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The Influence of Facility Maintenance and Service Quality on Student Satisfaction on Trans Padang Bus Corridor 1

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Abstract

Bus Trans Padang Corridor 1 serves as a primary mode of public transportation for students in Padang City; however, social media observations from August to December 2025 revealed persistent complaints regarding facility conditions and service performance, indicating a gap between user expectations and perceived service delivery. This study examines the effects of facility maintenance and service quality on student satisfaction with Bus Trans Padang Corridor 1. A quantitative associative-causal design was employed, involving 97 junior and senior high school students selected through accidental sampling. Data were collected using a closed-ended questionnaire measured on a five-point Likert scale and analyzed through multiple linear regression using SPSS 20. The findings indicate that facility maintenance significantly affects student satisfaction ($t = 9.067$, $p < .001$, $R^2 = .464$), while service quality also exerts a significant effect ($t = 12.879$, $p < .001$, $R^2 = .636$). Simultaneously, facility maintenance and service quality significantly explain 66.6% of the variance in student satisfaction ($F = 96.651$, $p < .001$, adjusted $R^2 = .666$), as represented by the regression equation $Y = -5.830 + 0.415X_1 + 0.492X_2$. These findings support the Expectation-Disconfirmation Theory and are consistent with the P-

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Transqual and SERVQUAL frameworks, demonstrating that student satisfaction is shaped by both the physical reliability of transportation facilities and the quality of service delivery. The study contributes empirical evidence on student satisfaction in urban public transportation and underscores the need for Perumda PSM and the Padang City Transportation Agency to integrate facility maintenance and service-quality improvements to enhance the performance of Bus Trans Padang Corridor 1.

Keywords: Bus Trans Padang; Facility Maintenance; Public Transportation; Service Quality; Student Satisfaction

INTRODUCTION

Public transportation is a fundamental component of urban systems that plays an important role in supporting community mobility and sustaining regional social and economic activity, as a well-managed public transportation system serves not only as a means of mobility but also as an indicator of local government success in delivering quality public services (Vuchic, 2017). In the urban context, effective public transportation can help reduce traffic congestion, curb air pollution, and improve the efficiency of urban space use (Litman, 2020), making the development of public transportation an important instrument in supporting sustainable and inclusive urban development (Banister, 2008). As the capital of West Sumatra Province, Padang City has responded to this need by developing the Bus Trans Padang service as a modern public transportation solution based on Bus Rapid Transit (BRT), the operational management of which was transferred to the Regional Public Company (Perumda) Padang Sejahtera Mandiri (PSM) starting in January 2021. Corridor 1, which connects the City Center to the City Boundary over approximately 19 kilometers, is the main corridor with high usage intensity, demographically dominated by junior and senior high school students subject to a special fare of IDR 1,500, making the sustainability of the service for this user segment a genuine and relevant social issue for further study.

User satisfaction is a key factor influencing the public's decision to continue using public transportation. According to Oliver, satisfaction assessment is influenced not only by the technical aspects of service but also by emotional and psychological dimensions in evaluating service quality, while dissatisfied users tend to switch to other transportation modes, which ultimately worsens congestion conditions and diminishes public trust in local government performance (Van Ryzin, 2006; Redman et al., 2023). Theoretically, user

satisfaction is explained by the Expectation-Disconfirmation Theory (EDT) proposed by (Oliver, 1980), in which satisfaction is determined by comparing users' initial expectations with their actual perceptions of service performance. Two main factors theoretically influencing public-transportation user satisfaction are facility maintenance and service quality; (Eboli & Mazzulla, 2011) state that suboptimally maintained facility conditions can reduce user comfort and safety, which in this study is measured through two indicators of (Bakti, 2015) P-Transqual model tangibles and comfort while (Parasuraman et al., 1988), through the SERVQUAL model, explain that service quality is measured through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles.

Preliminary observations through social media monitoring during the August–December 2025 period indicated a gap between user expectations and the actual service received, encompassing complaints regarding the physical condition of the fleet, the functioning of air-conditioning facilities, punctuality, and staff attitudes, a phenomenon consistent with the prediction of the Expectation-Disconfirmation Theory that discrepancies between expectations and actual perceptions of service significantly affect user satisfaction levels. Various prior studies have examined Bus Trans Padang user satisfaction, including the effect of facilities and service on general customer satisfaction (Masrin & Hasibuan, 2019), the effect of service quality and fare on passenger satisfaction (Anggraini & Rahmidani, 2019), and the effect of service quality on passenger satisfaction within the general population (Nasution, 2021). However, these studies have not specifically targeted junior and senior high school students as a captive user segment eligible for special fares, nor have they simultaneously integrated the P-Transqual model with SERVQUAL within a single analytical framework. This research gap, reinforced by the actual complaint phenomenon on Corridor 1, underscores the urgency of this study.

Based on this literature gap and empirical phenomenon, the present study aims to analyze and determine the effects of facility maintenance and service quality, both individually and jointly, on student satisfaction with the use of the Bus Trans Padang Corridor 1. Achieving this objective is important because understanding the relative contribution of these two factors will provide a foundation for Perumda PSM and the Padang City Transportation Agency to formulate well-targeted service-improvement strategies for the student segment. To this end, the study employs a quantitative associative-causal approach involving 97 junior and senior high school students selected through accidental sampling, with the sample size calculated using the Lemeshow formula (Lemeshow et al.,

1997), and analyzes the data using multiple linear regression in SPSS version 20. Through this approach, the study is expected to produce a comprehensive empirical picture of the determinants of student satisfaction with BRT-based public transportation services, while complementing previous studies that remain largely general.

This study argues that an integrated improvement in facility maintenance and service quality will significantly enhance student satisfaction, as both shape users' actual perceptions, which are compared against their initial expectations as explained by the Expectation-Disconfirmation Theory Oliver. This logic is supported by the findings of (Masrin & Hasibuan, 2019), which show that facilities positively affect Bus Trans Padang customer satisfaction, as well as by (Anggraini & Rahmidani, 2019; Susanti, 2025; Nasution, 2021), which demonstrate a significant effect of service quality on passenger satisfaction. Based on this argument, the study proposes three hypotheses: facility maintenance has a positive and significant effect on student satisfaction (H1); service quality has a positive and significant effect on student satisfaction (H2); and facility maintenance and service quality simultaneously have a positive and significant effect on student satisfaction (H3).

Further research into the satisfaction of the student segment as captive users of BRT-based public transportation is urgent, given that junior and senior high school students constitute a special-fare user group dependent on this service for their daily mobility, and that emerging complaints may drive them toward less safe alternative transportation modes. The novelty of this study lies in the integration of facility-maintenance indicators based on the P-Transqual model (Bakti, 2015) with the five service-quality dimensions of the SERVQUAL model (Parasuraman et al., 1988), within the specific context of junior and senior high school student satisfaction as users of Bus Trans Padang Corridor 1, a special-fare captive user segment that has not been widely explored in the BRT-based public transportation literature in Indonesia. Academically, this study enriches the public administration and transportation service management literature with empirical evidence on the relationship between facility maintenance, service quality, and student user satisfaction; practically, the findings are expected to serve as recommendations for Perumda PSM and the Padang City Transportation Agency in optimizing the facility maintenance and service quality of Bus Trans Padang Corridor 1. The purpose of this study is to analyze the influence of facility maintenance (X_1) and service quality (X_2) on the satisfaction (Y) of students using the Bus Trans Padang Corridor 1.

METHODS

The unit of analysis in this study is junior and senior high school students who use the Bus Trans Padang Corridor 1, which connects the City Center to the boundary of Padang City over approximately 19 kilometers. This individual-level unit of analysis was chosen because perceptions of facility maintenance, service quality, and satisfaction are constructs inherent to each student's direct experience when using the service. The material object of this study comprises two independent variables facility maintenance (X1), measured using two indicators from Bakti's (2015) P-Transqual model, namely tangibles and comfort, and service quality (X2), measured using the five SERVQUAL dimensions of Parasuraman, namely reliability, responsiveness, assurance, empathy, and service tangibles and one dependent variable, student satisfaction (Y), measured using three indicators: confirmation of expectations, comfort and safety, and overall satisfaction with the service. These three variables served as the primary reference for designing the research instrument and determining the research design.

This research was conducted over a period of six months, from January to June 2026. To examine the relationship between these variables, this study employs a quantitative approach using an associative-causal technique to determine the cause-and-effect relationship between the independent and dependent variables (Sugiyono, 2021). This approach was chosen because the study intends to empirically and objectively test the effects of facility maintenance and service quality, both individually and jointly, on student satisfaction, thereby requiring numerical data that can be statistically processed to yield measurable conclusions. The research location was set along the Corridor 1 route of Bus Trans Padang (Pasar Raya Padang–Lubuk Buaya), Padang City, West Sumatra Province. With this associative-causal design, the cause-and-effect relationships between variables can be systematically tested through inferential statistical procedures, ensuring that the resulting findings have a robust evidentiary basis before being further interpreted in the subsequent stages of determining the population and sample.

The population of this study consists of all junior and senior high school students who use the Bus Trans Padang Corridor 1, treated as an infinite population because no official data on the number of users is available. Given that the exact size of the population is unknown, the sample size was determined using the Lemeshow formula with a 95% confidence level and a 10% margin of error, yielding a minimum sample of 97 respondents.

The sampling technique employed was non-probability sampling using an accidental sampling approach, that is, incidentally selecting students who met the following criteria: enrolled as junior or senior high school students, active users of Bus Trans Padang Corridor 1 at least 3 times within the past 3 months, and residing or attending school in Padang City. This technique was chosen for its efficiency in time and research costs, given that the population's characteristics could not be fully identified; this sample size subsequently formed the basis for designing the instrument and procedures for primary data collection in the field.

Primary data were collected through a closed-ended questionnaire using a five-point Likert scale consisting of 30 statement items (6 items for X1, 15 items for X2, 9 items for Y). In addition, respondents' demographic characteristics, including age, gender, level of education, and frequency of service use, were also collected to enrich the interpretation of the research results. Validity testing was conducted on 30 respondents outside the sample, and all items were found to be valid (calculated r > r-table = 0.361). Reliability testing yielded Cronbach's Alpha coefficients of 0.748 for X1, 0.873 for X2, and 0.874 for Y, so that all instruments were deemed reliable. This validity and reliability testing process was essential to ensure that the collected data accurately reflected the constructs under study before further processing during the data analysis stage.

Data analysis was conducted through several stages: descriptive analysis of respondent characteristics and the Respondent Achievement Level (TCR); classical assumption tests comprising normality (Kolmogorov-Smirnov), linearity, heteroscedasticity (Spearman's rho), autocorrelation (Durbin-Watson), and multicollinearity (VIF) tests; multiple linear regression analysis; and hypothesis testing through the t-test (partial), F-test (simultaneous), and coefficient of determination (R^2), all at a significance level of $\alpha = 0.05$. All analyses were conducted using SPSS version 20. This sequence of data-analysis procedures was arranged systematically to ensure that the resulting hypothesis-testing outcomes were valid, reliable, and methodologically defensible.

RESULTS

1. Demographic Characteristics of Respondents

The demographic profile of respondents provides important context for interpreting the research results, as factors such as age, gender, level of education, and intensity of service use can influence perceptions of facility maintenance, service quality, and satisfaction. The characteristics of the respondents are presented in Figure 1.

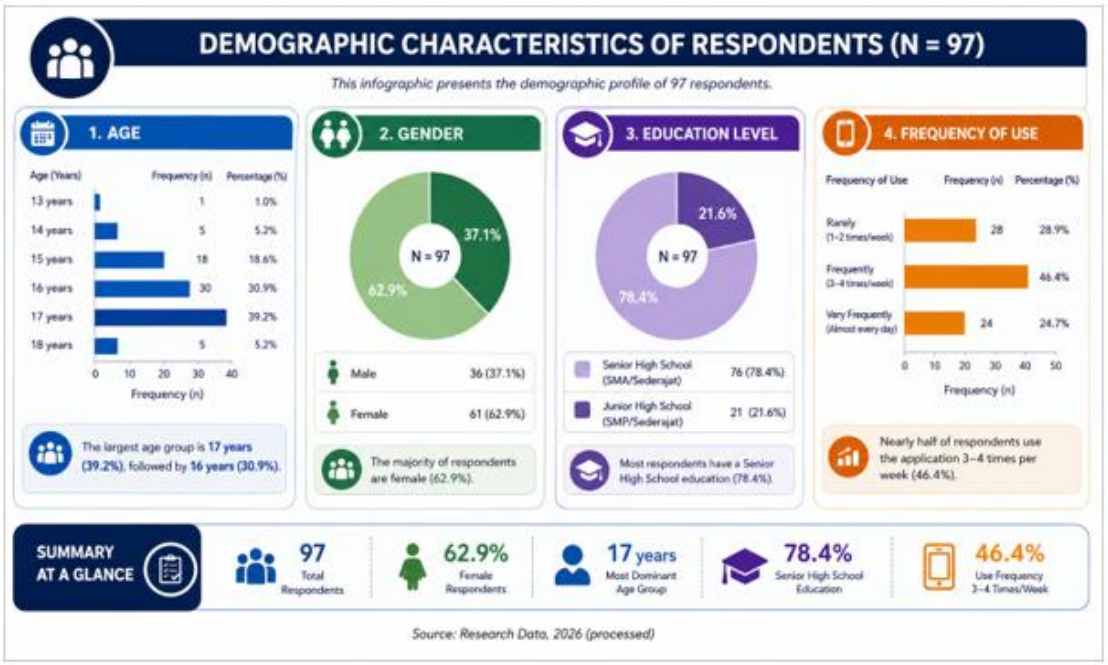


Figure 1. Infographic of Respondent Characteristics

Source: Processed data, 2026.

As shown in Figure 1, the majority of respondents were 17 years old (39.2%), followed by the 16-year-olds (30.9%) and 15-year-olds (18.6%), indicating that respondents were predominantly senior-level high school students. In terms of gender, respondents were predominantly female (62.9%) compared to male (37.1%). By level of education, the majority of respondents were from senior high school/equivalent (78.4%), while the remainder were from junior high school/equivalent (21.6%). In terms of usage frequency, most respondents were frequent users, with an intensity of 3–4 times per week (46.4%), followed by the rare-use category (28.9%) and very frequent, almost-daily use (24.7%). This profile indicates that the majority of respondents were regular users with sufficient experience to assess facility maintenance, service quality, and satisfaction with the Bus Trans Padang Corridor 1 service, thereby allowing the descriptive results for the three main research variables to be interpreted more contextually in the following section.

2. Description of Research Variables

The results of the descriptive analysis using the Respondent Achievement Level (TCR) for the three research variables are presented in Tables 1, 2, and 3.

Table 1. Description of TCR for the Facility Maintenance Variable (X_1)

Indicator	Mean	TCR (%)	Category
Tangibles	2.93	58.63	Moderate
Comfort	2.82	56.49	Moderate
Average Facility Maintenance	2.88	57.56	Moderate

Source: Processed data results, 2026.

As shown in Table 1, the average facility-maintenance score falls into the moderate category, with a mean of 2.88 and a TCR of 57.56%. The tangibles indicator obtained a TCR of 58.63%, and the comfort indicator obtained a TCR of 56.49%, both in the moderate category. This indicates that the condition of the bus fleet and shelters, such as interior cleanliness, seat condition, and air-conditioning functionality, has not yet fully met students' expectations; this finding therefore needs to be examined alongside the service-quality results discussed below.

Table 2. Description of TCR for the Service Quality Variable (X_2)

Indicator	Mean	TCR (%)	Category
Reliability	2.90	58.0	Moderate
Responsiveness	3.64	64.9	Moderate
Assurance	3.07	57.3	Moderate
Empathy	3.03	63.3	Moderate
Tangibles	3.40	68.0	Good
Average Service Quality	3.20	62.3	Moderate

Source: Processed data results, 2026.

As shown in Table 2, the average service-quality score is moderate, with a mean of 3.20 and a TCR of 62.3%. The tangibles dimension obtained the highest score, at 68.0% (good category), while the assurance dimension obtained the lowest score, at 57.3% (moderate category), indicating that staff members' ability to instill a sense of safety and trust among students still needs considerable improvement. Given that both independent variables fall into the moderate category, this is presumed to jointly shape the pattern of student satisfaction discussed in the following section.

Table 3. Description of TCR for the Student Satisfaction Variable (Y)

Indicator	Mean	TCR (%)	Category
Confirmation of Expectations	2.93	52.0	Moderate
Comfort and Safety	2.77	55.3	Moderate
Overall Service Satisfaction	2.74	54.8	Moderate
Average Student Satisfaction	2.81	54.1	Moderate

Source: Processed data results, 2026.

As shown in Table 3, the average student-satisfaction score is moderate, with a mean of 2.81 and a TCR of 54.1%. The confirmation-of-expectations indicator had the lowest TCR, at 52.0%, indicating that the service students receive still frequently falls short of their initial expectations. To ensure that the descriptive patterns of these three variables could be tested causally, the data were subsequently analyzed through classical assumption testing as a prerequisite for regression.

3. Validity of the Regression Model through Classical Assumption Testing

Prior to analyzing the relationship between variables, classical assumption testing was conducted to ensure that the regression model met the statistical requirements for valid inference. The test results are presented in Table 4.

Table 4. Results of Classical Assumption Testing

Test Type	Value	Remarks
Normality	Asymp. Sig. = 0.880	Normally distributed data
Linearity X_1	Sig. = 0.673	Linear relationship
Linearity X_2	Sig. = 0.274	Linear relationship
Heteroscedasticity X_1	Sig. = 0.738	No heteroscedasticity
Heteroscedasticity X_2	Sig. = 0.946	No heteroscedasticity
Autocorrelation	DW = 2.063	Free of autocorrelation (1.7116 < DW < 2.2884)
Multicollinearity	VIF = 1.844; Tolerance = 0.542	No multicollinearity

Source: Processed data results, 2026.

As shown in Table 4, all classical assumptions were satisfied. The normality test yielded an Asymp. Sig. of 0.880 (> 0.05), indicating normally distributed data. The linearity test yielded a Deviation from Linearity Sig. of 0.673 for X_1 and 0.274 for X_2 (both > 0.05), confirming a linear relationship between each independent variable and the dependent variable. The heteroscedasticity test using Spearman's rho yielded a Sig. of 0.738 for X_1 and

0.946 for X_2 (both > 0.05), indicating the absence of heteroscedasticity. The autocorrelation test yielded a Durbin-Watson value of 2.063, which falls within the autocorrelation-free range ($dU < DW < 4-dU$, i.e., $1.7116 < 2.063 < 2.2884$). The multicollinearity test yielded a VIF of 1.844 (< 10) and a Tolerance of 0.542 (> 0.1), indicating no multicollinearity among the independent variables. The fulfillment of all classical assumptions confirms that the developed regression model is robust and valid for legitimately testing the effect of facility maintenance and service quality on student satisfaction in the following section.

4. Multiple Linear Regression Analysis

The results of the multiple linear regression analysis are presented in Table 5.

Table 5. Results of the Multiple Linear Regression Analysis

Variable	Coefficient (B)	Sig.	Beta
Constant	−5.830	0.010	–
Facility Maintenance (X_1)	0.415	0.002	0.261
Service Quality (X_2)	0.492	0.000	0.621

Source: Processed data results, 2026.

As shown in Table 5, the resulting regression equation is $Y = -5.830 + 0.415X_1 + 0.492X_2$. The positive coefficient for X_1 (0.415) indicates that every one-unit increase in facility maintenance increases student satisfaction by 0.415. The positive coefficient for X_2 (0.492) indicates that a one-unit increase in service quality increases student satisfaction by 0.492, holding other variables constant. The significance of both coefficients is examined further through the partial t-test and the simultaneous F-test in the following section.

5. Hypothesis Testing Results

The results of the hypothesis test are presented in Table 6.

Table 6. Summary of Hypothesis Testing Results

Hypothesis	t/F value	Sig.	R Square	Remarks
H_1: $X_1 \rightarrow Y$ (Partial)	9.067	0.000	46.4%	Accepted
H_2: $X_2 \rightarrow Y$ (Partial)	12.879	0.000	63.6%	Accepted
H_3: $X_1 + X_2 \rightarrow Y$ (Simultaneous)	96.651	0.000	66.6%	Accepted

Source: Processed data results, 2026.

DISCUSSION

1. The Influence of Facility Maintenance on Student Satisfaction

As shown in Table 6, H_1 is accepted: facility maintenance has a significant partial effect on student satisfaction ($t = 9.067 > 1.985$; sig. = 0.000; $R^2 = 0.464$). This result is consistent with the theory proposed by (Eboli & Mazzulla, 2011), who state that suboptimally maintained facility conditions can reduce user comfort and safety, thereby affecting satisfaction with public transportation services. In this study, students rated the condition of facility maintenance as moderate, with a TCR of 57.56%, indicating that the bus fleet and shelters have not yet fully met students' expectations. This finding is also consistent with the P-Transqual model developed by (Bakti, 2015), which emphasizes that tangibles and comfort are the primary dimensions directly perceived by users when assessing public transportation service quality. The positive regression coefficient (0.415) confirms that systematic and sustained improvement in facility maintenance will directly enhance student satisfaction, in line with the findings of (Masrin & Hasibuan, 2019; Nofrianto et al., 2025) regarding the positive effect of facilities on Bus Trans Padang customer satisfaction. Accordingly, the strength of the effect of facility maintenance needs to be compared with that of service quality, as discussed in the following section.

2. The Influence of Service Quality on Student Satisfaction

As shown in Table 6, H_2 is accepted: service quality has a significant partial effect on student satisfaction ($t = 12.879 > 1.985$; sig. = 0.000; $R^2 = 0.636$). Service quality has a greater effect than facility maintenance, as indicated by its higher regression coefficient (0.492) and t-value (12.879). This finding is consistent with the SERVQUAL model of (Parasuraman et al., 1988), which posits that service quality is a primary determinant of user satisfaction. Of the five dimensions measured, the assurance dimension obtained the lowest TCR, at 57.3%, indicating that staff members' ability to instill a sense of safety and trust among students still needs significant improvement. This supports (Zeithaml et al., 1996; Schiebler et al., 2026) argument that a mismatch between expected and perceived service can diminish user satisfaction. This finding is also consistent with the studies of (Anggraini & Rahmidani, 2019; Nasution, 2021; Zhang et al., 2022), who found a significant effect of service quality on Bus Trans Padang passenger satisfaction. With the partial effects of both independent variables confirmed, subsequent testing focuses on their simultaneous effect on student satisfaction.

3. The Simultaneous Influence of Facility Maintenance and Service Quality on Student Satisfaction

As shown in Table 6, H_3 is accepted: facility maintenance and service quality simultaneously have a significant effect on student satisfaction ($F = 96.651 > 3.09$; sig. = 0.000; Adjusted $R^2 = 0.666$). Together, the two variables explain 66.6% of the variance in student satisfaction, with the remaining 33.4% attributable to other factors outside the research model. This finding is theoretically consistent with the Expectation-Disconfirmation Theory (EDT) proposed by Oliver, which posits that satisfaction is formed by comparing users' initial expectations with their actual perceptions of service performance. Facility maintenance and service quality are the primary components shaping students' actual perceptions of the Bus Trans Padang Corridor 1 service.

Referring to the research results showing that all variables fall into the moderate category, with a student-satisfaction TCR of 54.1%, it can be interpreted that a condition of zero disconfirmation to negative disconfirmation generally prevails, in which the service received by students has not yet fully met, or is even lower than, their expectations. The demographic profile of respondents, dominated by students aged 16–17 and regular users who use the service 3–4 times per week (Table 1), reinforces the validity of this finding, as this user group provided the assessments with sufficient experience of the service. Therefore, an integrated effort to improve facility maintenance and service quality is imperative for Perumda PSM and the Padang City Transportation Agency. Such improvements are essential because previous studies have demonstrated that continuous enhancements in service quality and facilities significantly contribute to increasing user satisfaction and promoting long-term loyalty toward public transportation services (Susanti & Gusman, 2025; Nguyen & Nguyen, 2024).

4. Research Limitations

This study has several limitations that must be considered when interpreting the results. First, the study used only two independent variables, whereas 33.4% of the variance in student satisfaction is attributable to other factors not examined, such as digital technology integration, fare policy, or environmental sustainability. Second, the accidental sampling technique and the research's focus on a single corridor limit the generalizability of the findings to other Bus Trans Padang corridors. Third, the cross-sectional design limits the ability to draw long-term causal conclusions. Fourth, data collection relying on self-report

questionnaires may introduce response bias. Taking these limitations into account, future research is recommended to include additional independent variables, expand the scope of corridors and samples, and adopt a mixed-methods approach to gain a more comprehensive understanding.

CONCLUSION

Based on the research results and data analysis conducted, three main conclusions are drawn. First, facility maintenance (X_1) has a significant partial effect on student satisfaction (Y) with the use of Bus Trans Padang Corridor 1, with a calculated t-value of 9.067 (sig. = 0.000) and a contribution of 46.4%. Second, service quality (X_2) has a significant partial effect on student satisfaction, with a calculated t-value of 12.879 (sig. = 0.000) and a contribution of 63.6%. Third, facility maintenance and service quality simultaneously have a significant effect on student satisfaction, with a calculated F-value of 96.651 (sig. = 0.000), explaining 66.6% of the variance in student satisfaction. Demographically, respondents were predominantly 17 years old (39.2%), female (62.9%), enrolled in senior high school/equivalent (78.4%), and regular users with a frequency of 3–4 times per week (46.4%). These findings confirm that student satisfaction with the Bus Trans Padang Corridor 1 service is empirically shaped by the combination of facility maintenance and service quality, as predicted by the Expectation-Disconfirmation Theory employed in this study.

The scholarly contribution of this study lies in the empirical validation of integrating facility-maintenance indicators from the P-Transqual model with service-quality dimensions from the SERVQUAL model, within the context of junior and senior high school student satisfaction as users of Bus Trans Padang Corridor 1, a special-fare captive user segment that has not been widely explored in the BRT-based public transportation literature. These findings provide quantitative justification that optimizing facility maintenance and service quality, particularly the assurance and comfort dimensions, is an effective strategy for enhancing student satisfaction. This study thus enriches the body of literature on public administration and transportation service management with contextual empirical evidence from a captive user segment that has received comparatively less attention than studies of the general passenger population.

Despite its contributions, this study still has several limitations that must be considered when interpreting the results proportionately: the use of two independent variables, so that 33.4% of the variance in student satisfaction remains explained by other factors outside the model; the accidental sampling technique and single-corridor scope, which limit the generalizability of the findings; the cross-sectional design, which limits long-term causal conclusions; and self-report data, which may introduce response bias. Based on these findings, it is recommended that Perumda PSM and the Padang City Transportation Agency improve facility maintenance through routine checks of fleet cleanliness, optimal air-conditioning function, and shelter facility adequacy, and prioritize the assurance dimension by enhancing staff competence and professionalism. Future research is recommended to include additional variables such as digital technology integration, fare policy, and environmental sustainability, to expand the research location and sample, and to adopt a mixed-methods approach to obtain a more comprehensive picture of the factors influencing public transportation user satisfaction.

REFERENCES

Anggraini, M., & Rahmidani, R. (2019). Pengaruh Kualitas Layanan dan Harga terhadap Kepuasan Penumpang Bus Trans Padang. *Jurnal Ecogen, 2*(4), 769–777. https://doi.org/10.24036/jmpe.v2i4.7854

Bakti, I. G. M. Y., & Sumaedi, S. (2015). P-TRANSQUAL: A service quality model of public land transport services. *International Journal of Quality & Reliability Management, 32*(6), 534–558. https://doi.org/10.1108/IJQRM-06-2013-0094

Banister, D. (2008). The sustainable mobility paradigm. *Transport Policy, 15*(2), 73–80. https://doi.org/10.1016/j.tranpol.2007.10.005

Eboli, L., & Mazzulla, G. (2011). A methodology for evaluating transit service quality based on subjective and objective measures from the passenger's point of view. *Transport Policy, 18*(1), 172–181. https://doi.org/10.1016/j.tranpol.2010.07.007

Lemeshow, S., Hosmer, D. W., Klar, J., & Lwanga, S. K. (1990). *Adequacy of sample size in health studies*. John Wiley & Sons.

Litman, T. (2020). *Evaluating public transit benefits and costs: Best practices guidebook*. Victoria Transport Policy Institute.

Masrin, I., & Hasibuan, E. (2019). Pengaruh Pelayanan dan Fasilitas terhadap Kepuasan Pelanggan Bus Trans Padang. *Jurnal Menara Ekonomi, 5*(1), 9–19. https://jurnal.umsb.ac.id/index.php/menaraekonomi/article/view/1268

Nasution, H. (2021). *Pengaruh Kualitas Pelayanan terhadap Kepuasan Penumpang Bus Trans Padang* [Thesis, Universitas Muhammadiyah Sumatera Barat]. https://eprints.umsb.ac.id/3260/

Nguyen, T. H., & Nguyen, T. T. (2024). Determinants of disengagement and negative customer engagement behaviour: Expectancy disconfirmation and justice perspectives. *Journal of Services Marketing, 38*(6), 776–801. https://doi.org/10.1108/JSM-07-2023-0259

Nofrianto, H., Verdian, Muchlian, M., Wahab, W., & Honesti, L. (2025). Analisis Faktor-Faktor yang Mempengaruhi Tingkat Kepuasan Penumpang Bus Trans Padang Koridor 2 Rute RTH Imam Bonjol–Bungus Teluk Kabung. *Jurnal Sains dan Teknologi: Jurnal Keilmuan dan Aplikasi Teknologi Industri, 25*(1), 190–199. https://doi.org/10.36275/dt7sce80

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17*(4), 460–469. https://doi.org/10.1177/002224378001700405

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40.

Redman, L., Friman, M., Gärling, T., & Hartig, T. (2013). Quality attributes of public transport that attract car users: A research review. *Transport Policy, 25*, 119–127. https://doi.org/10.1016/j.tranpol.2012.11.005

Schiebler, T., Lee, N., & Brodbeck, F. C. (2026). Expectancy-disconfirmation and consumer satisfaction: A meta-analysis. *Journal of the Academy of Marketing Science, 54*(1), 91–112. https://doi.org/10.1007/s11747-024-01078-x

Sugiyono. (2021). *Metodologi Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Susanti, F., & Gusman, A. (2025). Pengaruh Kualitas Pelayanan, Tarif, dan Fasilitas terhadap Kepuasan Pelanggan Pengguna Bus Trans Padang Koridor 1. *Economics and Digital Business Review, 6*(2), 1072–1083. https://ojs.stieamkop.ac.id/index.php/ecotal/article/view/2382

Van Ryzin, G. G. (2006). Testing the expectancy disconfirmation model of citizen satisfaction with local government. *Journal of Public Administration Research and Theory, 16*(4), 599–611. https://doi.org/10.1093/jopart/mui058

Vuchic, V. R. (2007). *Urban transit systems and technology*. John Wiley & Sons. https://doi.org/10.1002/9780470168066

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31–46. https://doi.org/10.1177/002224299606000203

Zhang, J., Chen, W., Petrovsky, N., & Walker, R. M. (2022). The expectancy-disconfirmation model and citizen satisfaction with public services: A meta-analysis and an agenda for best practice. *Public Administration Review, 82*(1), 147–159. https://doi.org/10.1111/puar.13368