

## The Influence of Service Quality, Facilities, and Location on Customer Satisfaction at Luceo Pool And Cafe, Malang

Evi Anggraini, Mohammad Bukhori, Sudjilah

Asia Institute of Technology and Business Malang, Indonesia

evianggraini0802@gmail.com

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### Abstract

Increasing competition in the pool-and-cafe industry requires businesses to identify the factors associated with customer satisfaction. This study examined the relationships between service quality, facilities, location, and customer satisfaction at Luceo Pool and Cafe in Malang, both individually and collectively. A quantitative research design was employed. The study population comprised 564 customers who visited the establishment between January and March 2026. A sample size of 86 respondents was calculated using the Slovin formula, and participants were selected through purposive sampling. Primary data were collected through an online questionnaire administered via Google Forms and analyzed using multiple linear regression in SPSS. Service quality did not significantly predict customer satisfaction ( $t = 1.676$ ,  $p = 0.098$ ), nor did facilities ( $t = 1.567$ ,  $p = 0.121$ ). In contrast, location was a positive and significant predictor of customer satisfaction ( $t = 4.179$ ,  $p < 0.001$ ). Collectively, service quality, facilities, and location significantly predicted customer satisfaction ( $F = 25.422$ ,  $p < 0.001$ ), explaining 48.2% of its variance ( $R^2 = 0.482$ ). These findings identify location as the only significant independent predictor within the analyzed model, underscoring the importance of accessibility and visibility in

shaping customer satisfaction. Nevertheless, the significant overall model indicates that customer experience should be managed comprehensively. Luceo should therefore preserve its locational advantages, improve parking convenience, and continuously maintain service quality and facilities.

**Keywords:** Customer Satisfaction; Facilities; Location; Pool and Cafe; Service Quality

## INTRODUCTION

The entertainment and culinary industries in Indonesia have experienced very rapid growth in recent years. Changes in people's lifestyles have transformed entertainment venues from facilities serving solely recreational purposes into multifunctional spaces for social gatherings, working, discussions, and the development of social relationships (Barrie et al., 2023). This condition has encouraged the emergence of various business concepts that combine entertainment and culinary services, one of which is the Pool and Cafe concept (Noaime et al., 2025). This concept offers a distinctive experience because customers can not only enjoy food and beverages but also engage in sports and recreational activities within a single location. Increasingly intense business competition requires every business operator to provide high-quality services, adequate facilities, and a strategic location in order to create and maintain customer satisfaction.

In Malang City, the development of Pool and Cafe businesses has also increased in line with the growing number of university students, tourists, and productive members of the community who require venues for both entertainment and social interaction. This phenomenon has transformed billiards businesses from establishments that merely provide gaming facilities into an integral part of the lifestyle business industry. Consequently, competition among business operators has become increasingly intense, requiring companies to create added value in order to remain attractive to customers (Kumar & Reinartz, (2016). Nevertheless, billiards historically had a relatively negative image in the eyes of the public. Billiards venues were often associated with gambling, alcoholic beverages, cigarette smoke, and behaviors considered inconsistent with prevailing social norms (Abdi et al., 2015). Such perceptions led some members of the community, particularly parents, to prohibit their children from visiting billiards venues because they were considered to have potentially negative influences. This stigma hindered the development of billiards as a sport, despite the

fact that billiards has officially been recognized as a sport under the authority of the Indonesian Billiards Sports Association (Persatuan Olahraga Biliar Seluruh Indonesia—POBSI) (Salim et al., 2025).

However, this situation has gradually begun to change. According to a report published by Jawa Pos Radar Malang entitled “Billiard Kota Malang Berjuang Menghilangkan Stigma Negatif” (<https://radarmalang.jawapos.com>), the billiards community and POBSI officials in Malang City have continued to make efforts to change public perceptions by emphasizing that billiards is a competitive sport rather than merely a form of entertainment associated with negative activities. Various initiatives, including athlete development programs, tournament organization, and public education, have been undertaken to establish a positive image of billiards as a sport and to encourage its acceptance among broader segments of society. This shift in perception indicates that the public has increasingly come to view billiards as a sport that requires concentration, strategy, precision, and sportsmanship. This transformation in the image of billiards has also been reinforced by a Javasatu report featured in the Mbois Sport Podcast (<https://javasatu.com>), which highlighted Malang City's achievement in becoming the overall champion in a provincial-level billiards competition in East Java through continuous athlete development. This achievement demonstrates that billiards is no longer exclusively associated with negative stigma but has developed into a sport capable of enhancing the reputation of the region. This condition has indirectly contributed to increasing public interest in visiting modern billiards venues that offer a more comfortable, safe, and professional environment.

One of the businesses adopting the *Pool and Cafe* concept in Malang City is Luceo *Pool and Cafe* Malang. As a venue that combines sports, entertainment, and culinary services, Luceo *Pool and Cafe* is required to provide high-quality services, adequate facilities, and a strategic location in order to meet customer expectations. The establishment is located on Jalan Saxophone, Tunggulwulung, Lowokwaru District, Malang City, East Java. Luceo *Pool and Cafe* has 14 billiard tables, including two VIP rooms that provide comfortable and private facilities, as well as various attractive discounts for customers.

High-quality service is expected to provide a positive customer experience, thereby creating customer satisfaction (Mariansyah & Syarif, 2020; Sulistiowati et al., 2025; Izzuddin & Muhsin, 2020; Silalahi et al., 2024). The owner of Luceo *Pool and Cafe* pays considerable attention to customer satisfaction by prioritizing excellent service. Excellent service refers to

the efforts undertaken by a company or organization to provide the best possible service to its customers. The primary objective of excellent service is to fulfill customer needs and expectations, thereby creating satisfaction with the services provided.

Factors contributing to customer satisfaction are not limited to service quality. Several other factors may influence customer satisfaction, including facilities, price, strategic location, spacious parking areas, product quality, and other related aspects (Dahlani & Hasanul Ahwal, 2021). Every business operating in the *Pool and Cafe* sector, including Luceo *Pool and Cafe*, strives to build customer loyalty so that customers are willing to make repeated visits on a continuous basis. Customer loyalty plays an important role in maintaining business sustainability and supporting the company's long-term revenue growth. Customers who feel comfortable and have positive experiences are more likely to revisit the establishment. In this context, facilities represent one of the aspects that require particular attention because the condition of the facilities contributes to shaping the customer experience during their stay at the establishment. Facilities should not only be sufficiently available but should also be properly maintained, periodically renewed, and consistently monitored in terms of quality to ensure that they remain aligned with customer needs (Sinaga et al., 2025; Fishendra, 2022).

According to the study by Hanaysha, (2020) location can be defined as the place where a company is established and plays an important role in marketing mix strategies. In determining a business location, companies need to consider various factors, including customers' ease of access to the location, the safety and comfort of the surrounding environment, proximity to potential consumers, and the availability of adequate supporting facilities, such as parking areas (Nugraha, 2025). Accessibility and security are also emphasized as location indicators that have a significant influence on customer satisfaction, particularly in entertainment-oriented cafe businesses. The combination of service quality, facilities, and location plays an important role in creating optimal levels of customer satisfaction, particularly in the entertainment sector, which offers interactive experiences such as billiards and game centers.

The location of Luceo *Pool and Cafe* is considered highly strategic due to its proximity to universities, its position along a road with high daily traffic, and its location within an area surrounded by student boarding houses. However, the lack of distinctive exterior signage or visual elements indicating that the establishment is a billiards and cafe venue means that many people are unaware of its presence or the type of business it operates. An adequate

parking area, in other words, one that is sufficiently spacious and comfortable, is also an important supporting factor through which location may influence customer satisfaction. Unfortunately, the parking area provided by Luceo is relatively limited in capacity. This condition may also become a factor contributing to decreased consumer interest in visiting the establishment and playing billiards.

The *grand theory* underlying this study is the *Expectancy Disconfirmation Theory (EDT)* developed by Richard L. Oliver in 1980. According to Zhang et al., (2022) this theory explains that customer satisfaction arises from a comparison between customers' expectations prior to using a product or service and their perceptions of the performance experienced after receiving or using the product or service. When the service provided is prompt, friendly, and aligned with customer needs, *positive disconfirmation* occurs, referring to a condition in which perceived performance exceeds customer expectations and consequently generates customer satisfaction. *Confirmation* refers to a condition in which the performance of a product or service corresponds to customer expectations. Under this condition, customers feel satisfied because their expectations have been fulfilled, as reflected in the location of Luceo, which meets customer expectations by being easy to locate and readily accessible. Conversely, *negative disconfirmation* refers to a condition in which the performance of a product or service falls below customer expectations, resulting in disappointment or dissatisfaction. In the context of this study, this condition is reflected in the facilities, which are considered insufficient or have not fully met customer expectations due to the lack of refurbishment of the main facilities, particularly the billiard tables and billiard cues.

According to the researcher, these conditions indicate that customer satisfaction in *pool and cafe* businesses cannot be assessed based on a single aspect alone but rather represents the outcome of customers' evaluations of the overall experience they obtain during their visits. Fast, friendly, and responsive service constitutes an important component in creating a positive customer experience. However, good service needs to be supported by comfortable and properly functioning facilities, as well as a location that is easily accessible, so that the customer experience can be optimized. In the context of Luceo Pool and Cafe Malang, facilities such as billiard tables and equipment, dining areas, Wi-Fi, restrooms, and parking areas constitute integral components of the customer experience. Therefore, the researchers argue that customer satisfaction should be managed comprehensively by simultaneously considering service quality, facilities, and location. This perspective is consistent with the conditions observed in the study, which indicate that these three aspects

constitute integral components of customers' experiences when using the services provided by Luceo Pool and Cafe Malang.

Furthermore, the researcher consider that customer complaints regarding order delivery errors, employees' lack of focus when arranging billiard balls, and orders that do not correspond to customers' requests indicate that service quality still requires continuous evaluation. At the same time, key facilities, particularly billiard tables and cues, also require attention in terms of maintenance and refurbishment. These conditions indicate the possibility of a discrepancy between customer expectations and the actual experiences received while using the services.

Several previous studies have examined the relationships among service quality, facilities, location, and customer satisfaction, with varying findings. Izzuddin & Muhsin, (2020) found that service quality and location influence consumer satisfaction. Dahliani & Ahwal, (2021) also demonstrated the importance of location in shaping customer satisfaction, while Fishendra, (2022) examined the effects of service quality and facilities on customer satisfaction. The studies conducted by Winata, (2023) and Sutarjo et al., (2024) have greater similarities with the present study because they both examine service quality, facilities, and location as factors associated with customer satisfaction. However, the research objects, respondent characteristics, and business contexts examined in these studies differ from those of Luceo Pool and Cafe Malang.

Although the relationships among service quality, facilities, location, and customer satisfaction have been extensively examined, previous findings indicate that the magnitude and significance of the effects of each variable are not always consistent. Such differences may arise because customer characteristics, business types, facility conditions, service quality, and business environments vary across research settings. In addition, previous studies remain relatively limited in examining service quality, facilities, and location simultaneously within businesses that integrate billiards and cafe activities (*pool and cafe*). Therefore, an empirical gap remains that needs to be addressed through further examination in the context of Luceo Pool and Cafe Malang.

Based on this research gap, the novelty of the present study lies in its integrated examination of the effects of service quality, facilities, and location on customer satisfaction within the context of a *pool and cafe* business, specifically Luceo Pool and Cafe Malang. Unlike previous studies that have focused on restaurants, cafes, service businesses, or other types of

institutions, this study positions a *pool and cafe* business as the research context, integrating sports, entertainment, and culinary activities into a single customer experience. This distinctive characteristic enables customers to evaluate not only service and product quality but also the comfort of gaming facilities, accessibility, and the overall condition of the location. Therefore, this study is expected to extend the empirical evidence concerning the factors that shape customer satisfaction in service sectors characterized by multiservice experiences.

Theoretically, the relationship among service quality, facilities, location, and customer satisfaction in this study can be explained through the *Expectancy Disconfirmation Theory* (EDT) introduced by Richard L. Oliver. This theory explains that customer satisfaction is formed through an evaluation process between customers' expectations prior to using a product or service and their perceived performance after obtaining the relevant experience. When the performance received meets or exceeds expectations, *confirmation* or *positive disconfirmation* occurs, which can result in customer satisfaction. Conversely, when the performance received falls below expectations, *negative disconfirmation* occurs, which may lead to dissatisfaction.

In the context of *Luceo Pool and Cafe* Malang, service quality, facilities, and location constitute components of the overall experience evaluated by customers. Fast and responsive service, comfortable and well-maintained facilities, and an easily accessible location can meet or even exceed customer expectations. Conversely, inconsistent service, poorly maintained facilities, or unfavorable location conditions may create a discrepancy between customer expectations and their actual experiences. Thus, the *Expectancy Disconfirmation Theory* provides a conceptual foundation for explaining why these three variables need to be examined in relation to customer satisfaction.

Based on the phenomena, problems, findings from previous studies, research gaps, and theoretical foundation described above, this study focuses on examining the effects of service quality, facilities, and location on customer satisfaction at *Luceo Pool and Cafe* Malang. The study analyzes the effect of each variable partially, as well as the simultaneous effects of all three variables on customer satisfaction. Specifically, this study aims to: (1) analyze the effect of service quality on customer satisfaction; (2) analyze the effect of facilities on customer satisfaction; (3) analyze the effect of location on customer satisfaction; and (4)

analyze the simultaneous effects of service quality, facilities, and location on customer satisfaction at *Luceo Pool and Cafe* Malang.

## METHODS

This study employed a quantitative approach with a causal associative research design to analyze the effects of service quality, facilities, and location on customer satisfaction at Luceo Pool and Cafe Malang, both partially and simultaneously. The study was conducted at Luceo Pool and Cafe Malang from March 12 to June 10, 2026, with data collected through a questionnaire over a two-week period.

The study population consisted of 564 customers who played billiards at Luceo Pool and Cafe Malang during January–March 2026. The sample size was determined using the Slovin formula with a 10% margin of error, resulting in 86 respondents. The sampling technique employed was purposive sampling, with the following criteria: customers aged at least 17 years who had played billiards and purchased food or beverages at Luceo at least twice. Primary data were collected through an online questionnaire administered using Google Forms. The instrument employed a five-point Likert scale, ranging from *Strongly Disagree* to *Strongly Agree*. The study variables consisted of service quality ( $X_1$ ), facilities ( $X_2$ ), location ( $X_3$ ), and customer satisfaction ( $Y$ ). The instrument was assessed through validity and reliability testing using Cronbach's Alpha, with a reliability threshold of  $\geq 0.70$ .

The data were analyzed using IBM SPSS Statistics through descriptive analysis, classical assumption tests, multiple linear regression analysis, the coefficient of determination, t-test, and F-test. The classical assumption tests included normality, multicollinearity, and heteroscedasticity tests. The normality test was conducted using a P–P Plot and the Kolmogorov–Smirnov test, multicollinearity was assessed using Tolerance and Variance Inflation Factor (VIF) values, while heteroscedasticity was examined using the Glejser test and scatterplot. Multiple linear regression analysis was employed to determine the direction and magnitude of the effects of service quality, facilities, and location on customer satisfaction. Hypothesis testing was conducted at a 5% significance level.

## RESULTS

### Classical Assumption Test

#### 1. Normality Test Results

**Table 1. Results of the Normality Test  
One-Sample Kolmogorov–Smirnov Test**

|                                   | Unstandardized Residual |
|-----------------------------------|-------------------------|
| N                                 | 86                      |
| Normal Parameters <sup>a, b</sup> |                         |
| Mean                              | 0.0000000               |
| Std. Deviation                    | 2.42820780              |
| Most Extreme Differences          |                         |
| Absolute                          | 0.082                   |
| Positive                          | 0.063                   |
| Negative                          | −0.082                  |
| Test Statistic                    | 0.082                   |
| Asymp. Sig. (2-tailed)            | 0.200 <sup>c, d</sup>   |

<sup>a</sup>. Test distribution is Normal.

<sup>b</sup>. Calculated from data.

<sup>c</sup>. Lilliefors Significance Correction.

<sup>d</sup>. This is a lower bound of the true significance.

Table 1 shows the results of the One-Sample Kolmogorov–Smirnov normality test for the unstandardized residuals of the regression model. The analysis was based on 86 observations and produced a test statistic of 0.082 with an Asymp. Sig. (2-tailed) value of 0.200. Because the significance value exceeds the 0.05 threshold, the null hypothesis that the residuals are normally distributed cannot be rejected. Thus, the residuals can be considered normally distributed, confirming that the regression model satisfies the normality assumption and can proceed to the subsequent statistical analyses.

#### 2. Multicollinearity Test Results

**Table 2. Multicollinearity Test Results**

| Model |                                   | Collinearity Statistics |       |
|-------|-----------------------------------|-------------------------|-------|
|       |                                   | Tolerance               | VIF   |
| 1     | (Constant)                        | —                       | —     |
|       | Service Quality (X <sub>1</sub> ) | 0.611                   | 1.637 |
|       | Facilities (X <sub>2</sub> )      | 0.554                   | 1.806 |
|       | Location (X <sub>3</sub> )        | 0.530                   | 1.887 |

<sup>a</sup>. Dependent Variable: Customer Satisfaction

Based on the results of the multicollinearity test presented in Table 2, the Tolerance values for service quality ( $X_1$ ), facilities ( $X_2$ ), and location ( $X_3$ ) were 0.611, 0.554, and 0.530, respectively. These results indicate that none of the independent variables has a Tolerance value below 0.10, suggesting that there is no problematic correlation among the independent variables. The Variance Inflation Factor (VIF) values for service quality ( $X_1$ ), facilities ( $X_2$ ), and location ( $X_3$ ) were 1.637, 1.806, and 1.887, respectively. These values lead to the same conclusion, as none of the independent variables has a VIF value exceeding 10. Therefore, it can be concluded that the regression model does not exhibit multicollinearity.

### 3. Heteroscedasticity Test

**Table 3. Results of the Glejser Heteroscedasticity Test**

| Model |                 | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.  |
|-------|-----------------|-----------------------------|------------|---------------------------|--------|-------|
|       |                 | B                           | Std. Error | Beta                      |        |       |
| 1     | (Constant)      | 6.016                       | 2.120      | —                         | 2.838  | 0.006 |
|       | Service Quality | 0.025                       | 0.060      | 0.056                     | 0.415  | 0.679 |
|       | Facilities      | -0.063                      | 0.054      | -0.166                    | -1.172 | 0.244 |
|       | Location        | -0.092                      | 0.066      | -0.204                    | -1.408 | 0.163 |

<sup>a</sup>. Dependent Variable: ABS\_Res

Table 3 shows the results of the Glejser heteroscedasticity test. The significance values for service quality (0.679), facilities (0.244), and location (0.163) are all greater than 0.05. This indicates that none of the independent variables significantly affects the absolute residuals. Therefore, the regression model is free from heteroscedasticity and satisfies the homoscedasticity assumption.

### Multiple Linear Regression Analysis Results

**Table 4. Results of the Multiple Linear Regression Analysis**

| Model |                           | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  |
|-------|---------------------------|-----------------------------|------------|---------------------------|-------|-------|
|       |                           | B                           | Std. Error | Beta                      |       |       |
| 1     | (Constant)                | 6.535                       | 3.492      | —                         | 1.871 | 0.065 |
|       | Service Quality ( $X_1$ ) | 0.165                       | 0.098      | 0.170                     | 1.676 | 0.098 |
|       | Facilities ( $X_2$ )      | 0.139                       | 0.088      | 0.167                     | 1.567 | 0.121 |
|       | Location ( $X_3$ )        | 0.452                       | 0.108      | 0.456                     | 4.179 | 0.000 |

<sup>a</sup>. Dependent Variable: Customer Satisfaction

The results show that the regression coefficients for service quality ( $X_1$ ), facilities ( $X_2$ ), and location ( $X_3$ ) are 0.165, 0.139, and 0.452, respectively. Therefore, the multiple linear regression equation for this study can be expressed as follows:

$$Y = 6.535 + 0.165X_1 + 0.139X_2 + 0.452X_3 + \epsilon$$

where:

$Y$  = Customer Satisfaction

$\alpha$  = Constant

$X_1$  = Service Quality

$X_2$  = Facilities

$X_3$  = Location

$\epsilon$  = Error term

The regression equation can be interpreted as follows:

- The regression coefficients for service quality, facilities, and location are all positive, indicating that these three independent variables have positive relationships with customer satisfaction. The constant value of 6.535 indicates the expected value of customer satisfaction when the values of service quality, facilities, and location are zero.
- The regression coefficient for service quality is 0.165, indicating that a one-unit increase in service quality is associated with a 0.165-unit increase in customer satisfaction, assuming that the other independent variables remain constant.
- The regression coefficient for facilities is 0.139, indicating that a one-unit increase in facilities is associated with a 0.139-unit increase in customer satisfaction, assuming that the other independent variables remain constant.
- The regression coefficient for location is 0.452, indicating that a one-unit increase in location is associated with a 0.452-unit increase in customer satisfaction, assuming that the other independent variables remain constant.

### Coefficient of Determination ( $R^2$ ) Test Results

**Table 5. Results of the Coefficient of Determination Test**

| Model | R                  | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1     | 0.694 <sup>a</sup> | 0.482    | 0.463             | 2.47223                    |

<sup>a</sup>. Predictors: (Constant), Location, Service Quality, Facilities

<sup>b</sup>. Dependent Variable: Customer Satisfaction

Based on the coefficient of determination test presented in Table 5, the R Square ( $R^2$ ) value is 0.482, or 48.2%. This value indicates that service quality, facilities, and location collectively explain 48.2% of the variance in customer satisfaction. The remaining 51.8% is attributable to other factors outside the variables examined in this study.

Meanwhile, the Adjusted R Square value is 0.463, or 46.3%. This indicates that, after adjusting for the number of independent variables and the sample size, the regression model explains 46.3% of the variance in customer satisfaction. Thus, the model provides a moderate level of explanatory power in accounting for variations in customer satisfaction at Luceo Pool and Cafe Malang, while the remaining proportion is explained by other factors not included in the model.

## Hypothesis Testing

### 1. Partial Test Results (t-Test)

**Table 6. Results of the t-Test**

| Model |                 | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  |
|-------|-----------------|-----------------------------|------------|---------------------------|-------|-------|
|       |                 | B                           | Std. Error | Beta                      |       |       |
| 1     | (Constant)      | 6.535                       | 3.492      | —                         | 1.871 | 0.065 |
|       | Service Quality | 0.165                       | 0.098      | 0.170                     | 1.676 | 0.098 |
|       | Facilities      | 0.139                       | 0.088      | 0.167                     | 1.567 | 0.121 |
|       | Location        | 0.452                       | 0.108      | 0.456                     | 4.179 | 0.000 |

<sup>a</sup>. Dependent Variable: Customer Satisfaction

#### a. Effect of Service Quality on Customer Satisfaction

The results indicate that the calculated t-value for service quality is 1.676, which is lower than the critical t-value of 1.989. In addition, the significance value is 0.098, which is greater than 0.05. Therefore, service quality does not have a statistically significant effect on customer satisfaction at the 5% significance level. Accordingly, H1 is rejected and H0 is accepted.

#### b. Effect of Facilities on Customer Satisfaction

The results indicate that the calculated t-value for facilities is 1.567, which is lower than the critical t-value of 1.989. Furthermore, the significance value is 0.121, which is greater than 0.05. Therefore, facilities do not have a statistically significant effect on customer satisfaction at the 5% significance level. Accordingly, H1 is rejected and H0 is accepted.

### c. Effect of Location on Customer Satisfaction

The results indicate that the calculated t-value for location is 4.179, which is greater than the critical t-value of 1.989. Furthermore, the significance value is 0.000, which is lower than 0.05. Therefore, location has a positive and statistically significant effect on customer satisfaction. This conclusion is supported by the positive regression coefficient of 0.452. Accordingly, H1 is accepted and H0 is rejected.

## 2. Simultaneous Test Results (F-Test)

**Table 7. Results of the F-Test**

|   | Model      | Sum of Squares | df | Mean Square | F      | Sig.               |
|---|------------|----------------|----|-------------|--------|--------------------|
| 1 | Regression | 466.138        | 3  | 155.379     | 25.422 | 0.000 <sup>b</sup> |
|   | Residual   | 501.176        | 82 | 6.112       | —      | —                  |
|   | Total      | 967.314        | 85 | —           | —      | —                  |

<sup>a</sup>. Dependent Variable: Customer Satisfaction

<sup>b</sup>. Predictors: (Constant), Location, Service Quality, Facilities

Based on the results presented in Table 7, the calculated F-value is 25.422, with a significance value of 0.000, which is lower than the 0.05 significance level. Therefore, H4 is accepted and H0 is rejected, indicating that the three independent variables included in the model collectively have a statistically significant effect on customer satisfaction (Y).

The simultaneous effect of the independent variables on the dependent variable was examined using the F-test. The statistical results show a significance value of 0.000 at the 0.05 significance level. These findings indicate that service quality, facilities, and location simultaneously have a statistically significant effect on customer satisfaction. Thus, the hypothesis stating that service quality, facilities, and location jointly influence customer satisfaction is supported.

## DISCUSSION

### 1. Effect of Service Quality on Customer Satisfaction at Luceo *Pool and Cafe* Malang

The partial test results indicate that service quality obtained a calculated t-value of 1.676, which is lower than the critical t-value of 1.989. The significance value was 0.098, which is greater than 0.05. Based on these results, H<sub>1</sub> is not supported and H<sub>0</sub> fails to be rejected. This indicates that service quality does not have a statistically significant effect on

customer satisfaction at Luceo *Pool and Cafe* Malang after facilities and location are accounted for in the regression model.

This finding is noteworthy because the descriptive results show that service quality obtained a *grand mean* of 4.4 and was categorized as “Strongly Agree.” Customers provided positive assessments of employees' responsiveness, attention to customer needs, and friendly and courteous attitudes. These results do not imply that service quality is unimportant. Good service may have been perceived as a basic standard that customers expect to receive when visiting the establishment. When almost all customers provide similarly high ratings, service quality may have limited discriminatory power in distinguishing customers with high and low levels of satisfaction. In addition, customer satisfaction may also be associated with other aspects, such as price, food and beverage quality, atmosphere, promotional activities, and the billiards-playing experience. However, these possibilities remain interpretative because such factors were not examined in the present study.

From the perspective of the *Expectancy Disconfirmation Theory* (EDT), the high descriptive assessment indicates that service quality tends to be perceived as having met customer expectations. However, such service may not necessarily create an experience that exceeds expectations to an extent sufficient to produce meaningful differences in customer satisfaction.

This finding is consistent with the study by Sinaga & Nurfitra (2025), which also found that service quality did not have a significant effect on customer satisfaction. The consistency of these findings suggests that positive assessments of service quality are not necessarily accompanied by statistically significant effects because customer satisfaction may be shaped by a broader context and overall customer experience.

*Luceo* should continue to maintain its service quality, which has been rated highly by customers. However, service improvements should be directed toward indicators that still receive Neutral or Disagree responses, particularly the consistency between the services provided and those promised, the accuracy of order delivery, and employees' understanding of their respective responsibilities. Periodic training on service standards, communication, responsiveness, and order accuracy can be implemented to ensure that service quality is not only high on average but also experienced consistently by all customers.

## 2. Effect of Facilities on Customer Satisfaction at Luceo *Pool and Cafe* Malang

The partial test results indicate that facilities obtained a calculated t-value of 1.567, which is lower than the critical t-value of 1.989. The significance value of 0.121 is also greater than 0.05. Therefore,  $H_2$  is not supported and  $H_0$  fails to be rejected. These results indicate that facilities have not been shown to have a statistically significant effect on customer satisfaction after service quality and location are controlled for in the model.

Descriptively, the facilities variable obtained a *grand mean* of 3.9 and was categorized as “Agree.” This indicates that customers generally perceive the facilities at Luceo *Pool and Cafe* as reasonably good. The cleanliness of the area, room comfort, lighting, restrooms, and Wi-Fi quality received positive responses. However, several aspects, such as the condition of the billiards equipment and the adequacy of tables and chairs, received relatively lower ratings. These differences in assessments indicate that customers' experiences with the facilities are not entirely uniform. Some customers feel sufficiently comfortable, whereas others still encounter facilities that do not fully meet their needs. Under such conditions, facilities may be viewed as basic requirements that support customer activities but have not become a primary differentiating factor in shaping customer satisfaction.

From the perspective of EDT, the available facilities tend to have fulfilled customers' basic needs but may not necessarily have provided experiences that exceeded their expectations. This condition may explain why facilities received favorable descriptive assessments but did not demonstrate a statistically significant effect in the regression model. Nevertheless, whether customer expectations were met or exceeded cannot be determined directly because this study did not measure the discrepancy between customers' initial expectations and their actual perceptions of the facilities.

This finding is consistent with Kusumaningrum & Cornelia, (2026) who found that facilities did not have a significant effect on customer satisfaction. This finding should not be interpreted as indicating that facilities can be neglected. Facilities remain an integral part of the visiting experience; therefore, the maintenance of billiards equipment, adequate seating capacity, cleanliness, and room comfort should be consistently maintained.

However, the finding that facilities do not have a statistically significant effect does not imply that facilities can be disregarded. Facilities remain an integral component of the customer experience, particularly given the characteristics of Luceo as a business that combines billiards and cafe activities. Therefore, management should conduct regular inspections and maintenance of billiard tables and equipment, replace equipment that is no

longer fit for use, and evaluate the adequacy of tables and seating during periods of high customer volume. The cleanliness, lighting, room comfort, and Wi-Fi quality that have received positive assessments should also be consistently maintained.

### **3. Effect of Location on Customer Satisfaction at Luceo *Pool and Cafe* Malang**

The partial test results indicate that location obtained a calculated t-value of 4.179, which is greater than the critical t-value of 1.989. The significance value reported by SPSS is 0.000, which should preferably be reported statistically as  $p < 0.001$  and is therefore lower than 0.05. Accordingly,  $H_3$  is supported and  $H_0$  is rejected. These results demonstrate that location has a positive and statistically significant effect on customer satisfaction at Luceo *Pool and Cafe* Malang.

The descriptive results show that the location variable obtained a *grand mean* of 4.1 and was categorized as “Agree.” Customers perceived Luceo as relatively easy to find and access and located in a safe and comfortable environment. Such accessibility may reduce the time, effort, and perceived barriers experienced by customers when planning to visit the establishment. Therefore, location should not be understood merely as the physical position of a business but also as an integral component of the overall customer experience. Although the location received a favorable assessment, the indicator concerning parking availability had the lowest mean score, at 3.6. This finding indicates that the locational advantages of the establishment could be further strengthened through more orderly and user-friendly parking arrangements, particularly during peak visiting hours. Improvements in this aspect could help maintain a positive customer experience from the time customers arrive until they leave the establishment.

From the perspective of EDT, ease of access, visibility, and environmental comfort can be understood as aspects of location performance that correspond to customers' needs. When customers can reach the establishment without experiencing significant obstacles, such an experience may strengthen customer satisfaction. However, as with the other variables, the explanation concerning whether customer expectations were merely met or exceeded remains interpretative because this study did not directly measure the discrepancy between expectations and perceived location performance.

This finding is consistent with several previous studies, including Dahliani & Ahwal (2021); Winata, 2023); Sutarjo et al., (2024), which found that location significantly affects customer satisfaction. This consistency demonstrates that accessibility, visibility,

environmental safety, and supporting facilities associated with a location constitute important components of the customer experience when selecting and visiting a business establishment.

*Luceo* should maintain its existing locational advantages, particularly in terms of accessibility, visibility, safety, and environmental comfort. At the same time, management should pay greater attention to the parking area, which received the relatively lowest score among the location indicators. More orderly vehicle arrangements and improved parking management during peak hours could serve as practical measures to enhance customer convenience.

#### **4. Effect of Service Quality, Facilities, and Location on Customer Satisfaction at Luceo Pool and Cafe Malang**

The simultaneous test results show a calculated F-value of 25.422 with a significance value of 0.000, which is statistically reported as  $p < 0.001$ . This value is lower than 0.05; therefore,  $H_0$  is rejected and  $H_4$  is supported. This indicates that the model incorporating service quality, facilities, and location collectively explains a statistically significant proportion of the variation in customer satisfaction at Luceo Pool and Cafe Malang.

The F-test should be understood as an assessment of the overall significance of the regression model. The finding indicates that at least one independent variable contributes to explaining customer satisfaction. Based on the partial test results, location is the variable demonstrated to have a statistically significant effect, whereas service quality and facilities did not demonstrate statistically significant effects after all three variables were analyzed within the same model. Thus, the simultaneous significance of the model does not imply that every individual variable necessarily has a significant effect.

The R Square value of 0.482 indicates that 48.2% of the variance in customer satisfaction can be explained by service quality, facilities, and location in the research model. Meanwhile, the Adjusted R Square value of 0.463 indicates that, after adjusting for the number of independent variables and the sample size, the model explains 46.3% of the variance in customer satisfaction. The remaining 53.7% of the variance in customer satisfaction is not explained by the model. This unexplained proportion may be associated with other factors that were not examined in this study, such as price, food and beverage quality, atmosphere, promotional activities, customer experience, business image, and individual customer characteristics. However, this proportion should not be interpreted

entirely as the “effect of other variables,” as it may also include measurement error and other sources of variation outside the research model.

Overall, location is the only variable that was demonstrated to have a statistically significant partial effect on customer satisfaction. Meanwhile, service quality and facilities did not provide sufficiently strong unique statistical contributions when the effects of all three variables were controlled simultaneously. This does not mean that service quality and facilities are unimportant; rather, their unique effects could not be statistically demonstrated in the sample examined in this study.

For *Luceo Pool and Cafe*, these findings emphasize the importance of maintaining accessibility, visibility, environmental safety, and parking-area convenience. Service quality and facility conditions should also continue to be maintained because both constitute important components of the customer experience, even though they were not found to have statistically significant partial effects. Improvements should be directed toward indicators that received relatively lower assessments so that the overall visiting experience can be maintained and improved comprehensively.

Overall, the findings indicate that location is the variable with the strongest partial effect on customer satisfaction at Luceo Pool and Cafe Malang, whereas service quality and facilities did not demonstrate statistically significant partial effects. This condition indicates that customers' ease of reaching and accessing the establishment is more influential in differentiating levels of customer satisfaction than service quality and facilities when the three variables are examined simultaneously. However, the simultaneous test results demonstrate that the three variables still make a collective contribution to customer satisfaction. Therefore, the findings should not be interpreted as indicating that service quality and facilities are unimportant; rather, they suggest that the unique effects of these two variables were not sufficiently strong to be statistically demonstrated in the present sample.

These findings imply that strategies for improving customer satisfaction at Luceo should not focus exclusively on a single aspect. Management should maintain the advantages of its location, particularly accessibility, safety, and environmental comfort, while simultaneously improving the parking area, which received a relatively lower assessment. At the same time, service quality and facilities should be maintained and selectively improved, particularly on indicators that continue to receive relatively lower ratings. Such an approach is important because customer satisfaction represents an evaluation of the overall customer experience rather than merely the outcome of a single service component.

## CONCLUSION

This study demonstrates that service quality and facilities do not have statistically significant partial effects on customer satisfaction at Luceo Pool and Cafe Malang, whereas location has a positive and statistically significant effect on customer satisfaction. Location is the only variable demonstrated to have a significant partial effect in the model, indicating that accessibility, visibility, safety, and environmental comfort play important roles in shaping customer satisfaction. Simultaneously, service quality, facilities, and location have a statistically significant effect on customer satisfaction, with an *Adjusted R*<sup>2</sup> value of 0.463, indicating that the model explains 46.3% of the variance in customer satisfaction.

Theoretically, this study contributes to the development of customer satisfaction research in the billiards and cafe context by demonstrating that the effects of business attributes on customer satisfaction are not necessarily uniform. The finding that location has a significant effect, whereas service quality and facilities do not have significant partial effects, provides empirical evidence that the business context and characteristics of the customer experience should be considered when explaining the formation of customer satisfaction.

Future research is recommended to incorporate other variables that were not examined in the present study, such as price, food and beverage quality, atmosphere, promotional activities, customer experience, and brand image, and to employ larger and more diverse samples. Methodological developments, including longitudinal or *mixed-methods* approaches, are also recommended to obtain a more comprehensive understanding of the factors that shape customer satisfaction.

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