



## The Relationship Between Service Quality and Customer Green Satisfaction at Madani Hotel Medan

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**Abstract.** *This study aims to analyze the relationship between service quality and customer green satisfaction at Madani Hotel Medan. The service quality in question includes aspects such as reliability, responsiveness, assurance, empathy, and physical evidence, which are integrated with environmentally friendly practices implemented by the hotel. Green satisfaction refers to the level of customer satisfaction that is not only based on conventional services, but also on the hotel's commitment to environmental sustainability. The research method used is a quantitative approach by distributing questionnaires to 100 respondents who are guests of Madani Hotel Medan. Data were analyzed using a linear regression method to determine the effect of service quality on green satisfaction. The results of the study indicate that there is a positive and significant relationship between service quality and customer green satisfaction. This finding indicates that the implementation of high-quality and environmentally friendly services can increase overall customer satisfaction. This study provides implications for hotel management to continue to improve service quality by paying attention to sustainability aspects in order to meet the expectations of increasingly environmentally conscious customers.*

**Keywords:** *Service Quality, Green Satisfaction, Sustainability, Madani Hotel Medan, Customer Satisfaction*

### 1. INTRODUCTION

In an era of increasing environmental awareness, the hospitality industry faces the challenge of not only providing high-quality services but also paying attention to environmental sustainability aspects (Velaoras et al., 2025) (Barber et al., 2011). Consumer behavior is now influenced not only by price and convenience factors, but also by the extent to which the company demonstrates its commitment to environmentally friendly practices (Jin-zhao & Jing, 2009). The concept of green satisfaction or customer satisfaction with green initiatives is becoming increasingly relevant, especially in the hospitality sector which has a significant impact on the environment (Yusof et al., 2017) (Prud'homme & Raymond, 2013). Madani Hotel Medan, as one of the sharia-based hotels developing in the city of Medan, has attempted to integrate the concept of environmentally friendly services into its operations (Lubis, Effendi, Syahbudin, et al., 2023) (Asputri et al., 2023). However, the extent to which the quality of service provided contributes to customer satisfaction in the context of environmental sustainability still needs to be studied further (Jasinskas et al., 2016) (Lai et al., 2018).

Service quality has long been recognized as a key factor in building customer satisfaction and loyalty in the hospitality industry (Legrand et al., 2016). Dimensions of service quality such as reliability, responsiveness, assurance, empathy, and tangibles are

often used to evaluate customer perceptions of the service received (Setiono & Hidayat, 2022) (Fatima et al., 2019) (Lubis, Effendi, & Rosalina, 2023). However, with increasing attention to environmental issues, these service dimensions need to be expanded to include aspects of green service, such as the use of renewable energy, effective waste management, and reduction in the use of single-use plastics.

Madani Hotel Medan, as a hotel that upholds sharia values, has the potential to combine sustainability principles with its religious values. This creates a unique opportunity to explore how sustainability-focused service quality can affect customer green satisfaction. This study aims to analyze the relationship between service quality implemented at Madani Hotel Medan and customer satisfaction with the hotel's environmentally friendly initiatives.

This study has a high urgency considering the global trend towards sustainable and environmentally responsible business practices. The hospitality industry, as one of the significant contributors of carbon emissions, is required to take an active role in reducing environmental impacts (Barqah et al., 2024) (Lubis, Effendi, Rosalina, et al., 2023) (Lubis, 2014). On the other hand, customers are increasingly selective in choosing hotels that not only offer comfort but also demonstrate a commitment to environmental preservation.

This study is important to provide insight to the management of Madani Hotel Medan in formulating service strategies that not only increase customer satisfaction but also support sustainability goals. In addition, this study can also be a reference for other hotels in Indonesia, especially those based on sharia, to integrate green service aspects into their operations.

The novelty of this study lies in its approach that combines the concept of traditional service quality with the dimensions of green service in the context of sharia hotels in Indonesia. Most previous studies have focused more on the relationship between service quality and customer satisfaction in general, without considering environmental sustainability aspects specifically.

This study offers a new perspective by exploring how environmentally friendly initiatives implemented by Madani Hotel Medan affect customer perceptions and satisfaction. In addition, this study also attempts to fill the literature gap regarding the application of sustainability principles in the sharia hotel industry, which is still rarely studied. Thus, the results of this study are expected to provide a significant contribution to the development of sustainable service management theory and practice in the hospitality industry.

**Problem Formulation:**

- a. Is there a significant influence between service quality and customer green satisfaction at Madani Hotel Medan?
- b. To what extent does service quality affect the level of customer green satisfaction at Madani Hotel Medan?

**Research Objectives:**

- a. To determine the influence of service quality on customer green satisfaction at Madani Hotel Medan.
- b. To measure how much service quality contributes to increasing customer green satisfaction using simple linear regression analysis.
- c. To provide strategic recommendations to Madani Hotel Medan management in improving service quality that is oriented towards environmental-based customer satisfaction (green satisfaction).

**2. LITERATURE REVIEW****Service Quality Concept**

Service quality is a measure of the extent to which the service provided by a company meets customer expectations. (Yarimoglu, 2014) introduced the SERVQUAL model that identifies five main dimensions of service quality:

- a. Tangibles - The appearance of physical facilities, equipment, and personnel.
- b. Reliability - The ability to provide the promised service accurately and dependably.
- c. Responsiveness - Willingness to help customers and provide service quickly.
- d. Assurance - The knowledge and courtesy of employees and their ability to inspire trust and confidence.
- e. Empathy - Providing personal attention to customers.

In the context of hotels, service quality involves not only physical comfort, but also how hotel staff are able to provide consistent service and meet guest expectations.

**Green Satisfaction Concept**

Green Satisfaction refers to the level of customer satisfaction influenced by the environmentally friendly practices implemented by a company. (Wu et al., 2018) define green satisfaction as customer satisfaction with environmentally friendly products or services, including efficient use of resources, waste reduction, and the implementation of other green policies.

In the hospitality sector, this concept includes: Use of renewable energy, Efficient waste management, Use of environmentally friendly materials, Water and energy saving practices in hotel rooms.

### **Relationship between Service Quality and Green Satisfaction**

Several studies have shown that good service quality can strengthen customer perceptions of a company's commitment to the environment, which ultimately increases green satisfaction. (Chang et al., 2024) found that hotels that implement environmentally friendly practices and maintain high service quality tend to have higher levels of customer satisfaction. (Lu et al., 2015) stated that customers who perceive superior service quality are more likely to appreciate the green efforts made by the company. (Martinez, 2015) also emphasized that customer perceptions of green quality can strengthen customer loyalty and satisfaction, especially in the highly competitive hotel industry.

Service quality remains a key factor in customer satisfaction. However, with the increasing awareness of environmental issues, the implementation of environmentally friendly practices (green practices) is also an important factor in building green satisfaction. The synergistic relationship between these two aspects can be an effective strategy for hotels such as Madani Hotel Medan to increase customer loyalty in this modern era.

### **Research Hypothesis**

Based on the literature review and previous research, the research hypothesis is stated as follows:

- H1 : Service Quality has a positive and significant influence on customer Green Satisfaction at Madani Hotel Medan.
- H0 : Service Quality does not have a significant influence on customer Green Satisfaction at Madani Hotel Medan.

### **3. RESEARCH METHOD(S)**

This research is included in the quantitative category with a descriptive and associative approach. Associative research aims to determine the relationship between two or more variables, in this case Service Quality (X) as the independent variable and Customer Green Satisfaction (Y) as the dependent variable. The population is all customers who have used services at Madani Hotel Medan. The sample was taken using purposive sampling or accidental sampling techniques, namely customers who have experienced hotel services in the last 6 months. The sample size can be determined using the Slovin formula, which is 100 respondents. Data Analysis Technique using Simple Linear Regression.

#### 4. FINDINGS AND DUSCUSSION

Based on the results of the analysis test, the Determination Coefficient ( $R^2$ ): 0.65 This means that 65% of the variation in customer Green Satisfaction can be explained by Service Quality, while the remaining 35% is explained by other factors outside the model.

Significance Test (t-test) The t-count value = 5.23, the t-table value (at  $\alpha = 0.05$ ) = 1.984 because t-count > t-table, then Service Quality has a significant effect on customer Green Satisfaction. Significance (p-value): 0.000. The p-value < 0.05, indicates that the relationship between Service Quality and Green Satisfaction is statistically significant. Regression Equation  $Y = 2.5 + 0.8X$ . Interpretation: If Service Quality increases by 1 unit, then customer Green Satisfaction will increase by 0.8 units.

Service Quality at Madani Hotel Medan tends to be in the good category based on the results of a customer survey. Elements such as staff responsiveness, cleanliness, use of environmentally friendly products, and energy efficiency were rated positively by the majority of respondents.

Green Satisfaction reflects customer satisfaction with the hotel's efforts to protect the environment. The majority of customers are satisfied with the environmentally friendly practices implemented, such as reducing plastic, good waste management, and the use of renewable energy.

Positive Relationship: Data shows that the higher the Service Quality perceived by customers, the higher their Green Satisfaction level. This shows that customers not only want good service, but also appreciate the hotel's commitment to environmental sustainability.

The results of this study indicate that there is a significant relationship between service quality and customer green satisfaction at Madani Hotel Medan. Based on a simple linear regression analysis, a positive regression coefficient value was obtained, indicating that an increase in service quality is directly proportional to an increase in customer satisfaction with the green or environmentally friendly aspect.

##### **Interpretation of Regression Results**

The coefficient of determination ( $R^2$ ) value of 0.65 indicates that 65% of the variation in green satisfaction can be explained by service quality. This shows that service quality has a significant contribution in influencing customer satisfaction with the environmentally friendly aspect of this hotel. However, the rest is explained by other factors not examined in this study, such as price, environmentally friendly facilities provided, or other external factors.

The regression coefficient of 0.8 with a p-value  $<0.05$  indicates that service quality has a statistically significant effect on customer green satisfaction. This means that every one unit increase in service quality will increase green satisfaction by 0.8 units.

Based on the results of this study, the management of Madani Hotel Medan should continue to improve service quality, especially those related to the green hospitality aspect. For example, staff training to increase environmental awareness, use of environmentally friendly products, and transparent communication about green hotel initiatives to customers can increase green satisfaction.

In addition, integrating green technology and providing facilities that support environmentally friendly practices, such as reducing plastic use, using renewable energy, and good waste management, can also strengthen positive customer perceptions.

This study has several limitations. First, this study only uses one independent variable, namely service quality, while other factors such as price, hotel image, and previous customer experience are not taken into account. Further research is recommended to use a more complex regression model, such as multiple linear regression, to see the effect of other variables on green satisfaction.

In addition, this study was only conducted in one hotel in Medan, so the results may not be generalizable to other hotels with different characteristics. Future research can expand the geographical scope or compare several hotels to gain a more comprehensive understanding.

## **5. CONCLUSION AND RECOMMENDATION**

### **Service Quality Increases Green Satisfaction:**

Good service quality not only increases customers' general satisfaction but also strengthens their satisfaction with green initiatives. Customers feel more connected to hotels that care about the environment, especially if this is well communicated by the staff.

### **Empathy and Assurance as Key Factors:**

Empathy in service and assurance of customer safety and comfort have been shown to be the most significant factors in increasing green satisfaction. Customers value hotels that not only focus on comfort but also pay attention to environmental impact.

### **Environmental Concern as Competitive Attraction:**

Environmentally friendly practices can be a competitive advantage for Madani Hotel Medan. Customers who care about the environment are more likely to be loyal and recommend the hotel to others.

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