

The Effect of Price Perception on Customer Loyalty Mediated by Customer Satisfaction in Wardah Loose Powder Products in the City of Bandung

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Abstract

This study aims to analyze the influence of price perception on customer loyalty with customer satisfaction as a mediating variable in Wardah Loose Powder products in the city of Bandung. The study used a quantitative approach with a survey method of 120 respondents who were selected using convenience sampling techniques. Data were analyzed using descriptive analysis, simple linear regression, multiple linear regression, and Sobel test with the help of SPSS version 27. The results of the study show that price perception has a positive and significant effect on customer satisfaction and customer loyalty. In addition, customer satisfaction also has a positive and significant effect on customer loyalty and has been proven to mediate the influence of price perception on customer loyalty. These findings show that price perception is able to increase customer satisfaction, thus having an impact on increasing customer loyalty. Therefore, companies need to maintain pricing strategies that are in accordance with the value perceived by consumers, such as affordability, price compatibility with product quality, price competitiveness, price compatibility with benefits.

INTRODUCTION

The development of digital technology in the era of globalization has encouraged changes in people's behavior, including in trade activities through e-commerce. The increasing use of digital platforms makes buying and selling transactions easier to do. Data from Databooks (2025) shows that as many as 48.4% of Indonesians make transactions through e-commerce at least once a month.

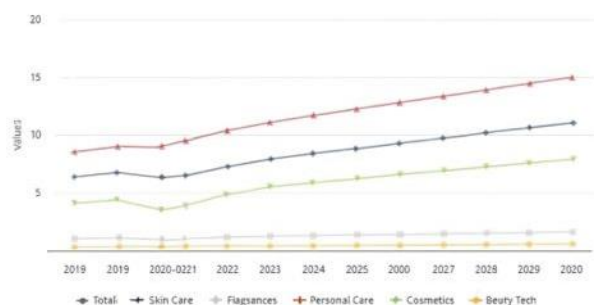


Figure 1. Beauty and Personal Care Graph

In line with that, according to Statista (2025), the beauty and personal care industry in Indonesia has also experienced consistent growth from 2019 to 2025 and is projected to continue to increase until 2030. This condition reflects the increasing market opportunities for cosmetic products as the needs and awareness of beauty and personal care products increase.

Increasingly fierce competition in the cosmetics industry requires companies not only to present quality products, but also to set prices that are able to meet consumer expectations. In the

process of making a purchase decision, price perception is one of the important aspects because consumers will compare the price paid with the benefits obtained. If the price is considered proportional to the quality and benefits of the product, consumers tend to feel satisfied. Conversely, a mismatch between price and perceived benefits can lower satisfaction and have an impact on customer loyalty. Therefore, understanding the influence of price perception on customer satisfaction and loyalty is important for companies to retain their consumers.

Top Brand	TBI 2021	TBI 2022	TBI 2023	TBI 2024	TBI 2025	+/-
Make Over	8.10%	11.60%	11.20%	11.70%	12.70%	1%
Marcks	20.60%	18.10%	17.70%	15.70%	11.20%	-4,5%
Viva	5.50%	4.70%	5.20%	3.50%	5.40%	1,9%
Wardah	20.30%	20.50%	19.30%	19.70%	14.80%	-4,9%

Source: (Top Brand Index, 2025)

This phenomenon is also seen in Wardah loose powder products. Based on the Top Brand Index (2025), the Wardah brand index in the loose powder subcategory has decreased from 19.7% in 2024 to 14.8% in 2025 or decreased by 4.9%, while some competitors have actually shown an increase. Although Wardah is still one of the brands with a high level of recognition, the decline in the index indicates a decline in customer loyalty. The measurement of Top Brand itself is based on three indicators, namely *top of mind*, *last usage*, and *future intention*. So it can be analyzed from the *Top Brand Awards* data, one of which is *future intention* which shows a decrease in customer loyalty where the strength of a brand in encouraging customers to use and consume again in the future. Customer loyalty is very important because the drive from loyal and happy customers with the product makes them buy the product over and over again. This loyalty shows the balance of the customer, which is when the customer continues to buy the same goods or services from the same provider. Based on this phenomenon, it was identified that there was a research problem, namely the decline in customer loyalty in Wardah loose powder products. The phenomenon of declining loyalty in Wardah loose powder products shows that consumers in assessing a product not only focus on the popularity of the brand, but also consider the suitability between initial expectations and the experience gained after using the product. (Eka & Sutedjo, 2023)

LITERATURE REVIEW

According to Kotler & Armstrong (2018), price perception is a consumer's assessment of the value contained in a price based on the benefits received from the use of the product. In the context of cosmetic products such as Wardah loose powder, consumers not only consider the quality of the product, but also consider whether the price paid is in accordance with the benefits obtained after using the product. When consumers feel that the price of a product is reasonable, they tend to judge that the price reflects the quality, features, or benefits provided (Kotler & Keller, 2016). According to Kotler & Armstrong (2018), price perception has 4 indicators, namely: 1) price affordability, 2) price conformity with product quality, 3) price competitiveness, 4) price conformity with benefits.

The Expectation Confirmation Theory (ECT) put forward by Oliver (1980) explains that consumers have expectations before using a product or service, then compare it with the actual experience after use. The results of the comparison result in confirmation if the experience is in line with expectations, or confirmed if the two are not aligned, which further affects the level of consumer satisfaction. This theory consists of five main constructs, namely *expectation* as an initial belief in the benefits of the product, *perceived performance* as an assessment of perceived product performance, *confirmation/disconfirmation* as the result of evaluating the suitability between expectations and experience, *satisfaction* as an emotional response after evaluation, and *behavioral intention* which describes consumer behavioral trends, such as the intention to make a repeat purchase or continue to use the product in the future.

According to Kotler (2016), customer satisfaction is a person's feeling of happiness or disappointment that arises after comparing expectations to the reality obtained. High satisfaction or pleasure creates an emotional bond with the product or company in question to reuse the product offered (Janita et al., 2014). Customer satisfaction is that consumer expectations have been fulfilled and what consumers feel when using the product feels satisfied (Astuti & Abdurrahman, 2022). According to Febrianto et al., (2021) customer satisfaction has three indicators, namely: 1) Perceived quality, consumer perception of product quality or excellence of the product in order to achieve customer satisfaction 2) Perceived value, consumer perception of the quality of a product used 3) Customer expectations, estimates or beliefs of customers about what they will receive when they buy or consume a product in the form of goods or services.

According to ECT, satisfaction will emerge when the actual experience the individual receives matches or exceeds the individual's initial expectations. This mechanism is based on a process of cognitive evaluation, in which individuals compare actual experiences with initial expectations to determine confirmation or disconfirmation. Customer satisfaction will arise when the experience of using the product is able to meet or exceed the initial expectations of the consumer. In this study, when consumers assess that the price of Wardah loose powder is in accordance with their quality, benefits, and purchasing power, customer satisfaction will be formed. This is in line with research conducted by Jannah et al. (2024) found that price perception has a positive effect on customer satisfaction. Nuraini et al. (2024) also stated that price perception has a significant effect on customer satisfaction. In addition, Juniantara & Sukawati (2018) prove that price perception has a positive and significant effect on consumer satisfaction. Based on this description, the following hypothesis is proposed:

H1: Price perception affects customer satisfaction

According to Kotler and Keller (2012), customer loyalty is a commitment to continue to make repeat purchases of products or services despite the influence of competitors, while Griffin (2005) views loyalty as a purchase behavior that is made repeatedly. Loyalty is measured through three indicators, namely repeat purchase, retention, and referrals (Kotler & Keller, 2012). Consumers who value the price of products according to the quality and benefits received tend to show higher loyalty through repurchases and recommendations to others. This relationship is supported by research by Juniantara and Sukawati (2018), Hariyanto (2024), Nufus & Ratnamurni (2024), and Monica (2026) which proves that price perception has a positive effect on customer loyalty. Based on this description, a hypothesis was proposed

H2: Price Perception has a positive and significant effect on customer loyalty.

Based on Expectation Confirmation Theory (ECT), customer satisfaction is the result of an evaluation after consumers compare initial expectations with actual experience using the product.

A high level of satisfaction will encourage the formation of loyalty through commitment and the tendency to make repurchases (Oliver, 1980). Thus, the higher customer satisfaction with Wardah Loose Powder, the higher the customer loyalty. This relationship is supported by research by Rahayu and Faulina (2022), Sucihati and Suhartini (2022), Octaviananda et al. (2023), Ramanta et al. (2021), Wati et al. (2020), and Yum and Yoo (2023) which prove that customer satisfaction has a positive and significant effect on customer loyalty. Based on this description, a hypothesis was proposed.

H3: Customer satisfaction has a positive and significant effect on customer loyalty.

In Expectation Confirmation Theory (ECT), customer satisfaction is the result of an evaluation after consumers compare initial expectations with the experience of using the product, as well as acting as a variable that mediates the influence of price perception on customer loyalty. If consumers judge the price of Wardah Loose Powder according to the quality and benefits received, customer satisfaction will increase and encourage loyalty. This relationship is supported by research by Humairah et al. (2025), Fathin et al. (2022), Nastiti and Astuti (2019), Aprillian & Putra (2025), and Prastesiya & Sigarlaki (2024) which prove that customer satisfaction mediates the influence of price perception on customer loyalty. Based on this description, a hypothesis was proposed.

H4: Customer satisfaction plays a role in mediating the influence of price perception on customer loyalty.

Based on the explanation that has been described regarding the perception of price to customer loyalty mediated by customer satisfaction, the conceptual model can be described as follows:

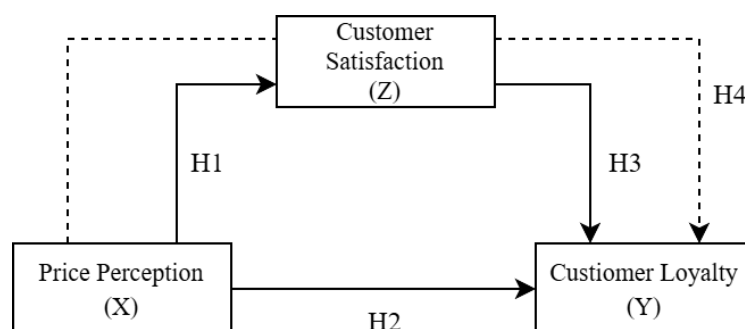


Figure 2. Conceptual Model

METHODS

This study uses a quantitative approach with a survey method that aims to test the influence of price perception on customer loyalty with customer satisfaction as a mediating variable. The object of this research is consumers who have bought and used Wardah loose powder products in the city of Bandung. Primary data was collected through a five-point Likert Scale-based questionnaire distributed online using Google Forms. This study is *cross-sectional*, where data is collected over a certain period of time to test the relationships between variables based on the hypothesis that has been formulated. The study population included consumers aged at least 17 years who had purchased and used Wardah loose powder, with a sample of 120 respondents determined using a *non-probability sampling* method through *convenience sampling techniques*. The collected data was tested for validity and reliability, then analyzed using simple and multiple regression analysis, as well as sobel tests to test the mediating role of customer satisfaction. The

entire process of data processing and analysis was carried out systematically to draw conclusions about the causal relationship between variables in this study.

RESULT AND DISCUSSION

Validity and Reliability Tests

The validity test in this study uses *the product moment correlation technique* with the criterion that if r is calculated $> r$ table, then the item of the statement is declared valid. It is known that the r table in this study is 0.1509.

Table 1. Descriptive Statistics of Research Variables

Variable	Questions	Validity Test Results	Reliability Test Results
		R count (<i>person correlation</i>)	Cronbach's alpha
Price Perception (X)	I think the price of Wardah loose powder is still affordable for me.	0.839	0,824
	I feel that the price of Wardah loose powder is in accordance with the quality of the product obtained.	0.793	
	The price of Wardah loose powder is able to compete with similar products from other brands.	0.794	
	I feel that the price of Wardah loose powder is in accordance with the benefits I feel.	0.811	
Customer Satisfaction (Z)	I am satisfied with the quality of the Wardah powder I use.	0.814	0,700
	I feel that the use of Wardah loose powder provides a good value for me.	0.782	
	I feel that Wardah loose powder is able to meet my expectations as a consumer.	0.776	
Customer Loyalty (Y)	I intend to buy back Wardah powder in the future.	0.769	0,704
	I still choose to use Wardah loose powder even though there are many similar products from other brands.	0.799	
	I am willing to recommend Wardah powder to friends or family.	0.809	

The results of the validity test showed that all statements on the questionnaire were declared valid because they had a greater calculated r value than the r of the table (0.1509), so that the

research instrument was considered able to measure the variables that should be measured. In addition, the results of the reliability test showed that all variables had a *Cronbach's Alpha* value above 0.60 according to the criteria of Sekaran and Bougie (2017), which showed that the research instrument was reliable and able to produce consistent measurements at different times.

Descriptive Analysis Test

Table 2. Results of Descriptive Analysis of Price Perception Variables

Statement	Mean Statistic	Total Mean Statistic	Categories
X1.1	3.05	3.30 (Medium or adequate)	Medium or sufficient
X1.2	3.03		Medium or sufficient
X1.3	3.00		Medium or sufficient
X1.4	3.02		Medium or sufficient

The results of the descriptive analysis showed that the price perception variable obtained a *mean* value between 3.00–3.05 with an overall average of 3.03. This value indicates that the respondents' perception of the price of Wardah Loose Powder products in the city of Bandung is in the medium or adequate category.

Table 3. Results of Descriptive Analysis of Customer Satisfaction Variables

Statement	Mean Statistic	Total Mean Statistic	Categories
Z1.1	2.90	2.94(Medium or moderate)	Medium or sufficient
Z1.2	3.03		Medium or sufficient
Z1.3	2.89		Medium or sufficient

The results of the descriptive analysis showed that the price perception variable obtained a *mean* value between 2.89–3.03 with an overall average of 2.94. This value indicates that the respondents' perception of customer satisfaction of Wardah Loose Powder in the city of Bandung is in the medium or adequate category.

Table 4. Results of Descriptive Analysis of Customer Loyalty Variables

Statement	Mean Statistic	Total Mean Statistic	Categories
Y1.1	3.12	3.14(Medium or adequate)	Medium or Fair
Y1.2	3.12		Medium or Fair
Y1.3	3.18		Medium or Fair

The results of the descriptive analysis showed that the price perception variable obtained a *mean* value between 3.12–3.18 with an overall average of 3.14. This value indicates that respondents' perception of the loyalty of Wardah Loose Powder customers in the city of Bandung is in the medium or adequate category.

Average score interval as the basis for interpretation

- 0.00 – 1.80 = Very Bad
- 0.81 – 2.60 = Poor
- 2.61 – 3.40 = Medium or Fair
- 3.41 – 4.20 = Good

- 4.21 – 5.00 = Excellent

Classic Assumption Test

The classical assumption test consists of a normality test, a multicollinearity test and a heteroscedasticity test which are described as follows:

Table 5. Classical Assumption Test Results

Types of Classical Assumption Tests	Criteria for Acceptance of Test Results	Test Results	Interpretation
Normality Test (Kolmogorov-smirnov) Price Perception → Customer Satisfaction	(Sig) $\geq$ 0.05	(Sig) = 0.200	Normally-distributed data
Normality Test (Kolmogorov-smirnov) Price Perception → Customer Satisfaction → Customer Loyalty	(Sig) $\geq$ 0.05	(Sig) = 0.200	
Multicollinearity Test Price Perception → Customer Satisfaction	<i>Tolerance value</i> > 0.1 and VIF < 10	<i>Tolerance value</i> = 1,000 or VIF = 1,000	There is no perfect correlation between independent variables
Multicollinearity Test Price Perception → Customer Satisfaction → Customer Loyalty	<i>Tolerance value</i> > 0.1 and VIF < 10	<i>Tolerance value</i> = 0.646 or VIF = 1.547 <i>Tolerance value</i> = 0.646 or VIF = 1.547	
Heteroscedasticity Test (Glejser Test) Price Perception → Customer Satisfaction	(Sig) $\geq$ 0.05	(sig) = 0.148	There is no similarity of <i>variance</i> from the residual regression model or the absence of heteroscedasticity
Test of Heteroscedasticity Price Perception → Customer Satisfaction → Customer Loyalty	(Sig) $\geq$ 0.05	(sig) = 0.366 (Sig) = 0.950	

Based on the results of the classical assumption test in Table 5, the regression model meets all the required assumptions. The normality test showed a significance value in both equations of 0.200 ($\geq$ 0.05), so that the data was declared to be normally distributed. Furthermore, the results of the multicollinearity test showed that all independent variables had a *tolerance* value of > 0.10 and VIF < 10, which indicated the absence of multicollinearity. In addition, the heteroscedasticity test produced a significance value above 0.05 on all variables, so that the regression model was declared free of heteroscedasticity symptoms because there was no independent variable influence on the *residual absolute value*.

Simple and Multiple Regression Tests

Regression analysis can be continued to find out how much influence Price Perception,

Customer Satisfaction and Customer Loyalty are after the classic assumption test is met. The following are the results of the simple and multiple regression tests presented in the table.

Table 6. Results of Simple Regression Analysis of Price Perception on Customer Satisfaction

Models		Unstandardized Coefficient		Standardized Coefficient	T Value	Sig
		B	Std. Error	Beta		
1	(Constant)	3.724	0.644		5.783	0.001
	Price Perception	0.421	0.052	0.595	8.034	0.001

Here is the equation of a simple regression:

$$Z = 3.724 + 0.421 X$$

Based on the results of simple regression analysis, a constant value of 3.724 was obtained which shows that if the price perception variable is zero, then the customer satisfaction value is 3.724 units. Price perception was proven to have a positive and significant effect on customer satisfaction with a regression coefficient of 0.421, a calculated t value of 8.034 which was greater than the t table (0.67657), and a significance value of 0.001 (< 0.05). These results show that every one unit increase in price perception will increase customer satisfaction by 0.421 units. Therefore, the management of Wardah Loose Powder needs to prioritize the improvement of all indicators that form price perception to encourage increased customer satisfaction.

Furthermore, the multiple regression test has the purpose of analyzing the direct impact of price perception variables and customer satisfaction on customer loyalty.

Table 7. Multiple Regression Analysis Results The Influence of Price Perception on Customer Loyalty is Mediated by Customer Satisfaction

Models		Unstandardized Coefficient		Standardized Coefficient	T Value	Sig
		B	Std. Error	Beta		
1	(Constant)	3.160	0.709		4.459	0.001
	Price Perception	0.232	0.063	0.325	3.666	0.001
	Customer Satisfaction	0.392	0.089	0.388	4.383	0.001

Based on table 7, multiple regression equations can be obtained as follows:

$$Y = 3.160 + 0.232 X + 0.392 Z$$

Based on the results of multiple regression analysis, a constant value of 3.160 was obtained which shows that if the price perception variable is zero, then customer loyalty is 3.160 units. The test results also showed that price perception had a positive and significant effect on customer loyalty with a regression coefficient of 0.232, a calculated t value of 3.666 which was greater than the t table of 1.65798, and a significance value of 0.001 (< 0.05). In addition, customer satisfaction also has a positive and significant influence on customer loyalty, shown by

a regression coefficient of 0.392, a calculated t value of 4.383 which exceeds the t of table 1.65798, and a significance value of 0.001 (< 0.05).

Sobel Test

The sobel test has the purpose of knowing the role of customer satisfaction in mediating the indirect influence of price perception on customer loyalty. This sobel test is carried out using the online sobel test calculator from [quantpsy.org/sobel/sobel.htm](https://www.quantpsy.org/sobel/sobel.htm).

Table 8. Sobel Test Results

Relationships Between Hypothesized Variables	A	B	the Battl e of the T	Sb	Sobel Test Results (T Calculat ed)	Criteria for Acceptan ce of Sobel Test Results	P Value	Interpretati on
Price Perception → Customer Satisfaction → Customer Loyalty	0.421	0.392	0.052	0.089	3.86901202	$t_{cal} > t_{table} = 1.65798$	0.000	Customer Satisfaction successfully mediates the influence of Price Perception on Customer Loyalty

Description:

a = regression coefficient of independent variables to intervening variables

b = regression coefficient of intervening variables against dependent variables

Table 8 shows the results of the test of the role of customer satisfaction in mediating the influence of price perception on customer loyalty. The soel test was obtained from t count of 3.869 which is greater than t table of 1.65798 and *p-value* by 0.000 which is less than 0.05. So that it can explain that customer satisfaction successfully mediates the influence of price perception on customer loyalty.

Hypothesis Test

The results of the hypothesis test of the four available hypotheses can be seen in table 9.

Table 9. Hypothesis Test Results

Hypothesi s	Influence Between Variables	T Count	T Table	Sig	Interpretation of Hypothesis Test Results	
H1	Price Perception → Customer Satisfaction	8.034	0.67657	0.001	H0 was rejected successfully	H1 accepted
H2	Price Perception → Customer Loyalty	3.666		0.001	H0 was rejected successfully	H2 accepted

H3	Customer Satisfaction → Customer Loyalty	4.383	1.65798	0.001	H0 was rejected successfully	H3 accepted
H4	Price Perception → Customer Satisfaction → Customer Loyalty	3.869		0.001	H0 was rejected successfully	H4 accepted

Description:

1. Rejection criterion H0 if the calculation is $> t_{table}$ or $sig \leq 0.05$
2. *** = t_{table} (Simple regression) of 0.67657
3. *** = t_{table} (multiple regression) of 1.65798
4. *** = t_{table} (sobel test) of 1.65798

DISCUSSION

Hypothesis 1: Price Perception has a Positive Effect on Customer Satisfaction

The results of the first hypothesis test show that Price Perception has a positive and statistically significant influence on Customer Satisfaction. This is shown by a t-count value of 8.034 with a significance level of 0.001 ($p < 0.05$), so that the first hypothesis is accepted. These results show that the better the customer's perception of the product price, the higher the level of satisfaction felt after using Wardah loose powder products. Prices that are considered in accordance with the quality, benefits, and purchasing power of consumers are able to form a positive assessment of the product so that consumer expectations can be met. Thus, customers not only consider the affordability of the price, but also assess the suitability between the price paid and the benefits received after using the product.

The findings of this study support the Expectation Confirmation Theory (ECT) put forward by Oliver (1980), which explains that customer satisfaction is formed when the performance of the product is able to meet or even exceed the initial expectations of the consumer. In the context of this study, good price perception is a form of cognitive evaluation of consumers before using products. When consumers judge that the price of Wardah loose powder is in accordance with the quality of the product obtained, there will be confirmation of their expectations so as to produce customer satisfaction. On the other hand, if the price is considered not proportional to the benefits received, then consumers will experience dissatisfaction because there is a mismatch between expectations and product performance. The results of this study are in line with the research of Jannah et al. (2024), Nuraini et al. (2024), Nufus & Ratnamurni (2024), and Juniantara and Sukawati (2018) which stated that price perception has a positive and significant effect on customer satisfaction.

Hypothesis 2: Price Perception has a Positive Effect on Customer Loyalty

The results of the second hypothesis test show that Price Perception has a positive and statistically significant influence on Customer Loyalty. This is shown by a t-calculated value of 3.666 with a significance level of 0.001 ($p < 0.05$), so that the second hypothesis is accepted. These results show that the better the customer perception of the price of Wardah loose powder products, the higher the customer loyalty. Customers who consider the price of the product to be affordable, competitive, and in accordance with the quality and benefits received will tend to

make a repeat purchase, still choose Wardah products over other brands, and recommend them to others. Thus, a positive price perception is able to form a long-term relationship between the customer and the product.

The findings show that price perception is not only seen as a number of costs that consumers must incur, but also as a representation of the value received. When consumers feel they are benefiting that is proportional to the price paid, then consumers will have a tendency to maintain a long-term relationship with the brand. This condition shows that the right price is able to create a sense of trust in the value of the product so as to encourage the formation of customer loyalty. The results of this study support the research of Juniantara and Sukawati (2018), Hariyanto (2024), and Monica (2026) who stated that price perception has a positive and significant effect on customer loyalty.

Hypothesis 3: Customer Satisfaction has a positive and significant effect on Customer Loyalty

The results of the third hypothesis test show that Customer Satisfaction has a positive and significant influence on Customer Loyalty. This is shown by a t-calculated value of 4.383 with a significance level of 0.001 ($p < 0.05$), so that the third hypothesis is accepted. This shows that the higher customer satisfaction after using Wardah loose powder products, the higher the customer loyalty. Customers who are satisfied with the product quality, benefits obtained, and experience using the product will be more likely to make a repeat purchase, continue to use Wardah products, and be willing to give recommendations to others.

The results of this study are in line with the Expectation Confirmation Theory (ECT) which states that satisfaction is the result of consumer evaluation after comparing initial expectations with the actual experience gained after using the product. When the experience of using the product meets or even exceeds the expectations of consumers, then customers will feel satisfied. This satisfaction further encourages the formation of loyal behavior in the form of repurchases, commitment to the brand, and willingness to provide recommendations to other consumers. The results of this study are in line with the research of Rahayu and Faulina (2022), Sucihati and Suhartini (2022), Octaviananda et al. (2023), Ramanta et al. (2021), Wati et al. (2020), Dewi & Putra (2024), and Yum and Yoo (2023) who stated that customer satisfaction has a positive and significant effect on customer loyalty.

Hypothesis 4: Customer Satisfaction plays a role in mediating the influence of Price Perception on Customer Loyalty

The results of the fourth hypothesis test show that Customer Satisfaction is able to mediate the influence of Price Perception on Customer Loyalty. Based on the results of the Sobel test, a T-count value of 3.869 was obtained that was greater than the T-table of 1.65 with a significance level of 0.000 ($p < 0.05$), so that the fourth hypothesis was accepted. These results show that price perception not only has a direct influence on customer loyalty, but also provides an indirect influence through increased customer satisfaction. Thus, customer satisfaction serves as a mechanism that strengthens the relationship between price perception and customer loyalty.

Based on Expectation Confirmation Theory (ECT), consumers will evaluate the suitability between initial expectations and the actual experience gained after using the product. When consumers judge that the price of Wardah loose powder is in accordance with the quality, benefits, and value received, customer satisfaction will be formed. This satisfaction further encourages customers to continue using the product, make repeat purchases, and recommend the product to others. Therefore, the influence of price perception on customer loyalty will be

stronger if customers first feel satisfaction with the products used. The results of this study are in line with the research of Humairah et al. (2025), Fathin et al. (2022), and Nastiti and Astuti (2019) which stated that customer satisfaction is able to mediate the influence of price perception on customer loyalty.

CONCLUSION

The results of this study support the application of *Expectation Confirmation Theory* (ECT) in the context of marketing by showing that price perception has a positive influence on customer satisfaction and customer loyalty, and customer satisfaction has a positive effect on customer loyalty. In addition, customer satisfaction has been shown to mediate the influence of price perception on customer loyalty. This finding indicates that price perception is one of the important factors in building customer loyalty to Wardah Loose Powder products in the city of Bandung

Based on the results of the study, it is proven that customer satisfaction mediates the influence of price perception on customer loyalty. Price perception is categorized simply with *the lowest* mean value, namely price competitiveness. Therefore, PT *Paragon Technology and Innovation* is advised to maintain and improve price competitiveness by setting competitive prices without reducing product quality. One of the steps that can be taken is to evaluate prices periodically by comparing the prices of similar products from competitors, so that the price of Wardah Loose Powder remains at a level that is able to provide more value for consumers. This step is expected to increase customer satisfaction so as to encourage loyalty which is reflected through repurchases, continuing to choose Wardah Loose Powder in the midst of competition, and willingness to recommend products to others, while strengthening competitiveness and supporting continuous sales increases.

This study still has limitations because it only involves 120 respondents in the city of Bandung, so the results are not fully representative of all users of Wardah Loose Powder in Indonesia. In addition, the use of simple regression analysis, multiple regression, and Sobel tests limits testing of relationships between variables to direct and indirect influences. Therefore, further research is recommended to expand the research area and the number of respondents to increase the generalization of results, apply *the Structural Equation Modeling* (SEM) method or *Partial Least Square-Structural Equation Modeling* (PLS-SEM) so that the analysis of the relationship between variables is more comprehensive, and add variables such as product quality, *brand image*, *brand trust*, service quality, promotion, *customer experience*, and other marketing factors to produce a more complete research model and enrich the development of marketing science.

REFERENCES

- Aprillian, K. M., & Putra, H. T. (2025). The Effect of Product Quality and Online Shopping Experience on Customer Loyalty With Customer Satisfaction as A Mediating Variable (On Rizki Jaya Customers at Shopee in the Greater Bandung Area). *American Journal of Economic and Management Business*, 4(5).

- Databooks. (2025, October 6). Frequency of Sales or Purchase Transactions Made by Indonesian People in E-Commerce (2025). (Accessed on October 29, 2025)
- Dewi, N. K. P., & Putra, H. T. (2024). Pengaruh Store Atmosphere dan Price terhadap Customer Loyalty yang Dimediasi Customer Satisfaction di Transmart Bandung dan Cimahi. *Jurnal Intelektualita: Keislaman, Sosial Dan Sains*, 13(1), 129–137. <https://doi.org/10.19109/intelektualita.v13i1.22885>
- Effendi, S., & Tukiran. (2012). Survey research method. Lp3es.
- Fathin, A., Cahaya, Y. F., & Erasashanti, A. P. (2022). The effect of price perception, sales promotion, and brand image on satisfaction to increase customer loyalty (Case study on Telkomsel SIMCARD users in Jabodetabek). National Seminar on Economic and Business Research, 1(1). <https://jurnalekonomi.unisla.ac.id/index.php/Semnna/article/view/1228>
- Febrianto, M., Kurniati, R. R., & Krisdianto, D. (2021). The effect of product quality on buying interest. In JIAGABI (Vol. 10, Number 2).
- Griffin. (2005). Customer Loyalty. Erlangga.
- Hariyanto, M. D., Yuliana, P., Kamali, S. R., & Sanjaya, V. F. (2024). The Effect of Price on Customer Loyalty (Case Study on Consumers of Toko Darussalam Computer Center). GLOBAL: Journal of Lantern BITEP, 2(1). <https://doi.org/10.59422/global.v2i01.199>
- Hengestu, N., & Iskandar, D. A. (2017). The influence of brand image and price on customer loyalty of bottled water. Journal of Management and Business Research (JRMB) Faculty of Economics UNIAT, 2(3), 363–372. <https://doi.org/10.36226/jrmb.v2i3.70>
- <https://doi.org/10.2307/3150499>
- Humairah, A. A., Burhanuddin, Aswar, N. F., Riu, I. A., & Abadi, R. R. (2025). The effect of price perception on customer loyalty through consumer satisfaction as an intervening variable in PT. Isuzu Mobilindo Plaza Makassar City. Journal of Business, Finance, and Economics (JBFE), 6(1), 168–180. <https://doi.org/10.32585/jbfe.v6i1.6669>
- Janita, I. S., & Kusumawati, A. (2014). The effect of product quality and service quality on customer satisfaction in shaping customer loyalty (Study on McDonald's MT customers. Haryono Malang). Journal of Business Administration (JAB), 15(1).
- Jannah, N., et al. (2024). The Role of Promotion in Moderating the Influence of Service Quality, Customer Experience, and Price Perception on Customer Satisfaction at Hotel Hokiwa Malinau. ECONOMIC FORUM: Journal of Economics, Management and Accounting, 26(1). <https://doi.org/10.30872/jfor.v26i1.15607>
- Juniantara, I. M. A., & Sukawati, T. G. R. (2018). The Influence of Price Perception, Promotion, and Service Quality on Satisfaction and Its Impact on Consumer Loyalty. E-Journal of Management of Udayana University, 7(11), 5955–5982. <https://doi.org/10.24843/EJMUNUD.2018.v07.i11.p06>
- Kotler, P., & Armstrong, G. (2018). Marketing: An Introduction (13th Global ed.). Pearson.
- Kotler, P., & Keller, K. L. (2012). Marketing Management (14th ed.). Pearson.
- Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson.
- Nufus, N. Z., & Ratnamurni, E. D. (2024). Pengaruh Kualitas Produk, Persepsi Harga dan Citra Merek Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan Mie Gaga pada Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Jenderal Achmad Yani. *J-MAS (Jurnal Manajemen Dan Sains)*, 9(1), 373. <https://doi.org/10.33087/jmas.v9i1.1641>

- Nuraini, D. P., & Chodidjah, S. (2024). The Effect of Price Perception, Service Quality, and Location on Mujinah Grocery Store Customer Satisfaction. *AL-MIKRAJ: Journal of Islamic Studies and Humanities*, 4(2), 1139–1147.
- Oliver, R. L. (1980). A Cognitive Model of The Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4).
- Prastesiya, L. L., & Sigarlaki, F. F. (2024). Pengaruh Brand Image terhadap Loyalitas Pelanggan yang Dimediasi oleh Kepuasan Konsumen Produk Luwak White Coffee Mahasiswa/I di Kota Cimahi. *J-MAS (Jurnal Manajemen Dan Sains)*, 9(2), 1251.
<https://doi.org/10.33087/jmas.v9i2.1927>
- Rahayu, S., & Faulina, S. T. (2022). The Influence of Digital Customer Experience in Creating Customer Satisfaction and Customer Loyalty in the Digital Era. *Jesya (Journal of Sharia Economics & Economics)*, 5(1), 1–13. <https://doi.org/10.36778/jesya.v5i1.568>
- Sekaran, U., & Bougie, R. (2017). *Research Methods for Business* (6th ed., Vol. 1). Salemba Four.
- Sucihati, & Suhartini. (2022). The Effect of Consumer Satisfaction and Service Quality on Consumer Loyalty at PT. Ramayana Serang Insurance. *Journal of Corporate Management: JUMPA*, 1(1), <https://doi.org/10.30656/jumpa.v1i1.4563> 14–22.
- Tjiptono, F. (2008). *Service Management, Second Edition* (2nd ed.). Andi Publisher.
- Top Brand Image. (2025). Brand Comparison, Personal Care Category, Sub-Category of Sown Face Powder.
https://www.topbrandaward.com/komparasi_brand/bandingkan?id_award=1&id_kategori=1&id_subkategori=297&tahun_awal=2021&tahun_akhir=2025&brand1=make%20over&brand2=marcks&brand3=maybelline&brand4=viva&brand5=wardah. (Accessed on October 29, 2025)
- Yum, K., & Yoo, B. (2023). The Impact of Service Quality on Customer Loyalty through Customer Satisfaction in Mobile Social Media. *Sustainability (Switzerland)*, 15(14).
<https://doi.org/10.3390/su151411214>