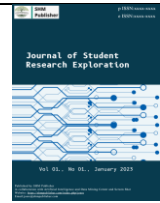




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Analysis of the effect of service quality on public satisfaction with motor vehicle testing services at the Bukittinggi City transportation department

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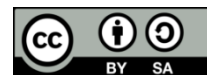
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ABSTRACT

This study examines how service quality affects community satisfaction in motor vehicle testing services at the Bukittinggi City Department of Transportation. Addressing limited evidence in local government contexts, it applies a quantitative explanatory design with five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. Data from 100 users were collected through a validated questionnaire and analyzed using multiple linear regression. Results show all dimensions significantly and positively influence satisfaction, both individually and collectively. The model explains 76.8% of satisfaction variance ($R^2 = 0.768$), indicating strong explanatory power. Responsiveness is the most influential factor, underscoring the importance of prompt and adaptive service delivery. The study contributes empirical evidence on the relative weight of service quality dimensions in regulatory services and suggests prioritizing responsiveness and reliability to improve effectiveness and sustain public trust.

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1. Introduction

Service quality is a crucial factor influencing public satisfaction in various sectors, including public services. Vehicle inspections are a mandatory service for vehicle owners to ensure

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safety, roadworthiness, and environmental sustainability. Services provided by vehicle inspection centers must meet quality standards to ensure public satisfaction and trust. In practice, service quality often presents challenges, particularly in relation to speed of service, clarity of information, staff attitude, and available facilities. If service quality is suboptimal, this can reduce public satisfaction, ultimately impacting the image and credibility of the vehicle inspection center.

Bukittinggi is a tourist city and trading center in West Sumatra, and every year, various types of vehicles pass through. Bukittinggi also has highways connecting various other major cities. Many vehicles pass through Bukittinggi, including small, medium, and large vehicles, as well as intercity and interprovincial vehicles. This is consistent with data obtained from the Bukittinggi City Samsat (Vehicle Traffic Management Unit), which indicates an increase in road usage in Bukittinggi over the past three years, as follows:

Table 1. Number of vehicles in Bukittinggi City

No	Year	Amount Vehicle
1	2022	4,026
2	2023	4,279
3	2025	5,286

Source: Bukittinggi City Samsat – 2025

With the increasing number of land transportation users in Bukittinggi city, it is natural that as road users, the community needs to get a guarantee of safety when driving. To get a guarantee of safety, the government provides services for the public/community in the form of motor vehicle testing services through the Transportation Agency. In accordance with the Regulation of the Minister of Transportation of the Republic of Indonesia No. 113 of 2015 Chapter 2 article 2 [1] that: The purpose of periodic motor vehicle testing is carried out to: a. provide technical safety assurance for the use of motor vehicles, trailers and attached trains on the road, b. support the realization of environmental sustainability from the possibility of pollution caused by the use of motor vehicles, trailers and attached trains on the road, c. provide public services to the community. To see the development of the number of people who carry out motor vehicle testing from 2022 to 2026, the following data was obtained:

Table 2. Number of vehicles that have been motor vehicle tested in Bukittinggi

No	Vehicle Type	Year		
		2022	2023	2026
1	PASSENGER CAR			
	<i>Passenger car not a sedan</i>	32	15	20
2	BUS CAR			
	<i>1. Small Bus</i>	480	225	275
	<i>2. Medium Bus</i>	48	39	29
	<i>3. Big Bus</i>	27	42	33
3	GOODS CAR			
	<i>1. Open-back Goods Truck</i>	1671	989	1018
	<i>Closed Truck</i>	324	371	347

No	Vehicle Type	Year		
		2022	2023	2026
	3. Tank Car	9	4	5
AMOUNT		2591	1685	1727

Source: Bukittinggi City Motor Vehicle Testing UPTD – 2025

Table 2 shows a decrease in the number of people taking vehicle tests at the Bukittinggi City Motor Vehicle Testing Center. In 2022, 2,591 vehicles underwent vehicle tests, but this decreased in 2023, with only 1,685 vehicles undergoing vehicle tests at the Bukittinggi City Transportation Agency. The vehicle testing process begins with the vehicle owner registering, followed by an officer providing the required documents and entering them into the system. The applicant makes payment through Bank Nagari. The vehicle is then tested, proof of passing the test is submitted, and the results are verified, with a decision being made whether the test is passed or not.

Of the many stages that consumers, namely the public, go through in conducting motor vehicle testing, the public certainly hopes to be served by officers as well and as quickly as possible so that the public feels satisfied with the services received, but there are always problems in motor vehicle test services, namely motor vehicle tests take at least approximately 60 minutes while there are people who want a fast service process, this sometimes makes people uncomfortable in waiting in long and long queues. The number of stages and the length of time for motor vehicle testing are not the only problems that arise during motor vehicle test services, many other factors affect public satisfaction and comfort when conducting motor vehicle tests. Service sector companies in this case the Department of Transportation must understand what consumers or the public want, otherwise it will be difficult to achieve public satisfaction with services or services.

2. Literature Review

2.1. Public service

According to Decree of the Minister of Utilities State Apparatus No. 63/KEP/M.PAN/7/2003 [2], services public is all activity services carried out by the organizer service public as effort fulfillment need recipient service and implementation provision legislation. Meanwhile, in the law Number 25 of 2009 Chapter I Article 1 paragraph 1 concerning service public, explained that service public is activity or series activity in need fulfillment service in accordance with regulation legislation [2] for all citizens and residents on goods, services, and/ or service administrative services provided by the organizer service public.

Service public covering all aspect all life society, not only about goods and services, but also about service health, services administration, tourism, security and services other matters concerning interest society. On its journey service public to all inhabitant or public without There is difference or discrimination, according to with Mustafa Lutfi's opinion (2012) [3] giving service public must carried out fairly and discriminatory. Thus, it can be concluded that public services are an effort by the government to fulfill the needs of the community, with

the aim of improving the welfare of the community in various aspects of community life such as security, comfort, education, health and others.

2.2. Public Satisfaction

Society is a human being who has many desires or hopes in living life, a feeling of always wanting to get something according to each of their standards. According to Gerson (2001:5) [4], customer satisfaction is when a product or service meets or exceeds customer/community expectations, usually the customer/community will feel satisfied. Meanwhile, according to Ranguti (2006) [5], customer satisfaction is the customer's response to the discrepancy between the level of previous interest and the actual performance felt after use.

The satisfaction standards of each customer/community are different, they have different expectations from one another, but according to the Decree of the Minister of State Apparatus Empowerment No. Kep./25/M.PAN/2/2004 [6], public satisfaction can be measured through the Public Satisfaction Index (IKM), namely data and information about the level of public satisfaction obtained from the results of quantitative or qualitative measurements of public opinion in obtaining services from public service providers by comparing their needs.

2.3. Quality of Public/Community Services

Service quality is crucial as a benchmark for service delivery, ensuring the process aligns with applicable laws and regulations. The quality of service provided by agencies to service users significantly influences the perceptions of KIR test users regarding the performance of transportation agency employees. User satisfaction can foster a positive impression of employees, which can be used as an evaluation tool for improving service delivery. Good service quality indicates that the service provided is also performing well and in accordance with applicable regulations. According to Algifari (2019) [7], service quality is explicitly defined as a company's work style that aims to consistently improve the quality of its operations, products, and services.

According to the Big Indonesian Dictionary, Quality means: 1. The level of good or bad of something; 2. Degree or level (skill; skill, etc.) while the quality of public/community service is the suitability between expectations and the performance of the service provided to the community itself. Services with good quality will usually increase trust, satisfaction, and effectiveness towards the institution that provides the service. In accordance with the opinion of Sinambela (in Hardiansyah, 2018) quality is everything that can influence the desires or needs of customers (Meeting the needs of Customers) [8].

Framework Conceptual



Figure 1. Framework conceptual effect of service quality on public satisfaction of vehicle owners who conduct vehicle tests

Conceptually, this research concerns the influence of service quality on the satisfaction of vehicle owners who undergo vehicle testing. Where service quality is the independent variable (x) that can influence public satisfaction, which is the dependent variable (y).

Hypothesis

Based on the conceptual framework presented, the hypothesis in this study is that service quality is suspected to have a positive influence on the satisfaction of vehicle owners who undergo motor vehicle testing at the Bukittinggi City Transportation Agency. Based on the framework of thought and problem formulation that has been presented previously, the author takes a temporary hypothesis in solving the problem, namely:

- H1:** Direct evidence (Tangibles) (X1) has a positive and significant effect on the satisfaction of vehicle owners who carry out motor vehicle tests at the Bukittinggi City Transportation Agency.
- H2:** Reliability (X2) has a positive and significant influence on the satisfaction of vehicle owners who carry out motor vehicle testing at the Bukittinggi City Transportation Agency.
- H3:** Responsiveness (X3) has a positive and significant effect on the satisfaction of vehicle owners who carry out motor vehicle testing at the Bukittinggi City Transportation Agency.
- H4:** Assurance (X4) has a positive and significant influence on the satisfaction of vehicle owners who carry out motor vehicle tests at the Bukittinggi City Transportation Agency.
- H5:** Empathy (X5) has a positive and significant influence on the satisfaction of vehicle owners who carry out motor vehicle tests at the Bukittinggi City Transportation Agency.
- H6:** Direct evidence (X1), reliability (X2), responsiveness (X3), assurance (X4) and empathy (X5) simultaneously have a positive and significant influence on the satisfaction of vehicle owners who carry out motor vehicle tests at the Bukittinggi City Transportation Agency (Y).

3. Research Methods

The type of research used in this study is a quantitative method using a simple regression approach. Quantitative research can be defined as a research method based on a positive

philosophy, used to study a specific population or sample, data collection using research instruments, and quantitative or statistical data analysis, with the aim of testing the hypotheses that have been applied [9]. Regression research is a method for determining the effect of independent variables on dependent variables. The independent or independent variable, often called variable X, is the causal variable. The dependent or dependent variable, or variable Y, is the effect variable [10].

3.1. Research Population and Sample

According to Syafrida Hafni Syahir (2022) [10], the population is all subjects studied. The population in this study is service users, namely vehicle owners who carry out vehicle tests at the Bukittinggi City Transportation Agency vehicle testing site, a total of 5,286 people in 2026. The sample is part of the population to be studied. The sample is a portion or representative of the population to be studied [11]. The requirements for a good sample are that it must be representative or represent the overall characteristics of the population, there are no duplicates and the most recent.

The sampling technique in this study is non-probability sampling with the type of sample being incidental sampling. Incidental sampling is a sampling determination technique based on chance, that is, anyone who coincidentally/incidentally meets the researcher can be used as a sample, if it is considered that the person who happened to be met matches the data source [9]. The number of samples in this study was determined using the Slovin formula. The number of samples in this study was 100 vehicle owners who came to the motor vehicle testing place.

3.2. Data Analysis Techniques

To formulate a problem or test a hypothesis, researchers must determine which analysis method to use, depending on the type of data collected. In quantitative research, several steps must be taken related to data processing and data analysis. A simple regression test is an analysis consisting of only two variables. This analysis is used to determine the extent of the influence of the independent variables, namely service quality, as measured by Direct Evidence (X1), Reliability (X2), Responsiveness (X3), and Assurance (X4). and Empathy (X5) towards the dependent variable, namely public satisfaction (Y), using the formula 1:

$$Y = a + bX_1 + bX_2 + bX_3 + bX_4 + bX_5 + e \quad (1)$$

4. Results and Discussion

4.1. Research result

The results of the study on service quality and public satisfaction were measured using a developed instrument and presented in descriptive percentage form. Based on the results of the research data processing, an overview of service quality and public satisfaction was obtained. The research data were obtained from an instrument in the form of a questionnaire given to vehicle owners who came to the motor vehicle testing center . This study used a questionnaire containing statements to be distributed to vehicle owners who came to the motor vehicle testing center.

4.2. Public satisfaction

The data obtained by researchers in analyzing the quality of service towards public satisfaction using a questionnaire consisting of 20 statements, with four dimensions, the analysis is as follows in table 3:

Table 3. Respondents' responses to the attitude dimensions of employee approaches to service users

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Employees' approach to service users	Y.1	Bukittinggi Transportation Agency employees give sincere smiles, greeting customers when they arrive	342	3.42	68.40%	Good
	Y.2	Bukittinggi Transportation Agency employees greet customers who come, good morning, good afternoon or good evening.	333	3.33	66.60%	Good
	Y.3	Bukittinggi Transportation Agency employees asked what assistance could be provided to customers who came.	322	3.22	64.40%	Good
	Y.4	Bukittinggi Transportation Agency employees are warm and friendly in conveying the information needed by customers.	323	3.23	64.60%	Good
Average Employee Attitude Dimensions			330	3.3	66.00%	Good

Source: Processed Data, 2026

Based on the analysis results on the dimensions of employee approach attitudes towards service users at the Bukittinggi City Transportation Agency, an average score of 330 was obtained with a mean value of 3.30 and a TCR of 66.00% which is in the good category. In general, this indicates that employee attitudes in providing services, such as smiling, greeting, saying hello, offering assistance, and conveying information in a friendly manner, have been implemented quite consistently and according to public expectations. The TCR value of

66.00% means that the quality of service attitudes is classified as good, but has not yet reached the very good category, so there is still room for improvement, especially in strengthening the consistency of friendliness and warmth in every service interaction so that public satisfaction can be more optimal.

Table 4. Recapitulation of respondents' responses regarding the services received by service users

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Quality of service received by service users	Y.5	Bukittinggi Transportation Agency employees pay attention to and understand all customer complaints.	317	3.17	63.40%	Good
	Y.6	Bukittinggi Transportation Agency employees respond to customer questions or complaints and provide the best solutions.	304	3.04	60.80%	Good
	Y.7	Bukittinggi Transportation Agency employees try to understand the feelings and circumstances that customers are facing.	338	3.38	67.60%	Good
	Y.8	Bukittinggi Transportation Agency employees greet customers by name after getting to know them.	336	3.36	67.20%	Good
Average Dimensions of Service Quality Received			324	3.24	64.75%	Good

Source: Processed Data, 2026

Based on the analysis results on the service quality dimensions received by service users at the Bukittinggi City Transportation Agency, an average score of 324 was obtained with a mean value of 3.24 and a TCR of 64.75% which is in the good category. On average, this indicates that employees have been able to provide fairly responsive and empathetic services, such as understanding complaints, responding to questions with solutions, and showing concern for customer conditions. A TCR value of 64.75% means that the quality of service perceived by the public has been running well, but still needs to be improved to be more optimal and consistent so that it can reach the very good category and increase overall service user satisfaction.

Table 5. Recapitulation of respondents' responses regarding administrative procedures

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Procedure administration	Y.9	Bukittinggi Transportation Agency provides queue numbers for vehicle owners who wish to take a motor vehicle test.	327	3.27	65.40%	Good
	Y.10	Bukittinggi Transportation Agency employees convey motor vehicle testing rates/fees transparently and clearly.	325	3.25	65.00%	Good
	Y.11	Bukittinggi Transportation Agency employees complete services quickly and according to promises and applicable standards.	327	3.27	65.40%	Good
	Y.12	Bukittinggi Transportation Agency employees who provide services have expertise in their fields.	329	3.29	65.80%	Good
	Average Employee Attitude Dimensions		327	3.27	65.40%	Good

Source: Processed Data, 2026

Based on Table 5 regarding administrative procedures at the Bukittinggi City Transportation Agency, an average score of 327 was obtained with a mean value of 3.27 and a TCR of 65.40% which is included in the good category. On average, this indicates that service procedures, such as providing queue numbers, transparent tariff delivery, timely service completion, and employee competence in carrying out their duties, have been implemented quite well and in accordance with applicable standards. A TCR value of 65.40% implies that the administrative system has been running in an orderly and clear manner, but there are still opportunities for improvement, especially in strengthening the consistency of service speed and professionalism so that service quality can reach the very good category and increase public trust.

Table 6. Recapitulation of respondents' responses regarding facilities provided by service locations

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Facilities provided by the service location	Y.13	Bukittinggi Transportation Agency provides supporting tools	328	3.28	65.60%	Good

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
	Y.14	Bukittinggi Transportation Agency provides a comfortable waiting room	327	3.27	65.40%	Good
	Y.15	The Transportation Agency's operational service hours are clear	322	3.22	64.40%	Good
	Y.16	Bukittinggi Transportation Agency provides a consultation room for owners	322	3.22	64.40%	Good
Average Employee Attitude Dimensions			325	3.25	64.95%	Good

Source: Processed Data, 2026

Based on Table 6 regarding the facilities provided at the Bukittinggi City Transportation Agency service location, an average score of 325 was obtained with a mean value of 3.25 and a TCR of 64.95% which is in the good category. On average, this indicates that supporting service facilities such as the availability of equipment, comfortable waiting rooms, clear operating hours, and consultation rooms are available and functioning quite well according to the expectations of service users. A TCR value of 64.95% implies that the service facilities and infrastructure are adequate, but still need to be improved in terms of comfort, completeness, and optimization of their utilization so that service quality can be maximized and provide a more satisfying service experience for the community.

Table 7. Recapitulation of respondents' responses regarding public satisfaction

Variables	No Item	Dimensions	Total Score	Mean	TCR	Note
Public Satisfaction	1	Employees' approach to service users	330	3.30	66.00%	Good
	2	Quality of service received by service users	324	3.24	64.75%	Good
	3	Administrative procedures	327	3.27	65.40%	Good
	4	Facilities provided by the service location	325	3.25	64.95%	Good
Average Employee Attitude Dimensions			326	3.26	65.28%	Good

Source: Processed Data, 2026

Based on Table 7 regarding public satisfaction with the services of the Bukittinggi City Transportation Agency, the recapitulation results of the Public Satisfaction variable at the Bukittinggi City Transportation Agency, obtained an average overall score of 326 with a mean

value of 3.26 and a TCR of 65.28% which is included in the good category. On average, this indicates that the level of public satisfaction with the services provided is already at a fairly satisfactory level, covering aspects of employee attitudes, service quality, administrative procedures, and service facilities. The TCR value of 65.28% means that the services provided have met public expectations in general, but have not yet reached the very good category, so that efforts are still needed to improve the quality of services comprehensively and continuously so that public satisfaction can be more optimal.

4.2.1 Quality of service

The data obtained by researchers in analyzing the quality of service for waste management using a questionnaire consisting of 25 statements, the analysis of each dimension is as follows:

Table 8. Recapitulation of respondents' responses regarding *Tangible Evidence*

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Tangible	X1.1	Complete Bukittinggi Transportation Agency Vehicle Testing Equipment	318	3.18	63.60%	Good
	X1.2	The Bukittinggi Transportation Agency Vehicle Test Building is Clean.	314	3.14	62.80%	Good
	X1.3	The appearance of Bukittinggi Transportation Agency employees is neat.	316	3.16	63.20%	Good
	X1.4	Bukittinggi Transportation Agency has social media such as the Web or Instagram to convey the latest information to the public.	315	3.15	63.00%	Good
	X1.5	Bukittinggi Transportation Agency has a comfortable waiting room	322	3.22	64.40%	Good
	Average Employee Attitude Dimensions		317	3.17	63.40%	Good

Source: Processed Data, 2026

Based on Table 8 regarding Tangibles in the Bukittinggi City Transportation Agency services, an average score of 317 was obtained with a mean value of 3.17 and a TCR of 63.40% which is in the good category. On average, this indicates that aspects of physical evidence of service such as the completeness of vehicle testing equipment, building cleanliness, neatness of employee appearance, availability of information media (website or Instagram), and comfort of the waiting room have been assessed as quite adequate by the public. The TCR value of 63.40% implies that the physical facilities and supporting facilities for services have been running well, but there is still room for improvement, especially in improving the quality of facilities and the use of information media so that services appear more professional, modern, and are able to increase public trust more optimally.

Table 9. Respondents ' responses on reliability

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Reliability	X2.1	Bukittinggi Transportation Agency employees work on vehicles according to the promised services.	313	3.13	62.60%	Good
	X2.2	Bukittinggi Transportation Agency employees carry out vehicle checks properly	314	3.14	62.80%	Good
	X2.3	Bukittinggi Transportation Agency employees carry out vehicle checks according to the established schedule.	317	3.17	63.40%	Good
	X2.4	Bukittinggi Transportation Agency employees store all vehicle inspection files accurately and neatly.	315	3.15	63.00%	Good
	X2.5	Bukittinggi Transportation Agency ensures that it provides services in accordance with the complaints submitted.	317	3.17	63.40%	Good
Average Employee Attitude Dimensions			315	3.15	63.04%	Good

Source: Processed Data, 2026

Based on Table 9 regarding the Reliability of Bukittinggi City Transportation Agency services, an average score of 315 was obtained with a mean value of 3.15 and a TCR of 63.04% which is included in the good category. On average, this indicates that the reliability of employees in providing services, such as carrying out vehicle inspections as promised, carrying out checks correctly and on schedule, storing files accurately, and ensuring services are in accordance with customer complaints, has been running quite well. The TCR value of 63.04% means that the level of consistency and accuracy of service has met public expectations, but still needs to be improved so that services become more accurate, timely, and more trustworthy so that service quality can reach the very good category.

Table 10. Recapitulation of respondents' perceptions of responsiveness

Dimensions	Item No.	Inquiry Items	Total Score	Mean	TCR	Ket
Responsiveness	X3.1	Bukittinggi Dishub officials respond to customer requests quickly.	312	3.12	62.40%	Good
	X3.2	Bukittinggi Dishub officers respond well to customer inquiries.	315	3.15	63.00%	Good
	X3.3	Bukittinggi Transportation Agency provides	303	3.03	60.60%	Good

Dimensions	Item No.	Inquiry Items	Total Score	Mean	TCR	Ket
		facilities for customers to be contacted at any time				
		Bukittinggi Transportation				
	X3.4	Agency employees look sincere when helping	305	3.05	61.00%	Good
	X3.5	customer	310	3.1	62.00%	Good
Average Employee Attitude Dimensions			309	3.09	61.80%	Good

Source: Processed Data, 2026

Based on Table 10 regarding the Responsiveness of Bukittinggi City Transportation Agency services, an average score of 309 was obtained with a mean value of 3.09 and a TCR of 61.80% which is in the good category. On average, this indicates that employee responsiveness in responding to requests, answering questions, providing communication facilities, and assisting customers has been running quite well. The TCR value of 61.80% implies that the speed and alertness of service has met public expectations at an adequate level, but still needs to be improved, especially in the aspects of response speed and availability of communication access so that services become more optimal, proactive, and able to provide a more satisfying experience for service users.

Table 11. Recapitulation of respondents' responses regarding assurance

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Assurance	X4.1	Bukittinggi Transportation Agency employees have good knowledge according to their respective job descriptions.	327	3.27	65.40%	Good
	X4.2	Bukittinggi Transportation Agency employees have expertise/competence in their respective fields	327	3.27	65.40%	Good
	X4.3	Bukittinggi Transportation Agency employees have a polite attitude towards all customers who come without discrimination.	319	3.19	63.80%	Good
	X4.4	Bukittinggi Transportation Agency employees are friendly in serving customers who come	323	3.23	64.60%	Good
	X4.5	Bukittinggi Transportation Agency employees can be relied upon to work on customer vehicles	322	3.22	64.40%	Good

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Average Employee Attitude Dimensions			324	3.24	64.72%	Good

Source: Processed Data, 2026

Based on Table 11 regarding the employee's approach to service users at the Bukittinggi City Transportation Agency, an average score of 324 was obtained with a mean value of 3.24 and a TCR of 64.72%, which is included in the good category. On average, this indicates that employees have the knowledge and competencies appropriate to their respective duties, are polite and friendly to all customers without discrimination, and are reliable in carrying out vehicle inspections. The TCR value of 64.72% means that the level of service assurance provided is sufficient to foster public trust and confidence in the quality of service, but still needs to be improved so that professionalism and service credibility are strengthened and able to reach the very good category.

Table 12. Recapitulation of respondents' responses on empathy

Dimensions	No Item	Question Items	Total Score	Mean	TCR	Note
Empathy	X5.1	Bukittinggi Transportation Agency employees gave me personal attention during the service process.	327	3.27	65.40%	Good
	X5.2	Bukittinggi Transportation Agency employees are willing to listen and respond to my complaints or questions well.	327	3.27	65.40%	Good
	X5.3	Bukittinggi Transportation Agency employees provide easy-to-understand explanations regarding vehicle test procedures and results.	319	3.19	63.80%	Good
	X5.4	The Bukittinggi Transportation Agency employees showed a good attitude in communicating with me.	323	3.23	64.60%	Good
	X5.5	Bukittinggi Transportation Agency employees understand my needs as a vehicle owner who is conducting a vehicle inspection.	322	3.22	64.40%	Good
Average Employee Attitude Dimensions			324	3.24	64.72%	Good

Source: Processed Data, 2026

Based on the analysis results on the Empathy dimension at the Bukittinggi City Transportation Agency, an average score of 324 was obtained with a mean value of 3.24 and a TCR of 64.72%

which is in the good category. On average, this indicates that employees have provided personal attention, are willing to listen and respond to complaints well, provide easy-to-understand explanations, and demonstrate a positive communication attitude to service users. The TCR value of 64.72% means that the level of employee concern and attention to community needs has been running quite well, but still needs to be improved so that service interactions become more personal, communicative, and are able to increase community satisfaction and comfort more optimally.

Table 13. Recapitulation of respondents' responses regarding service quality

Variables	No Item	Dimensions	Total Score	Mean	TCR	Note
Quality Service	1	Tangible	317	3.17	63.40%	Good
	2	Reliability	315	3.15	63.04%	Good
	3	Responsiveness	309	3.09	61.80%	Good
	4	Assurance	324	3.24	64.72%	Good
	5	Empathy	324	3.24	64.72%	Good
Average Employee Attitude Dimensions			321	3.21	64.12%	Good

Source: Processed Data, 2026

Based on Table 13 regarding the quality of service of the Bukittinggi City Transportation Agency, the average overall score was 321 with a mean value of 3.21 and a TCR of 64.12% which is in the good category. On average, this indicates that the quality of service which includes aspects of tangible, reliability, responsiveness, assurance, and empathy has been implemented quite well according to public expectations. Although all dimensions are in the good category, the TCR value which is still in the range of 61–64% means that the quality of service has not reached the very good category, so that efforts are still needed to improve, especially in the aspects of responsiveness and reliability so that services become more optimal, professional, and able to increase public satisfaction more maximally.

4.2.2 Multiple Regression Test Analysis

The analytical method used to assess the variability of the extent of risk disclosure in this study is multiple regression analysis . Multiple regression analysis is used to test the influence of service quality on the satisfaction of vehicle owners who take tests at the Bukittinggi City Transportation Agency's motor vehicle testing site . After tabulating the results of each variable, the data are entered/processed into the SPSS for Windows version 25.00 program to determine the influence of each variable.

Based on the calculation results using the SPSS for Windows version 25.0 program , the coefficients in the multiple linear regression equation are obtained as in the following table 14.

Table 14. Test results multiple linear regression

Independent Variables	Employee Competence		
	Unstandardized Coefficients Beta	Std. Error	Standardized Coefficients Beta
Constant	0.195	0.178	

Tangible	0.195	0.070	0.216
Reliability	0.174	0.082	0.177
Responsiveness	0.229	0.105	0.233
Assurance	0.200	0.094	0.200
Empathy	0.179	0.075	0.187

Source : Data Processing , 2026

Based on the regression coefficient table provided, a multiple linear regression equation can be constructed as follows in Equation 2:

$$Y = 0,195 + 0,195X_1 + 0,174X_2 + 0,229X_3 + 0,200X_4 + 0,179X_5 \quad (2)$$

1. Constant (0.195) The constant value of 0.195 indicates that if the variables Tangible, Reliability, Responsiveness, Assurance, and Empathy are considered constant or have a value of zero, then Employee Competence has a value of 0.195.
2. Tangible (X_1) = 0.195 The Tangible regression coefficient of 0.195 indicates that for every 1 unit increase in Tangible, Employee Competence will increase by 0.195, assuming other variables are held constant.
3. Reliability (X_2) = 0.174 The Reliability regression coefficient of 0.174 indicates that for every 1 unit increase in Reliability, Employee Competence will increase by 0.174, assuming other variables remain constant.
4. Responsiveness (X_3) = 0.229 The Responsiveness regression coefficient of 0.229 indicates that for every 1 unit increase in Responsiveness, Employee Competence will increase by 0.229, assuming other variables are constant.
5. Assurance (X_4) = 0.200 The Assurance regression coefficient of 0.200 indicates that for every 1 unit increase in Assurance, Employee Competence will increase by 0.200, assuming other variables remain constant.
6. Empathy (X_5) = 0.179 The Empathy regression coefficient of 0.179 indicates that for every 1 unit increase in Empathy, Employee Competence will increase by 0.179, assuming other variables are constant.

4.2.3 Analysis of the Coefficient of Determination (R^2)

The multiple correlation coefficient, symbolized by R, is a measure of the closeness of the relationship between the dependent variable and all independent variables together. Meanwhile, the multiple coefficients of determination, symbolized by R^2 , is a measure of the fit of multiple linear lines to the data. The R^2 values can be seen in the following table:

Table 15. Results of the determination coefficient test (R^2)

Model	R	R Square	Adjusted R Square
1	0.877 ^a	0.768	0.756

Source: Data Processing , 2026

Based on table 15 above, it can be seen that the coefficient of determination analysis obtained an R value of 0.877, which indicates that the relationship between the variables Tangible,

Reliability, Responsiveness, Assurance, and Empathy with Community Satisfaction is in the very strong category. Furthermore, the R Square value of 0.768 indicates that 76.8% of the variation in Community Satisfaction can be explained by the variables Tangible, Reliability, Responsiveness, Assurance, and Empathy in this research model. While the remaining 23.2% is influenced by other variables outside the research model that are not examined. The Adjusted R Square value of 0.756 indicates that after adjusting for the number of independent variables in the study, the contribution of the variables Tangible, Reliability, Responsiveness, Assurance, and Empathy to Community Satisfaction is 75.6%, while the remaining 24.4% is influenced by other factors outside the study.

4.3. Discussion

4.3.1 The influence of Tangible on public satisfaction

Tangible is one of the dimensions quality related services with proof physical that can felt in a way directly by the community, such as facility services, facilities infrastructure, appearance employees, as well as completeness equipment used in the service process. The existence of adequate facilities will give a positive impression to the public so that it can increase satisfaction with the services provided. Based on the results of the data analysis that has been done, the significance value of the Tangible variable was obtained at 0.036 which is smaller than 0.05. This indicates that Tangible has a significant influence on Public Satisfaction. This means that the better the condition of the physical facilities and service facilities available, the level of public satisfaction with the services provided will also increase.

Good service facilities, such as comfortable service rooms, adequate equipment, and neat employee appearance, can create a professional impression in public services. This will increase public trust in service agencies and make people feel valued in the service process they receive. In addition, good physical evidence also makes it easier for the public to access the services they need. Adequate facilities can speed up the service process and reduce obstacles in the administrative process so that the public feels satisfied with the services provided by the relevant agencies. The results of this study indicate that Tangible has a positive and significant influence on Public Satisfaction. Thus, this study is in line with research conducted by Rahmawati (2020) [12] which states that the Tangible dimension is one of the important factors that can increase public satisfaction with the quality of services provided by a public service organization.

4.3.2 The Influence of reliability on public satisfaction

Reliability is ability something agency or employee in give accurate , precise service time , and can Trusted by the public. This dimension relates to employee consistency in providing services in accordance with established procedures. Based on the test results, the significance value of the Reliability variable was 0.032, which is less than 0.05. This indicates that Reliability has a significant influence on Public Satisfaction. This means that the higher the level of employee reliability in providing services, the higher the level of public satisfaction.

Employee reliability in providing services is crucial because the public expects services to be fast, accurate, and tailored to their needs. If employees can provide good service and in accordance with established procedures, the public will be satisfied with the service provided. Furthermore, consistent and reliable service will also increase public trust in public service agencies. This trust will encourage the public to return to use the services provided by those agencies in the future. The results of this study indicate that reliability has a positive and significant effect on public satisfaction. Therefore, this research aligns with research conducted by Sari, N. (2021) [13], which states that reliability is a crucial factor in increasing public satisfaction with service quality.

4.3.3 The influence of responsiveness on public satisfaction

Responsiveness is ability employee in give service with fast and responsive to need Community . This dimension relates to the willingness of employees to help the community and provide responsive services. Based on the results of the statistical tests conducted, the significance value of the Responsiveness variable was 0.036, which is smaller than 0.05. This indicates that Responsiveness has a significant influence on Community Satisfaction. This means that the higher the level of employee responsiveness in providing services, the higher the level of community satisfaction.

Employees who are responsive to public needs will be able to provide prompt solutions to various problems they face during the service process. This will make the public feel cared for and appreciated by the public service agency. Responsiveness in providing services can also reduce waiting times for services. This makes the service process more effective and efficient, thereby increasing overall public satisfaction.

The results of this study indicate that responsiveness has a positive and significant effect on customer satisfaction. Thus, this research aligns with research conducted by Fauzi, R. (2020), which states that responsiveness in service is a crucial factor in increasing customer or community satisfaction. Responsiveness is the most influential factor. big.

4.3.4 The influence of assurance on public satisfaction

Assurance is ability employee in provide a sense of security and trust to public to the service provided. This dimension includes the knowledge, politeness, and ability of employees to provide good service assurance to the public. Based on the results of data analysis, the significance value of the Assurance variable was 0.019, which is smaller than 0.05. This indicates that Assurance has a significant influence on Public Satisfaction. This means that the higher the level of service assurance provided by employees, the higher the level of public satisfaction.

Employees who possess good skills and knowledge in providing services will be able to provide clear information to the public. This will instill public trust in public service agencies. Furthermore, polite and friendly attitudes from employees can also provide comfort to the public during the service process. This attitude will make the public feel appreciated, thereby

increasing satisfaction with the services received. The results of this study indicate that Assurance has a positive and significant effect on Public Satisfaction. Therefore, this study is in line with research conducted by Dina Utami & Abdul Rahman M. (2023) [14] which states that service assurance is an important dimension in increasing public satisfaction.

4.3.5 The influence of empathy on public satisfaction

Empathy is ability employee in give attention individually to public as well as understand need public in the service process. Dimensions This reflect concern employee to the community served. Based on results analysis that has been done , obtained mark significance Empathy variable of 0.031 which is more small from 0.05. This shows that empathy has a significant influence on Public Satisfaction. This means that the higher the level of employee care and attention to the public, the higher the level of public satisfaction. Employees who have empathy will more easily understand public needs and provide services that meet public expectations. This will make the public feel valued and cared for in the service process. The attention given by employees to the public can also create a good relationship between service agencies and the public. This good relationship will increase public trust in the services provided.

The results of this study indicate that empathy has a positive and significant effect on customer satisfaction. Therefore, this research aligns with research conducted by Hasbi Shiddiq Fauzan & Agus Setiawan (2023) [15], which states that empathy is a crucial factor in increasing customer satisfaction with service quality.

5. Conclusion

Based on the research findings, it can be concluded that all service quality variables—tangible, reliability, responsiveness, assurance, and empathy—have a positive and significant impact on customer satisfaction. This means that better physical facilities, service infrastructure, and employee performance lead to higher satisfaction; employees' ability to deliver timely, accurate, and reliable services plays a crucial role; responsiveness in assisting and providing prompt service enhances satisfaction; assurance in terms of security, trust, and guaranteed service strengthens public confidence; and empathy through attention, concern, and understanding of community needs increases appreciation of the services provided. Therefore, service agencies are advised to continuously improve physical facilities and employee appearance, enhance competencies for reliable service, strengthen responsiveness in handling complaints and offering solutions, improve assurance by providing clear, polite, and trustworthy service, and foster empathy by showing care and humane attention so that the community feels valued and satisfied with the services delivered.

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