# The Effect of Product Quality and Customer Value on Satisfaction and Loyalty

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## Abstract

**Aim**: This study aims to analyze the effect of product quality and customer value on satisfaction and loyalty. **Materials and methods**: The population used in this study is adult customers who have consumed generic drugs in Semarang City - Indonesia. The questionnaires used are answered by 147 customers who had made a purchase transaction. **Results**: The results of the study indicate that product quality has a positive and significant effect on customer value, satisfaction, and loyalty. Customer value has a positive and significant effect on satisfaction but not on customer loyalty. Customer satisfaction has a positive and significant effect on customer loyalty. **Conclusion**: Mediation test result reveals that customer satisfaction mediates the relationship between customer value and customer loyalty.

**Keywords**: Product quality, customer value, satisfaction, loyalty

Article type: Research paper

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## Introduction

Consumption of generic drugs in Indonesia is the lowest when compared to other ASEAN countries. In Thailand, the consumption of generic drugs accounted for 25% of drug sales while in Malaysia it reached 20% in 2007. Throughout 2007, sales of generic drugs consumed by the Indonesian people only reached 8.7% of total drug sales (Andayani & Satibi, 2016; Beall & Attaran, 2017; Hassali & Wong, 2018; West Java Health Office, 2009). The price of drugs in Indonesia is more expensive compared to other countries because the prices of these drugs are in distribution included the costs. complicated drug trade management, value-added tax, and the cost of promotion to doctors.

With the government's policy through the BPJS program and the use of generic drugs, pharmaceutical companies certainly compete in marketing their products. One method used by pharmaceutical industry in marketing products is the marketing mix strategy. Marketing mix in the company can be used as one of the considerations in marketing the product so that it can achieve the expected sales results. The initial stage in this activity is the planning of the product marketing mix, which is an important stage in supporting successful product sales. The increasingly fierce market competition conditions require companies to plan for a better product marketing mix. Therefore, the role of product marketing mix planning is felt even greater within the company.

Product quality plays an important role in shaping customer satisfaction, while also closely related to creating profits for the company. The more product quality is provided by the company, the satisfaction felt by the customer will be higher (Gök, Ersoy, & Börühan, 2019; Hallencreutz & Parmler, 2019; Lasander, 2013; Loebis et al., 2019). Product quality according to

Chien & Chi (2019); Kotler and Armstrong (2008) is a characteristic of a product or service that depends on its ability to satisfy customer needs. According to Garvin in Tjiptono and Diana (2003), there are eight types of dimensions that can be used to analyze product quality, namely performance, features, reliability, conformance to specifications, durability, service abilities, aesthetics, and perceived quality.

Customer satisfaction is the main thing that must be achieved by the company to get customer loyalty. Research conducted by Akbar et al. (2010); Guhl, Blankart, & Stargardt (2019); Loebis et al. (2019) state that satisfaction is a mediating variable between service quality and customer loyalty. Most satisfied customers will give high loyalty to the company. Loyalty can be a driver of repurchase interest. Customer satisfaction is expectation an of expectations or customer confidence about what will be received when using a product or service. Customer expectations are shaped by previous buying experience and from time to time continue to develop through the comments of friends and acquaintances and promises from the company. Therefore, this study aims to analyze the effect of product quality and customer value on satisfaction and loyalty.

#### **Literature Review**

Customer Loyalty

Loyalty is the formation of attitudes and behavior patterns of a customer towards the purchase and use of products resulting from their previous experience (Griffin, 2005). The concept of customer loyalty used in this study is a commitment held strong by customers to make purchases, use products from the company in the long run (repeatedly), recommend the company's products to colleagues despite the influence of situations and business targets that have the potential to

change customer behavior (Oliver, 1999; Lovelock, Wirtz and Mussry, 2010; Zeithaml et al., 1996; Gremler and Brown, 1996). Customer loyalty can also be defined based on consistent buying behavior (Griffin, 2005). Customer loyalty is a reliable measure for predicting sales growth.

#### Customer Satisfaction

definition satisfaction The of according to Kottler and Keller (2013) is someone's feeling of pleasure disappointment as a result of a comparison between the product received expected. Engel et al. (1994) state that customer satisfaction is a full evaluation where the alternative is chosen has at least the same results or exceeds customer expectations, while dissatisfaction arises if the results obtained do not meet customer expectations. Oliver and Richard (1999) state that satisfaction is a response of customer attitudes on the fulfillment of all needs or products purchased according based on their expectations. Zeithaml et al. (1993)explained that customer expectations have a very important role in determining product quality and customer satisfaction because there is a close relationship between determining quality and customer satisfaction. The concept of customer satisfaction used in this study is that customer responses can be in the form of feelings of pleasure or disappointment over the comparison between the product received and expected as an evaluation or overall customer evaluation of the product and experience of using the product or service (Oliver 1980; Taylor and Beker 1994; Engel et al., 2010; Johnson and Fornell 1991 in Edvardson et al., 2000; Kotler & Keller, 2013).

#### Customer Value

Customer value is the difference between the value obtained by the customer by owning and using a product with the costs incurred to obtain the product (Kotler and Keller, 2013). Value for customers is the difference between the total value for the customer and the total cost of the customer to the marketing offer. Total customer value is the total value of the product, service, personnel, and image that the buyer receives from marketing offers. Total customer costs are the total monetary, time. complete. psychological costs associated with marketing offers. Customer value is the customer's perception of the value at which the company must consider the value in developing products or services so that it is in line with what customers expect.

# Product Quality

The definition of product according to Kotler & Armstrong (2001) is anything that can be offered to the market to get attention, bought, used, or consumed that can satisfy a desire or need. Conceptually, the product is a subjective understanding of the producer of something that can be offered an effort as to achieve organizational goals through meeting customer needs and activities, following organization's competence capacity and market purchasing power. Besides, products can also be defined as customer perceptions described through their producers production results. Products are seen as important by customers and are used as the basis for purchasing decisions.

# **Hypotheses Development**

Product Quality and Customer Value

If the product has customer expectations, the customer will be happy and assume that the product is acceptable (Afshar et al., 2011). Provision of the best products is a must for a company. The better the quality of the products offered by the company, the higher the customer satisfaction. Higher customer expectations

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are reflected through a higher level of customer trust (Hidayat, 2009). Thus, *H1: Product quality has a positive effect on customer value.* 

Product Quality and Customer Satisfaction

Kotler and Armstrong (1996)suggested that product quality has a very relationship with customer satisfaction because product quality can be assessed from the ability of products to create customer satisfaction. Research conducted by Ahmad Sururi and Mudji Astuti (2003) found empirical evidence that product quality has a significant effect on satisfaction. Also. customer research conducted by Andaleeb and Conway (2006) concluded that customer satisfaction is largely influenced by product quality. The same thing was also concluded by Mulyono et al. (2007) that product quality has a positive and significant effect on customer satisfaction.

The relationship between product quality and customer satisfaction is very closely related. Usually, if the product offered by the company is of good quality, the customer will buy and consume the product directly beyond the expectations of the customer so that they are satisfied with the product. Thus,

H2: Product quality has a positive effect on customer satisfaction

Customer Value and Customer Satisfaction

A product is said to have high value in the eyes of the customer if it can provide the minimum quality, benefits, and sacrifice. The better the value for the customer provided by the company, the more satisfied the customer is with the product. This means that the value for customers has a positive and significant effect on customer satisfaction. The product value indicator as a measure of customer value is the largest compared to

the service value indicator. This means that the product value indicator is more dominant as a measure of value variables for customers. So the variable customer satisfaction is influenced by variable values for customers, especially indicators of product value according to Monroe research in Hidayat (2009) and Haemoon (1999). The results of their study support and prove a positive and significant relationship between value for customers and customer satisfaction. Thus,

H3: Customer value has a positive effect on customer satisfaction.

Product Quality and Customer Loyalty Product quality has a very close relationship with customer satisfaction because product quality can be assessed from the product's ability to create customer satisfaction. Research conducted by Jahanshahi, Asghar Afshar et al. (2011) concluded that service quality and product quality have a positive and significant effect on customer satisfaction customer loyalty. The same thing was also concluded by Halim, Peter et al. (2014) that product quality has a significant effect on customer loyalty. The relationship of product quality with customer loyalty is the satisfaction of purchasing products offered to customers, they continue to buy and use these products regularly and are not interested in other products because they already believe in the product so they remain loyal and recommend the product to others. Thus,

H4: Product quality has a positive effect on customer loyalty.

Customer Value and Customer Loyalty

Value for customers has a positive and significant effect on customer loyalty. This means that the better the value for the customer the company provides, the more customer feels loyal to the product. Value is intended to provide benefits to

The benefits received customers. bv customers will greatly determine the success of a business because of the perception and expectations following product reality. If the customer's perception after making a transaction turns out not to be as expected, the customer will be disappointed and not repeat the transaction and vice versa (Hidayat, 2009). Thus,

H5: Customer value has a positive effect on customer loyalty.

Customer Satisfaction and Customer Loyalty

Customer satisfaction is determined perceptions of product customer performance (Tjiptono, 2008). The results of research conducted by Asep et al. (2012) show that there is a positive relationship between customer satisfaction and loyalty. Customers who are satisfied after using the product provided will encourage the customer's desire to use the product in the future. Research by Musanto and Trisno (2004) proves that there is a positive and significant influence between customer satisfaction and loyalty. Satisfaction will arise if customers rate positively on their transaction experience. With a positive impression or assessment, customers will be willing to remain loyal to the company. Thus.

H6: Customer satisfaction has a positive effect on customer loyalty.

## **Materials And Methods**

In this study, the population used is adult customers who have consumed generic drugs in Semarang Citv Indonesia. The questionnaire used is answered by customers who had already purchase transaction. made a technique is non-probability sampling sampling. The sampling method used in study is purposive sampling. According to Arikunto (2010), purposive sampling is a sampling technique in which researcher depends on his/ her own augment when deciding representative of population to perform in the study. The determined criteria are customers who have taken generic drugs at least twice so that a sample of 147 customers is obtained.

The results of the descriptive analysis of respondents showed that 46.3% of respondents were male, and 537% were female. The average age of respondents is 38 - 47 years, with the latest education being a bachelor, and the average income is 2,000,000 - 3,000,000 million rupiah per month.

#### Results

Validity and Reliability

The validity test results show that all variables have a KMO value that is higher than the predetermined requirements that are  $\geq$  0.50. This means that product quality, customer value, customer satisfaction, and customer loyalty meet the requirements of the validity test. The results of the factor loading value of each variable also meet the requirements of  $\geq$  0.04. This shows that all question items raised in the research questionnaire were declared valid and could be used for research data collection.

Based on the results of the reliability test using the Cronbach alpha, the value of the reliability coefficient for question items regarding product quality, customer value, customer satisfaction, and customer loyalty is  $\geq$  0.70. Therefore, these variables can be declared reliable and can be used for research data collection.

## Coefficient Determination

The results of data analysis showed that product quality affected customer value by 28.4% and the rest (71.6%) was explained by other factors not present in this study. Product quality and customer value affect customer satisfaction by 25.5%

and the rest (74.5%) is explained by other factors not present in this study. Product quality, customer value, and satisfaction affect customer loyalty by 34.3% and the rest (65.7%) is explained by other factors not present in this study.

The result of the feasibility test of the model (F-test) shows that the significance value is 0.000  $\alpha$  (0.05). This shows that the independent variables used. namely product quality and customer value simultaneously affect customer satisfaction. Product quality, customer value. and customer satisfaction simultaneously also affect customer loyalty.

## Hypotheses Testing

The test results show that product quality has a significant effect on customer satisfaction. This can be seen from the significant value that meets the requirements of  $0.000 \le 0.050$ . The test results also indicate that customer value has a significant effect on customer satisfaction. This can be seen from the significant value that meets the requirements of  $0.024 \le 0.050$ .

The results of tests conducted on product quality, customer value, and customer satisfaction indicate that product quality has a significant effect on customer loyalty, where the significance value meets the requirements of  $0.000 \le 0.050$ ; customer value does not affect customer loyalty, where the significance value is 0.336 > 0.050; satisfaction has a significant effect on customer loyalty, where the significance value meets the requirements of  $0.004 \le 0.050$ .

# Testing of Mediation Effect

The mediation test in this study uses the path analysis method that can estimate the direct or indirect relationship of the independent variable to the dependent variable through the mediator variable. In this study, there are two mediation tests namely:

- 1. Mediation test 1: the relationship between product quality and customer satisfaction with customer value as a mediating variable. Mediation results 1 prove the magnitude of the indirect effect of  $0.538 \times 0.194 = 0.104$  is smaller than the direct effect of 0.385. Therefore, the relationship between product quality and customer satisfaction is more effective and has a direct effect, or customer value does not mediate the effect of product quality on satisfaction.
- 2. Mediation test 2: the relationship between customer value and customer loyalty and customer satisfaction as a mediating variable. Mediation 2 test results found that customer value does not significantly influence customer lovalty so that customer satisfaction fully mediates the relationship between customer value and customer loyalty. Therefore, customer value is a more effective indirect effect on customer loyalty where customer satisfaction mediates the relationship between customer value and customer loyalty.

#### Discussion

The first hypothesis test results show that product quality has a positive and significant effect on customer value. The second hypothesis test shows that product quality has a positive and significant effect on customer satisfaction. These results are consistent with research conducted by Aburumman & Nieto (2019); Gök, Ersoy, & Börühan, 2019; Hallencreutz & Parmler, 2019; Loebis et al., 2019; Mulyono et al. (2007); Sururi et al. (2003) that product quality has a positive and significant effect on customer satisfaction. Generic drugs circulating in the community have good quality, so customers feel satisfied in purchasing these drugs. The results of testing the third hypothesis show that customer value has a positive significant effect on satisfaction. The fourth hypothesis test results prove that product quality has a positive and significant effect on customer loyalty. These results are consistent with research conducted by Aburumman & Nieto (2019); Chadwick & Piartrini (2019); Loebis et al. (2019); Jahanshahi, Asghar Afshar (2011); Halm et al. (2014); Kim & Shim (2019). Generic drugs circulating in the community have good quality, so customers feel satisfied in purchasing these drugs. Because there is a sense of satisfaction in the customer over the quality of the generic drug, the customer becomes loyal in buying back the drug.

The fifth hypothesis test results indicate that customer value does not customer loyalty. The sixth hypothesis test results prove that customer satisfaction has a positive and significant effect on customer loyalty so that the sixth hypothesis is accepted. These results are consistent with research conducted by Asep et al. (2012); Cheng, Gan, Imrie, & Mansori (2019); Chou & Kohsuwan (2019); El-Adly (2019); Hadi, Aslam, & Gulzar (2019); Musanto & Trisno (2004); YuSheng & Ibrahim (2019); Zhou et al. (2019). Customer satisfaction is the main thing to be achieved in marketing generic drug products. The more satisfied the customer is with the generic drug, the more loyal the customer will be in purchasing the drug. Mediation test results indicate customer value does not mediate the effect of product quality on customer satisfaction. However, customer satisfaction mediates the effect of customer value on customer loyalty.

# Conclusion

The results of this study concluded that product quality has a positive and significant effect on customer value, satisfaction, and loyalty. Customer value has a positive and significant effect on satisfaction but not on customer loyalty. Customer satisfaction has a positive and effect on customer loyalty. significant Mediation test results indicate that customer satisfaction mediates the relationship between value and customer loyalty.

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