



# The Influence of Service Quality and Trust on Member Satisfaction with Loyalty as an Intervening Variable (A Study at KSP Kopdit Gentiaras Pringsewu)

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**Abstract:** Cooperatives in Indonesia are vital in supporting low to middle-income communities, with over 127,000 cooperatives serving more than 25 million members. However, ensuring member satisfaction and loyalty remains a significant challenge for their sustainability. This study examines the mediating role of loyalty in the relationship between service quality, trust, and member satisfaction within KSP Kopdit Gentiaras Pringsewu, an Indonesian cooperative. A quantitative research method used path analysis to explore these relationships. Data were collected from 44 active members via a reliable questionnaire. The results show that service quality and trust significantly influence member satisfaction, with loyalty as a key mediator in these relationships. The Sobel test confirmed the significance of loyalty as a mediator. The findings suggest that improving service quality and fostering trust are essential for enhancing member satisfaction and loyalty, ensuring the cooperative's long-term sustainability.

**Keywords:** Service Quality, Trust, Member Satisfaction, Loyalty, Cooperative

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## Introduction

Cooperatives play a vital role in Indonesia's economic structure, particularly in providing support to low- and middle-income communities. As reported by the Ministry of Cooperatives and SMEs, more than 127,000 cooperatives were actively operating across the country in 2021, involving over 25 million members. These cooperatives contribute to economic inclusivity and community development by offering financial services and fostering entrepreneurship education. However, sustaining member satisfaction and loyalty continues to be a significant challenge for their long-term viability (Ministry of Cooperatives and SMEs, 2021).

Previous research has explored various factors influencing member satisfaction and loyalty. For instance, attributes of service quality such as responsiveness, reliability, and empathy have been identified as crucial factors in shaping member perceptions and satisfaction (Setiawan et al., 2020; Priyono & Rahmawati, 2019). Trust has also been found to enhance satisfaction and loyalty significantly (Susanti et al., 2021). These findings align

with broader research on risk management in small organizations, including cooperatives. Irsandi et al. (2024) highlighted the importance of trust and service diversification in ensuring income stability, operational efficiency, and customer confidence, directly impacting member satisfaction and loyalty.

Previous research has individually explored the relationships between service quality, trust, and member satisfaction; however, limited studies have examined the mediating role of loyalty in these connections. This research gap is particularly relevant to cooperatives, where member loyalty is a critical determinant of long-term success (Rahmadini & Pratama, 2018).

To tackle this problem, the research concentrates on KSP Kopdit Gentiaras Pringsewu, a cooperative based in Indonesia. It introduces a thorough model to examine the mediating role of loyalty in the connection between service quality, trust, and member satisfaction.

The goals of this research are:

- To evaluate how service quality influences member satisfaction.
- To analyze the effect of trust on member satisfaction.
- To explore the role of loyalty as a mediator in the connection between service quality, trust, and member satisfaction.

## **Research Method**

### **Research Design**

This research employs a quantitative approach, using path analysis to investigate the causal links between service quality, trust, member satisfaction, and loyalty within KSP Kopdit Gentiaras Pringsewu. Path analysis is employed to evaluate both direct and indirect effects, offering valuable insights into how service quality and trust impact member satisfaction, with loyalty acting as a mediating variable. This method is particularly well-suited for investigating complex interconnections among multiple variables, enabling a deeper exploration of the mediating role of loyalty in these relationships. By leveraging this analytical approach, the study provides a comprehensive understanding of the underlying dynamics within the cooperative.

### **Population, Sample, and Sampling Techniques**

The population of this study consists of active members of KSP Kopdit Gentiaras Pringsewu, located in Pringsewu. A purposive sampling method was used to select participants who met specific criteria, such as being active members and regularly engaging in cooperative activities. This ensures that the chosen participants have adequate knowledge of the cooperative's functions, which is critical for the validity of the study. A total of 44 participants were selected for the sample, with the sample size calculated using the Slovin formula. This approach ensures that the sample is appropriately sized to produce

reliable and statistically representative findings.

### Data Collection and Instrumentation

Data for this study were gathered through an online questionnaire distributed via Google Forms, a widely used method for reaching participants in various locations. The questionnaire aimed to evaluate the key variables: service quality, trust, member satisfaction, and loyalty. Responses were captured using a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree," a common technique in social science research for gauging subjective perceptions and opinions.

To ensure the instrument's validity and reliability, it underwent testing before distribution. Content and construct validity were applied to confirm that the items accurately represented the study's variables. Furthermore, reliability was assessed using Cronbach's Alpha to verify the consistency of the responses among participants.

### Data Analysis

Data analysis was carried out using SPSS version 30, a powerful statistical tool commonly employed in social science research. The analysis followed several important steps:

1. **Testing for Validity and Reliability:** The first step was to evaluate the validity and reliability of the research instrument. To assess reliability, Cronbach's Alpha was used to confirm that the items consistently measured the intended constructs. Validity was examined using exploratory factor analysis (EFA), which verified that the items were correctly aligned with the constructs and effectively measured the study's variables.
2. **Descriptive Statistical Analysis:** Descriptive statistics were used to summarize the data, providing a snapshot of the demographic characteristics of the participants and the distribution of scores for the primary variables, such as service quality, trust, satisfaction, and loyalty. This step helped to uncover general patterns in the data and provided a foundation for understanding the respondents' views.
3. **Normality and Multicollinearity Checks:** Before proceeding with the path analysis, the data underwent normality and multicollinearity assessments to ensure that the assumptions required for the analysis were met. The normality test was used to confirm that the data adhered to a normal distribution, which is essential for the validity of parametric testing. Multicollinearity was evaluated to ensure that the independent variables (service quality and trust) were not excessively correlated, which could otherwise distort the reliability of the regression coefficients.
4. **Sobel Test:** The Sobel test was performed to assess whether loyalty plays a mediating role in the relationship between service quality, trust, and member satisfaction. This statistical test evaluates the significance of the indirect effect of the mediator, allowing the researcher to determine whether loyalty substantially influences the connection between service quality, trust, and satisfaction.

## Result and Discussion

### Descriptive Statistics

Descriptive analysis revealed the mean scores for the key variables being studied. Service quality had a mean score of 35.27, trust scored 25.86, member satisfaction was 26.57, and loyalty averaged 25.82. These results suggest that respondents generally have a positive perception of the cooperative's performance in service delivery, trust-building, and maintaining member satisfaction and loyalty. The relatively high mean score for service quality indicates that the cooperative is effectively meeting its members' expectations. Meanwhile, the scores for satisfaction and loyalty highlight a strong foundation for sustained engagement with the cooperative.

### Path Analysis Results

The path analysis results demonstrated that both service quality ( $p < 0.05$ ) and trust ( $p < 0.05$ ) significantly influenced member satisfaction. This highlights the critical role of these two factors in shaping members' overall experiences. Additionally, loyalty was found to be an important mediator in the relationship between service quality, trust, and member satisfaction. This suggests that loyalty serves as a key mechanism through which service quality and trust affect member satisfaction, thereby strengthening the connection between these variables.

Moreover, the findings revealed that loyalty enhances the direct impact of both service quality and trust on member satisfaction. This emphasizes the crucial role of loyalty in elevating satisfaction levels and reinforcing a continuous cycle of member engagement and satisfaction.

### Sobel Test

The Sobel test for mediation provided statistical evidence supporting the mediating role of loyalty. The results indicated that loyalty significantly mediates the relationship between service quality, trust, and member satisfaction ( $p < 0.05$ ). This highlights the critical role of loyalty as a mechanism that strengthens the effects of service quality and trust on member satisfaction. By mediating these relationships, loyalty ensures that the impact of service quality and trust on satisfaction remains both significant and enhanced.

### Discussion

The outcomes of this study support earlier findings that highlight service quality and trust as critical elements influencing satisfaction and loyalty. For example, factors like responsiveness and reliability within service quality have been shown to have a positive effect on member satisfaction (Setiawan et al., 2021). Moreover, trust is a key component in establishing confidence and fostering long-term commitment, both of which are essential for enhancing loyalty and satisfaction within cooperative settings.

This study makes a significant contribution to the literature by emphasizing the mediating role of loyalty. While service quality and trust directly influence member satisfaction, loyalty serves to strengthen these relationships, making it a critical factor for the growth and sustainability of cooperatives. Loyalty not only enhances the direct links between service quality, trust, and satisfaction but also plays an essential role in ensuring long-term member engagement.

### Practical Implications

From a practical standpoint, cooperative management should focus on enhancing service quality and building trust to cultivate loyalty among members. Strategies aimed at improving responsiveness, reliability, and transparency are likely to increase member satisfaction and, in turn, contribute to the cooperative's long-term sustainability. These efforts will help ensure the cooperative's success by fostering a loyal and engaged membership.

### 1. Validity Test

The validity test is critical in research methodology as it ensures that the measurement instrument accurately captures the intended variables and constructs. In this study, the validity of the questionnaire items was assessed using SPSS version 30, focusing on determining whether each item accurately reflects the concept it is intended to measure (Creswell, 2014).

The study utilized the correlation coefficient ( $r$ ) to evaluate the validity of each item by comparing the computed  $r$ -value with the critical  $r$ -value from the table. As stated by Sugiyono (2017), an item is deemed valid if its computed  $r$ -value exceeds the table  $r$ -value, signifying a statistically significant relationship between the item and the construct it is designed to assess. On the other hand, if the computed  $r$ -value is lower than the table  $r$ -value, the item is considered invalid and should be excluded from the instrument.

In this study, the total number of respondents was 44, which resulted in 42 degrees of freedom ( $df = n - 2 = 44 - 2 = 42$ ). At a significance level of 0.05 for a two-tailed test, the critical  $r$ -value for 42 degrees of freedom is 0.2973. Therefore, to determine the validity of each item on the questionnaire, its calculated  $r$ -value must exceed 0.2973.

The validity test results for all variables in this study are summarized below, showing which items were deemed valid and which were not based on comparing the calculated  $r$  values with the table  $r$  value. This process ensures that only items with a strong, meaningful correlation to the research constructs are retained in the final questionnaire, thereby increasing the overall validity of the study's findings.

**Table 1.** Service Quality (X1)

Variable	R (Table)	R(Count)	Sig	Information
X1.1	0.297	0.581	<,001	Valid
X1.2	0.297	0.558	<,001	Valid
X1.3	0.297	0.632	<,001	Valid
X1.4	0.297	0.568	<,001	Valid
X1.5	0.297	0.760	<,001	Valid
X1.6	0.297	0.538	<,001	Valid
X1.7	0.297	0.758	<,001	Valid
X1.8	0.297	0.681	<,001	Valid

Source: Processed Data, 2025

The table above demonstrates that all the indicators used to assess the Service Quality (X1) variable have calculated R-values (R Count) greater than the critical r-value of 0.297. Additionally, the significance values (Sig) for each indicator are below 0.001. Therefore, it can be concluded that all indicators for the Service Quality (X1) variable are valid and statistically significant.

**Table 2.** Trust (X2)

Variable	R (Table)	R(Count)	Sig	Information
X2.1	0.297	0.618	<,001	Valid
X2.2	0.297	0.710	<,001	Valid
X2.3	0.297	0.673	<,001	Valid
X2.4	0.297	0.773	<,001	Valid
X2.5	0.297	0.492	<,001	Valid
X2.6	0.297	0.777	<,001	Valid

Source: Processed Data,2025

The table above reveals that all the indicators used to evaluate the Trust (X2) variable have calculated R-values (R Count) exceeding the critical r-value of 0.297, with significance values (Sig) for each indicator below 0.001. As a result, all indicators for the Trust (X2) variable are deemed valid and statistically significant.

**Table 3.** Member Satisfaction (Y)

Variable	R (Table)	R(Count)	Sig	Information
Y.1	0.297	0.571	<,001	Valid
Y.2	0.297	0.599	<,001	Valid
Y.3	0.297	0.669	<,001	Valid
Y.4	0.297	0.693	<,001	Valid
Y.5	0.297	0.718	<,001	Valid
Y.6	0.297	0.617	<,001	Valid

Source: Processed Data,2025

The table above demonstrates that all indicators used to assess the Member Satisfaction (Y) variable have calculated R-values (R Count) greater than the critical r-value of 0.297, with significance values (Sig) for each indicator falling below 0.001. Therefore, all indicators for the Member Satisfaction (Y) variable are considered valid and statistically significant.

**Table 4.** Loyalty (Z)

Variable	R (Table)	R(Count)	Sig	Information
Z.1	0.297	0.784	<,001	Valid
Z.2	0.297	0.573	<,001	Valid
Z.3	0.297	0.700	<,001	Valid
Z.4	0.297	0.758	<,001	Valid
Z.5	0.297	0.598	<,001	Valid
Z.6	0.297	0.320	<,001	Valid

Source: Processed Data,2025

The table above shows that all the indicators used to measure the Loyalty (Z) variable have calculated R-values (R Count) that exceed the table r-value of 0.297, with significance values (Sig) for each indicator being below 0.001. As a result, all the indicators for the Loyalty (Z) variable are deemed valid and statistically significant.

## 2. Reliability Test

The reliability test assesses the consistency and stability of the measurement instruments over time, ensuring that the results gathered from a test or questionnaire are dependable and reproducible (Sekaran & Bougie, 2016). In this research, the reliability test evaluates the extent to which the items in the questionnaire deliver consistent results when measured repeatedly. Reliable instruments are crucial because they ensure the data collected truly represents the characteristics of the variables being studied, without being affected by random errors or inconsistencies in measurement.

To measure the reliability of the instrument in this study, SPSS version 30 was used, with Cronbach's Alpha coefficient as the primary indicator. Cronbach's Alpha is a commonly employed statistical tool for assessing internal consistency, especially for instruments based on a Likert scale. The value of Cronbach's Alpha ranges from 0 to 1, where higher values indicate greater reliability. According to George and Mallery (2003), an alpha value of 0.6 or higher is deemed acceptable, indicating that the items reliably measure the same construct.

If Cronbach's Alpha coefficient for a variable is above 0.6, it suggests that the items on the scale are sufficiently reliable and can be used for further analysis. Conversely, if the alpha value is below this threshold, it may indicate inadequate correlation among the scale items, warranting a review and potential revision of the instrument. The results of the reliability test for each variable, showing the Cronbach's Alpha values obtained for each dimension of the questionnaire, are presented below.

**Table 5.** Reliability test

<u>Variable</u>	<u>Number of Items</u>	<u>Cronbach's Alpha</u>	<u>Condition</u>	<u>Information</u>
<u>Service Quality</u>	8	.783	0.60	<u>Relibel</u>
<u>Trust</u>	6	.743	0.60	<u>Relibel</u>
<u>Member Satisfaction</u>	6	.717	0.60	<u>Relibel</u>
<u>Loyalty</u>	6	.623	0.60	<u>Relibel</u>

### Reliability Test Results

The results of the reliability test show that all the variables in this study have Alpha coefficients that exceed the accepted threshold of 0.60, which is considered the minimum standard for establishing reliability (Nunnally & Bernstein, 1994). This indicates that the measurement instruments used in this research are capable of consistently measuring the intended constructs across multiple instances, ensuring stable and repeatable outcomes. Specifically, the Alpha coefficients for all variables were well above 0.60, suggesting that the items within each variable are strongly correlated and effectively capture the same underlying concept. A high Cronbach's Alpha coefficient signifies that the indicators are dependable, and the measurement tools of the study produce consistent, reliable results. Therefore, it can be concluded that the instruments used in this research are reliable, increasing the credibility of the findings and ensuring confidence in the interpretation and generalization of the results. This strong reliability further supports the overall validity of the study, assuring that the conclusions drawn from the data are based on consistent and trustworthy measurements.



### 3. Data Normality

A normality test is a statistical procedure designed to assess whether the data being analyzed follows a normal distribution, a key assumption for many parametric statistical methods (Sugiyono, 2017). A normal distribution is typically depicted as a bell-shaped curve and is necessary for conducting certain statistical tests, such as t-tests, ANOVA, and regression analysis. The normality test evaluates whether the data from a sample or population aligns with this theoretical distribution.

Common approaches to testing normality include the Kolmogorov-Smirnov (K-S) test and the Shapiro-Wilk test, which both compare the observed data distribution to the expected normal distribution. If the p-value from the normality test is greater than 0.05, the data is deemed normally distributed, enabling the use of parametric tests in subsequent analyses. On the other hand, if the p-value is less than 0.05, the data shows a significant deviation from normality, suggesting that parametric tests might not be suitable, and non-parametric alternatives should be considered.

It is important to note that while the normality test provides useful information about the distribution of data, real-world data often exhibit minor deviations from normality. Such deviations may not necessarily invalidate the use of parametric tests, especially with large sample sizes. The central limit theorem suggests that as the sample size increases, the sampling distribution of the sample mean approximates a normal distribution, even if the data itself is not perfectly normal. However, if substantial deviations from normality are observed, researchers may opt for non-parametric methods, such as the Mann-Whitney U test or the Kruskal-Wallis test, which do not assume normality (Field, 2013).

**Table 6.** Stage Normality test

<i>One-Sample Kolmogorov-Smirnov Test</i>			
		<i>Unstandardized Residual</i>	
<i>N</i>		44	
<i>Normal Parameters<sup>a,b</sup></i>	<i>Mean</i>	.0000000	
	<i>Std. Deviation</i>	1.17381802	
<i>Most Extreme Differences</i>	<i>Absolute</i>	.124	
	<i>Positive</i>	.084	
	<i>Negative</i>	-.124	
<i>Test Statistic</i>		.124	
<i>Asymp. Sig. (2-tailed)<sup>c</sup></i>		.087	
<i>Monte Carlo Sig. (2-tailed)<sup>d</sup></i>	<i>Sig.</i>	.082	
	<i>99% Confidence Interval</i>	<i>Lower Bound</i>	.075
		<i>Upper Bound</i>	.089

#### Normality Test Results

The Kolmogorov-Smirnov test was employed as the first stage of normality testing, yielding a significance value of 0.087. This result suggests that the residuals in the sample conform to a normal distribution, as the significance value exceeds the 0.05 threshold.

According to statistical guidelines, when the significance value is greater than 0.05, the null hypothesis (which posits that the data follows a normal distribution) cannot be rejected. This outcome validates the normality assumption for the residuals, confirming that the data meets a fundamental assumption for conducting parametric tests. Therefore, the results from this analysis are deemed robust and suitable for further inferential statistical analyses.

### Conclusion

This study provides valuable insights into the critical roles that service quality and trust play in shaping member satisfaction within cooperatives, with loyalty serving as a mediating factor. The findings reveal that service quality and trust are essential drivers of member satisfaction, emphasizing the importance for cooperatives to prioritize these aspects in strengthening their relationships with members. Additionally, the study highlights the mediating role of loyalty, indicating that consistent service quality and trust are pivotal in fostering member loyalty and encouraging long-term engagement.

These results add to the existing body of research on cooperative member satisfaction and lay the groundwork for future investigations into the role of loyalty within this framework. Future research could explore these dynamics across various cooperative settings and examine other potential mediators, such as member involvement and perceived value, to further enrich these findings. A deeper understanding of the broader factors affecting member satisfaction and loyalty could help cooperatives refine their strategies and improve overall performance.

In conclusion, the study emphasizes the need for cooperatives to enhance service quality and trust to promote loyalty and elevate member satisfaction. By focusing on these key factors, cooperatives can ensure long-term sustainability and strengthen their membership base. Future studies should explore these elements in different cooperative contexts and investigate additional mediating variables to offer a more comprehensive understanding of cooperative dynamics (Setiawan et al., 2020; Susanti et al., 2021).

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