatmasari, (2021) which shows that there is a positive and significant effect of price perception on purchase intention. Thus, various studies have support the relationship between perceived price and purchase intention. Then hypothesis 1 is:

H1: Perceived Price Has a Positive and Significant Effect on Purchase Intention

**2. Perceived Value Affects Purchase Intention**

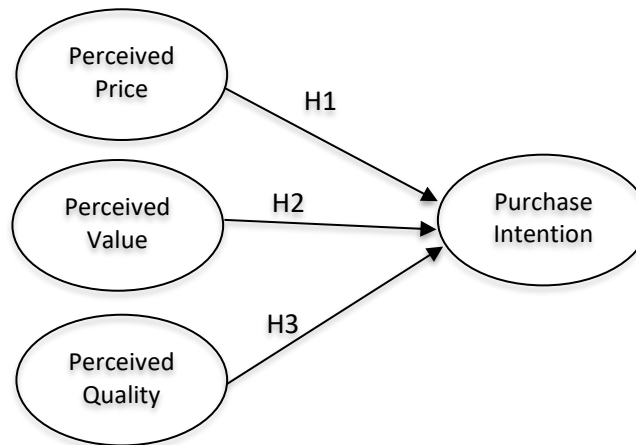
Consumer purchasing behavior is influenced by consumer perceptions of a product available in the market. Perceived value can also be used as a benefit that consumers feel with the products they buy. Previous research by Buana & Sumadi (2023) shows that buying interest in products can be influenced by perceived value through consumer attitudes. Thus, previous research has support the relationship between perceived value and purchase intention. Then hypothesis 2 is:

H2: Perceived Value Has a Positive and Significant Effect on Purchase Intention

**3. Perceived Quality Affects Purchase Intention**

Perceptions of quality can influence consumer buying interest in a product. This is supported by research by Rooney, Priambodo, A, A, & Hestiyani (2019) and Laraswati & Harti (2022) which shows that perceived quality has a positive and significant effect on consumer purchase intention. Thus, various studies have support the relationship between perceived quality and purchase intention. Then hypothesis 3 is:

H3: Perceived Quality Has a Positive and Significant Effect on Purchase Intention



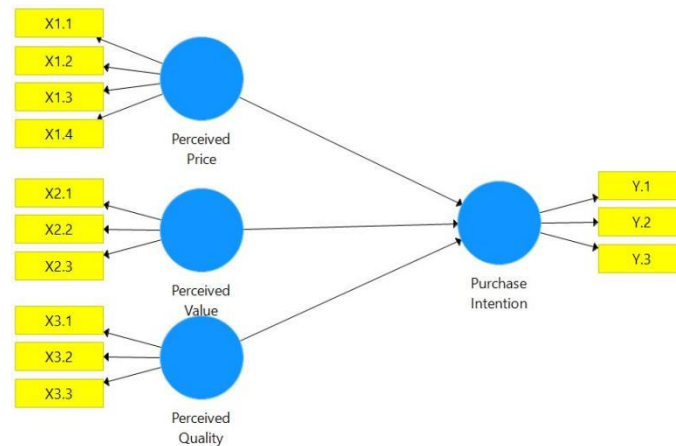
**Figure 1.** Research Framework

## RESEARCH METHODS

The research used is quantitative, using the causality analysis method. The sample in this study were consumers who had bought Jatropha aromatherapy candle products, both offline and online. Offline, Jatropha products are marketed at the South Tangerang bazaar event, while online Jatropha products are marketed through Instagram and WhatsApp. The data source for this research is primary data collected using the data collection technique of distributing questionnaires using Google Forms. Characteristic data is analyzed using descriptive analysis. The effect of consumer perceptions on the purchase intention of Jatropha aromatherapy candles was analyzed using the SEM-PLS (Structural Equation Modeling—Partial Least Square) correlation analysis method by utilizing the SmartPLS version 3 software application. SEM is an analytical technique used to test and estimate causal relationships by integrating path analysis and factor analysis (Hamid & Anwar, 2019). This study uses SEM-PLS analysis because the sample size is small and the data is measured on an ordinal scale (Putri, Meisanti, & Sukrianto, 2023)(Syacroni et al., 2023).

In SEM modeling, the variables used are exogenous and endogenous. The exogenous variables in this study are consumer perception variables consisting of perceived price variables (X1), perceived value (X2), and perceived quality (X3). Meanwhile, the endogenous variable in this study is the purchase intention variable (Y). The perceived price variable (X1) consists of four indicators, namely price affordability (X1.1), price compatibility with quality (X1.2), price competitiveness (X1.3), and price compatibility with benefits (X1.4). The perceived value variable (X2) consists of three indicators, namely emotional value (X2.1), social value (X2.2), and performance value (X2.3). The perceived quality variable (X3) consists of three indicators, namely reliability (X3.1), durability (X3.2), and quality conformity (X3.3). The purchase intention variable (Y) consists of two indicators, namely exploratory interest (Y1), preferential interest (Y2), and referential interest (Y3).

Structural model analysis has several stages, namely: 1) formulating structural model theory; 2) outer model analysis; 3) inner model analysis; and 4) hypothesis testing. The structural model of this study is as follows:



**Figure 2.** Research Model (Correlation of Variables)

## RESULTS AND DISCUSSION

### Characteristics of Respondents

The analysis of respondent response data is a description of the questionnaire that has been distributed to 50 respondents. Respondents are Jatropha customers, both men and women. Based on the results of distributing questionnaires, Jatropha customer profiles were obtained, namely based on gender, age, place of residence, and occupation. Based on gender, Jatropha consumers consist of 18 men (36%) and 32 women (64%). Based on age, Jatropha consumers consist of 47 people aged 15–25 years (94%), 1 person aged 26–30 years (2%), and 2 people aged 31–40 years (4%). Based on place of residence, Jatropha consumers consist of 3 people in Bekasi (6%), 7 people in Bogor (14%), 1 person in Cianjur (1%), 2 people in Cirendeu (4%), 2 people in Depok (4%), 15 people in Jakarta (30%), 1 person in Central Jakarta (2%), 6 people in South Jakarta (12%), 8 people in Tangerang (16%), and 5 people in South Tangerang (10%). Based on occupation, Jatropha consumers consist of 34 students (68%), 2 students (4%), 8 private employees (16%), 2 freelancers (4%), 2 entrepreneurs (4%), and 2 housewives (4%).

### Outer Model Testing

Data analysis techniques using SmartPLS. There are several criteria used to assess the outer model or measurement model, namely: convergent validity and discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2021). Meanwhile, reliability measurements are carried out with Cronbach's alpha and composite reliability.

#### a. Convergent validity

The initial step taken is a measurement that serves to determine the extent to which measures correlate positively with alternative measures on the same construct. Assessment can be done using processed data through the loading factor of each indicator and the average variance extracted value (Vinzi, Trinchera, & Amato, 2010).

#### 1) Loading factor

The loading factor value must be greater than 0,7. The results of the loading factor in this study can be seen in the table below:

Variable	Indicator	Outer Loading	Validitas
Perceived Price	X1.1	0,877	Valid
	X1.2	0,942	Valid
	X1.3	0,770	Valid
	X1.4	0,929	Valid
Perceived Value	X2.1	0,875	Valid
	X2.2	0,898	Valid
	X2.3	0,907	Valid
Perceived Quality	X3.1	0,898	Valid
	X3.2	0,875	Valid
	X3.3	0,901	Valid
Purchase Intention	Y.1	0,887	Valid
	Y.2	0,886	Valid
	Y.3	0,927	Valid

**Table 1.** Loading Factor Value  
 Source. Primary data processed, 2024

Based on table 1, it can be seen that the results of several indicators meet the 7% significance value requirement and the indicators have a loading factor value above 0.7. Thus, the construct is said to be valid and has met the validity requirements because the loading factor is above 0,7.

## 2) Average Variance Extracted (AVE)

Average Variance Extracted (AVE) is the average value of the variance extracted. The minimum AVE value is 0,5. This value illustrates adequate convergent validity which means that one latent variable is able to explain more than half of the variance of its indicators on average.

Variable	Average Variance Extracted (AVE)
Purchase Intention	0,810
Perceived Price	0,778
Perceived Quality	0,795
Perceived Value	0,798

**Table 2.** Average Variance Extracted (AVE) Values  
 Source. Primary data processed, 2024

Based on Table 2, the AVE (average variance extracted) value is above 0.5. These results indicate that the data contained in this study meet the requirements of convergent validity. The combined assessment of outer loading and the AVE (average variance extracted) test shows that the data in this study are convergent, valid, and eligible to proceed to the next stage.

### a. Discriminant Validity.

Discriminant validity measurements can be assessed based on the Fornell-Larcker criterion. In the fornell-larcker criterion test, discriminant validity can be said to be good or valid if the root of the Average Variance Extracted (AVE) on the construct is higher than the

construct correlation with other latent variables. The results of this research fornell-larcker criterion can be seen in Table 3.

	Purchase Intention	Perceived Price	Perceived Quality	Perceived Value
Purchase Intention	<b>0,900</b>			
Perceived Price	0,550	<b>0,882</b>		
Perceived Quality	0,767	0,750	<b>0,892</b>	
Perceived Value	0,647	0,882	0,849	<b>0,893</b>

**Table 3.** Fornell-Larcker Criterion Value

Source. Primary data processed, 2024

Based on Table 3, it can be assessed that all variables have a higher value when explaining the variable itself compared to other variables in the same column. Purchase intention has a value of 0,900, which is higher than other variables in the same column; perceived price has a value of 0,882, which is higher than other variables in the same column; perceived quality has a value of 0,892, which is higher than other variables in the same column. This leads to the conclusion that the data model tested in this study has met the requirements and criteria that indicate that the constructs in the model have discriminant validity.

**b. Cronbach's Alpha and Composite Reliability (CR)**

Cronbach's alpha and composite reliability measurements are carried out for reliability testing. Reliability tests are used to prove the accuracy, consistency, and accuracy of instruments in measuring constructs. The Cronbach's alpha and composite reliability values must be greater than 0,70. The Cronbach's alpha and composite reliability values in this study can be seen in Table 4.

Variable	Cronbach's Alpha	Composite Reliability
Purchase Intention	0,883	0,928
Perceived Price	0,905	0,933
Perceived Quality	0,871	0,921
Perceived Value	0,874	0,922

**Table 4.** Cronbach's Alpha and Composite Reliability Values

Source. Primary data processed, 2024

**Inner Model Testing**

**a. R-Square (R<sup>2</sup>)**

The R-Square value is used to measure the level of variation in changes in the independent variable on the dependent variable. R<sup>2</sup> can explain the causal relationship between exogenous variables and endogenous variables. R<sup>2</sup> has a value of 0 – 1,0. The stronger the influence of exogenous variables on endogenous variables will increase the resulting R<sup>2</sup> value. The R<sup>2</sup> value in this study can be seen in Table 5.

	R Square
Purchase Intention	0,590

**Table 5.** R-Square (R<sup>2</sup>) Value  
 Source. Primary data processed, 2024

Table 5 shows the R-Square value for the purchase intention variable obtained a value of 0,590. These results indicate that 59% of the purchase intention variable can be influenced by perceived price, perceived value, and perceived quality, while 41% is influenced by other variables outside those studied.

### Hypothesis Testing

The indicator used in hypothesis testing is the value contained in the path coefficients output using SmartPLS with the bootstrapping method on research data.

	Original Sample (O)	T Statistics ( O/STDEV )	P Values
Perceived Price -> Purchase Intention	-0,099	0,434	0,332
Perceived Value -> Purchase Intention	0,073	0,248	0,402
Perceived Quality -> Purchase Intention	0,779	4,366	0,000

**Table 6.** Hypothesis Testing Results  
 Source. Primary data processed, 2024

The results of hypothesis testing using bootstrapping analysis in Table 6 show that:

#### Hypothesis Testing H1 (perceived price has a significant effect on purchase intention)

Based on table 6, it can be seen that the p-value is 0,332 and the t-statistic is 0,434. Because the p-value > 0,05 and t-statistic < t-table (0,434 < 1,96), H1 is rejected. So perceived price has no significant effect on purchase intention. This is in line with the research of Halim & Iskandar (2019) that partially the price variable has no significant effect on purchase intention.

#### Hypothesis Testing H2 (perceived value has a significant effect on Purchase Intention)

Based on Table 6, it can be seen that the p-value is 0,402 and the t-statistic or t-value is 0,248. Because the p-value > 0,05 and t-statistic < t-table (0,248 < 1,96), H2 is rejected. So perceived value has no significant effect on purchase intention. This is not in line with Firdaus (2020), who states that perceived value has a positive and significant effect on purchase intention, with consumers linking it to the benefits obtained as a determinant of consumer expectations.

#### Hypothesis Testing H3 (perceived quality has a significant effect on purchase intention)

Based on Table 6, it can be seen that the p-value is 0,000 and the t-statistic or t-value is 4,366. Because the p-value is <0.05 and the t-statistic > t-table (4,366 > 1,96), H3 is accepted. So perceived quality has a significant effect on purchase intention. The higher the consumer's perception of product quality, the higher the consumer's interest in buying a Jatropha aromatherapy candle. For every 1-point increase in perceived quality, consumer purchase intention increases by 0,779. This is in line with the research of Laraswati and Harti (2022) that



partially the perceived quality variable has a significant effect on purchase intention. The perceived quality indicator that has the most influence on the purchase intention of Jatropha aromatherapy candles is the quality of suitability, which includes Jatropha aromatherapy candle products that are lighter.

## **CONCLUSION**

Jatropha customers are mostly female (64%) with the highest age of 15–25 years (94%), the most occupations are college students (68%), and most residences are domiciled in DKI Jakarta, around 44%. Perceived quality positively and significantly affects the purchase intention of Jatropha aromatherapy candles. The most influential indicator is quality conformity. Meanwhile, perceived price and value do not affect the purchase intention of Jatropha aromatherapy candles.

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