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Muslim Students Trust in Government Institutions: The Role of Religiosity, Administrative Transparency, and Public Service Quality in a Muslim-Majority Context

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Abstract

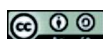
Public trust in government institutions is a key element in achieving effective governance, particularly among the educated youth within a Muslim-majority societal context. In this regard, the formation of public trust is influenced not only by administrative performance but also by the social and religious values inherent in citizens. University students hold a strategic position as they are both users of public services and future bureaucratic actors and leaders. This study aims to analyze the influence of religiosity, administrative transparency, and service quality on students' public trust in government institutions. Utilizing a quantitative correlational approach, the research involved 353 university students in Mataram as respondents. The research instrument consisted of a Likert-scale questionnaire with 24 items, and data analysis was conducted using descriptive statistics and multiple linear regression. The results indicate that, simultaneously, the three independent variables significantly influence public trust, with a coefficient of determination of 78.6%. Partially, religiosity and service quality have a positive and significant impact, whereas administrative transparency does not show a significant effect. Service quality emerged as the most dominant factor in shaping students' public trust in government institutions. The study concludes that public trust among students is more heavily influenced by the government's service performance than by normative aspects such as transparency or religious values alone. The implications suggest that the government must prioritize improving the quality of public services as a primary strategy to build and strengthen the younger generation's trust in government institutions.

Keywords: Public trust, administrative transparency, public service quality, trust government, religiosity

Abstrak

Kepercayaan publik terhadap institusi pemerintah merupakan elemen kunci dalam mewujudkan tata kelola pemerintahan yang efektif, khususnya di kalangan generasi muda terdidik (educated youth) dalam konteks masyarakat mayoritas Muslim. Dalam hal ini, pembentukan kepercayaan publik tidak hanya dipengaruhi oleh kinerja administratif semata, tetapi juga oleh nilai sosial dan religius yang melekat pada warga negara. Mahasiswa punya posisi strategis karena mereka merupakan pengguna layanan publik sekaligus calon aktor birokrasi dan pemimpin masa depan. Penelitian ini bertujuan untuk menganalisis pengaruh religiusitas, transparansi administratif, dan kualitas layanan terhadap kepercayaan publik mahasiswa terhadap institusi pemerintah. Penelitian menggunakan pendekatan kuantitatif dengan tipe korelasional,

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melibatkan 353 mahasiswa di Kota Mataram sebagai responden. Instrumen penelitian berupa angket skala Likert yang terdiri dari 24 butir pernyataan, dan analisis data dilakukan menggunakan statistik deskriptif serta regresi linier berganda. Hasil penelitian menunjukkan bahwa secara simultan ketiga variabel independen berpengaruh signifikan terhadap kepercayaan publik dengan nilai koefisien determinasi sebesar 78,6%. Secara parsial, religiusitas dan kualitas layanan berpengaruh positif dan signifikan, sementara transparansi administratif tidak berpengaruh signifikan. Variabel kualitas layanan terbukti sebagai faktor paling dominan dalam membentuk kepercayaan publik mahasiswa terhadap institusi pemerintah. Simpulan penelitian ini menegaskan bahwa kepercayaan publik di kalangan mahasiswa lebih dipengaruhi oleh kinerja pelayanan pemerintah dibandingkan aspek normatif seperti transparansi atau nilai religius semata. Implikasi penelitian ini menunjukkan bahwa pemerintah perlu memprioritaskan peningkatan kualitas layanan publik sebagai strategi utama dalam membangun dan memperkuat kepercayaan generasi muda terhadap institusi pemerintah.

Kata Kunci: Kepercayaan publik, transparansi administratif, kualitas pelayanan publik, pemerintah yang terpercaya, religiusitas

INTRODUCTION

Public trust in government institutions is an important indicator of government legitimacy in public administration and governance studies (Alessandro et al., 2021; Ministry of Administrative and Bureaucratic Reform, 2023; Levi & Stoker, 2000; Prasodjo, 2025). In the literature, public trust is defined as the level of citizen confidence in the government's ability, integrity, and good intentions to meet the needs of the community fairly and effectively (Mansoor, 2021; OECD, 2017). The theory of good governance shows that this trust is closely related to the quality of governance, including responsiveness, transparency, and accountability in public services (Mustika Rani & Malau, 2025). The research results also confirm that citizens' trust in the government continues to be influenced by their experience with the performance of public institutions (Abdi & Abdul Rahman, 2025; Campbell, 2023; Pratolo et al., 2022).

Religiosity as a dimension of individual values that reflects attachment to religious practices or beliefs, is often considered to influence social preferences and evaluation of public policy (Pearce et al., 2017). In the context of a Muslim-majority country, religiosity can shape students' attitudes and perceptions of the legitimacy and ethics of government institutions. Meanwhile, administrative transparency, openness of information, and public decision-making processes are essential foundations of open government that support the formation of trust (Grimmelikhuijsen & Meijer, 2014). Finally, the quality of public services perceived by individuals reflects how effectively the government meets the expectations of service users, which is also directly related to trust (Kumagai & Iorio, 2020). These three concepts are important as the main variables in this study.

Administrative transparency is an important principle of good governance that refers to openness regarding information, decision-making processes, and the implementation of policies and public services by government institutions. Administrative transparency enables the public to access relevant information, understand bureaucratic procedures, and monitor resource use and the fulfilment of government responsibilities (Ocampo et al., 2019). From a good governance perspective, transparency not only enhances the openness of public institutions but also strengthens accountability, builds public trust, and reduces opportunities for abuse of authority and corrupt practices (Zhang et al., 2022). The effective implementation of administrative transparency requires information that is accurate, easily accessible, timely, and clearly communicated to the public. Thus, administrative transparency can be understood as one of the fundamental elements in realising a government that is responsive, accountable, participatory, and oriented toward the public interest (Sabrina et al., 2023).

Perceived service quality is a crucial aspect of public service delivery because it reflects the public's assessment of the quality of services provided by government institutions (Yuliantini & Purnomo, 2024). In the context of public administration, service quality is determined not only by the outcomes of the services received but also by the service process, the responsiveness of government officials, the ease of accessing information, the clarity of procedures, and the government's ability to meet the public's needs and expectations. The public's perception of service quality is important because it can influence levels of satisfaction, trust, and evaluations of government performance. However, gaps between public expectations and the services actually received, such as complicated procedures, service delays, limited information, and a lack of responsiveness from government officials, can create negative perceptions of public service quality (Kim et al., 2024). Therefore, improving perceived service quality is a key challenge for the government in delivering public services that are effective, responsive, transparent, and oriented toward public needs. In this regard, understanding the factors that shape perceptions of service quality is essential for improving the administrative system and enhancing public trust in public institutions (Anggraeni & Mursyidah, 2025).

Previous research shows a relationship between religiosity and trust in the context of social and government institutions (Creel, 2022; Fox et al., 2024; Valente & Okulicz-Kozaryn, 2021). For example, research in Indonesia found that religious values can mediate the relationship between governance variables (such as government responsiveness and e-governance effectiveness) and public trust in the government during the COVID-19 pandemic (Sabrina et al., 2023). The findings indicate a significant correlation between perceived religious values and the level of trust reported by respondents. Other studies have also noted that religiosity positively influences perceptions of trust in financial institutions or faith-based services, indicating the role of religion in shaping social trust (Wijaya et al., 2023). Although these findings have not directly focused on students as a sample, they show the relevance of religiosity in shaping trust in institutions (Hartanto et al., 2021).

Various empirical studies also confirm the role of administrative transparency in increasing public trust in government institutions (Alessandro et al., 2021; Judijanto et al., 2024). For example, research in Pamekasan shows that public budget transparency has a positive and significant influence on the level of public trust in local government through an open and accountable process (Hamzah et al., 2024). In the context of village services, the transparency variable was also found to significantly influence public trust in local government (Azizah et al., 2024). This kind of finding is consistent with the good governance literature which places transparency as one of the main pillars for strengthening the legitimacy of institutions in the eyes of citizens (Aziz & Wediyanto, 2024; Widodo, 2021). In addition to religiosity and transparency, the quality of public services has been shown to be an important predictor of trust (Aditya et al., 2023; Asmawanti-S et al., 2025; Taufiqurokhman et al., 2024). Quantitative research on government agencies found that responsive and quality public administration services directly increase the level of public trust in government agencies (Jayanto & Munawaroh, 2019). Even in a study of e-government digital services in Indonesia, citizen trust in the government is linked to the perception that the services provide high benefits and satisfaction (Handayani, 2025). These findings demonstrate the importance of service quality in building trust, especially among users of public services (de Menezes et al., 2022).

Based on the empirical review above, there are still several significant gaps. First, although many studies have shown a relationship between religiosity, transparency, service quality, and trust among the general public, only a few studies have specifically examined this phenomenon among college students in countries with Muslim-majority populations even though college students, as educated young people, possess the ability to think critically and analyse public policy. Higher education encourages students to be more critical in assessing government transparency and performance (Chiang et al., 2025; Grimmelikhuijsen et al., 2021). Therefore, transparency does not always increase trust; openness regarding good performance can boost trust, whereas the exposure of government weaknesses can diminish it. Second, most studies also use samples drawn from the general public or users of public services, rather than students. Third, the integration of these three variables, religious commitment, administrative transparency, and service quality, into a single quantitative model to measure trust in government institutions remains underrepresented in the current literature. Therefore, this study makes a new contribution by focusing on college students in Muslim-majority communities as the unit of analysis and designing a comprehensive analysis of these three independent variables.

Based on this gap, the purpose of this study is to quantitatively examine the influence of religiosity, administrative transparency, and service quality on public trust in government institutions among students in a Muslim-majority community. This research is expected to provide theoretical benefits by broadening understanding of the determinants of trust in the context of higher education and Muslim communities, while also providing practical policy

implications for campus and government policymakers in designing communication strategies, public services, and strengthening governance that are responsive to the community's religious values. This is in line with the need for public administration research that increasingly emphasizes the integration of social values in modern governance.

Scholars rarely conduct research on Muslim students' trust in government institutions, as seen in the study Sabrina et al., (2023) focus on Role of Perceived Religious Values to Facilitate Predictors of Public Trust in Government: The Case of a Muslim-Majority Culture, then the research Masrurroh et al., (2026) focus on Islamic New Public Management Model for Excellent Service in Government Institutions, Next is Ferdiana's research Arief et al., (2024) The Internalization of Islamic-Based Public Service Ethics in Enhancing the Service Quality of Village Officials. Therefore, this research attempts to fill the knowledge gap which focuses on Muslim Students Trust in Government Institutions: The Role of Religiosity, Administrative Transparency, and Public Service Quality in a Muslim-Majority Context.

RESEARCH METHODS

This research uses a quantitative approach with a correlational research type, which aims to empirically test the relationship and influence between independent variables and dependent variables (Creswell, 2015; Muhammad Dhafin Atha Azka et al., 2025). The quantitative approach was chosen because it allows for objective measurement of respondents' perceptions as well as statistical testing of hypotheses (Creswell, 2015; Paramita et al., 2021). A correlational design was used to analyze the extent to which religiosity (X1), administrative transparency (X2), and perceived service quality (X3) influence public trust in government institutions (Y) among students in the context of a Muslim-majority society.

The subjects of this study were 353 students randomly selected from a sample of university students residing and studying in Mataram City, West Nusa Tenggara Province, chosen to represent the demographics of educated youth in a Muslim-majority society. Data collection was conducted using a closed questionnaire instrument with a five-point Likert scale, ranging from strongly disagree to strongly agree via Google Form. The research instrument consisted of 24 statement items, which were divided proportionally into four variables, namely 6 items for religiosity (X1), 6 items for administrative transparency (X2), 6 items for service quality (X3), and 6 items for public trust in government institutions (Y). This instrument was designed to capture the subjective perceptions of respondents in a systematic and measurable manner.

Table 1. Operationalization of Study Variables and Measurement Items

Variable	Item Code	Dimension	Questionnaire Item	Measurement Scale
Religiosity (X1)	X1.1	Influence of Religious Values	The religious values I adhere to influence how I evaluate the performance of government institutions.	5-point Likert scale
	X1.2	Morality and Fairness	I believe that religious teachings encourage me to be fair and objective in evaluating the government.	5-point Likert scale
	X1.3	Religious Practice	My religious practices shape my perceptions of the honesty of government officials.	5-point Likert scale
	X1.4	Moral Evaluation	I evaluate government institutions based on the extent to which their conduct aligns with religious moral values.	5-point Likert scale
	X1.5	Religious Guidance	Religious teachings serve as a guide when I evaluate public policies formulated by the government	5-point Likert scale
	X1.6	Government Ethics	I believe that ethical government conduct is consistent with religious values.	5-point Likert scale
Administrative Transparency (X2)	X2.1	Information Accessibility	Information about government policies and programs is easily accessible to the public	5-point Likert scale
	X2.2	Procedural Openness	Public service procedures are communicated clearly and openly to the public.	5-point Likert scale
	X2.3	Information Completeness	The government provides administrative information that is comprehensive and easy to understand	5-point Likert scale
	X2.4	Decision-Making Transparency	Government decision-making processes are conducted transparently.	5-point Likert scale
	X2.5	Information Honesty	Government officials communicate information to the public honestly.	5-point Likert scale
	X2.6	Public Oversight	The public has opportunities to monitor government administrative performance.	5-point Likert scale
Perceived service quality (X3)	X3.1	Service Reliability	The public services I receive are delivered in accordance with the promised procedures	5-point Likert scale
	X3.2	Responsiveness	Government officials respond promptly to the needs of the public.	5-point Likert scale
	X3.3	Assurance	I feel confident in government officials' ability to deliver public services.	5-point Likert scale
	X3.4	Empathy and Courtesy	Government officials demonstrate courtesy and concern for members of the public.	5-point Likert scale
	X3.5	Service Effectiveness	Public services provided by the government are delivered effectively.	5-point Likert scale
	X3.6	Service Satisfaction	Overall, I am satisfied with the quality of services provided by government institutions.	5-point Likert scale

Public Trust in Government Institutions (Y)	Y.1	Integrity	I trust government institutions to act honestly and with integrity.	5-point Likert scale
	Y.2	Competence	The government has the necessary capabilities to perform its public service responsibilities.	5-point Likert scale
	Y.3	Fairness	The government treats members of the public fairly and without discrimination.	5-point Likert scale
	Y.4	Public Interest Orientation	The government is committed to serving the public interest.	5-point Likert scale
	Y.5	Government Reliability	I trust government institutions to meet public needs reliably.	5-point Likert scale
	Y.6	General Trust	Overall, I trust the government institutions currently in place.	5-point Likert scale

The hypotheses of this study are: H1: Religiosity has a positive and significant effect on public trust in government institutions; H2: Administrative transparency has a positive and significant effect on public trust in government institutions; H3: Perceived service quality has a positive and significant effect on public trust in government institutions.

The research procedure began with the development of research instruments tailored to the indicators of each variable based on theoretical studies and previous research. The next stage was data collection, which was conducted by distributing questionnaires to student respondents. The collected data was then tabulated and coded to facilitate statistical processing. All data was processed using statistical software to ensure calculation accuracy and consistency of analysis results.

Data analysis in this study was conducted through two main stages: descriptive statistics and multiple linear regression analysis. Descriptive statistics were used to describe the characteristics of respondents and the tendencies of responses to each research variable. Furthermore, multiple linear regression was used to examine the simultaneous and partial effects of religiosity, administrative transparency, and service quality on students' public trust in government institutions. The results of the analysis were then systematically interpreted to answer the research objectives, which then served as the basis for drawing conclusions and drawing both theoretical and practical implications. This is summarized in detail in the research flow activities in Figure 1 below.

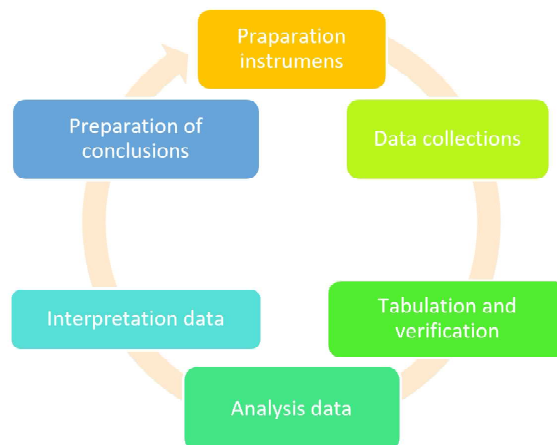


Figure 1. Research Flow

RESULTS

Respondent Data

Based on the results of data collection involving 353 student respondents, demographic characteristics show a relatively diverse distribution but are still dominated by certain groups. In terms of gender, female respondents have a larger proportion than male respondents, namely 56.7%, while men are 43.3%. In terms of age, the majority of respondents are in the 18–20 year age range (72.2%), followed by the 21–23 year age group (22.7%), while other age groups are relatively small. Based on semester level, respondents are dominated by students in their second semester (45.9%) and fourth semester (32.9%), indicating that most respondents are in the early to middle phase of their studies. This demographic composition illustrates that the research data is dominated by young students with an early level of education, making it relevant to represent the perceptions of educated youth towards the variables studied. Visually, the distribution of the respondent results is presented in Figure 2 below.

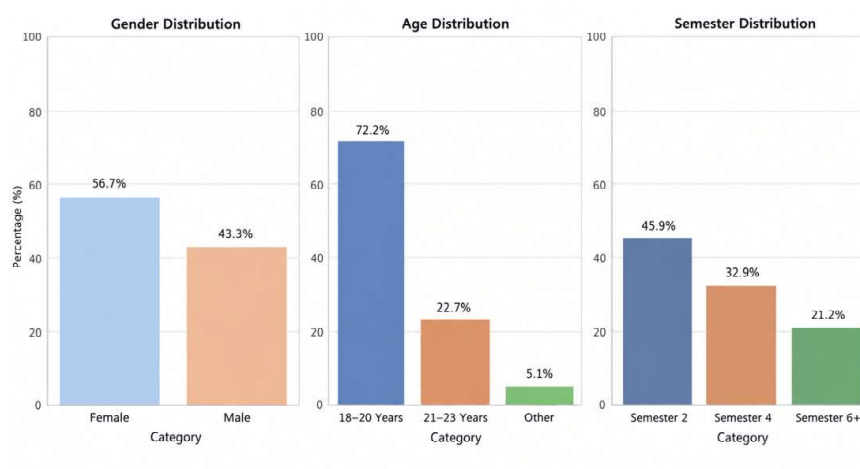


Figure 2. Respondent Data

Validity Test

Instrument validity testing was conducted to determine the extent to which the statement items in the questionnaire were able to measure the research variables accurately and consistently in accordance with the established concept. In this study, validity testing was conducted on all statement items on the variables of religiosity (X1), administrative transparency (X2), perceived service quality (X3), and public trust in government institutions (Y). Testing was conducted using Pearson Product Moment correlation with the basis of decision making based on significance value, namely an item is declared valid if it has a significance value of less than 0.05 (Sig. < 0.05).

Table 2. Validity Test

Variables	Indicator	Sign<0.05	Attack
X1 Religiosity	X1.1	0.000	valid
	X1.2	0.000	Valid
	X1.3	0.000	valid
	X1.4	0.000	valid
	X1.5	0.000	Valid
	X1.6	0.000	valid
X2 Administrative transparency	X2.1	0.000	valid
	X2.2	0.000	Valid
	X2.3	0.000	valid
	X2.4	0.000	valid
	X2.5	0.000	Valid
	X2.6	0.000	valid
X3 Perceived service quality	X3.1	0.000	valid
	X3.2	0.000	Valid
	X3.3	0.000	valid
	X3.4	0.000	valid
	X3.5	0.000	Valid
	X3.6	0.000	valid
Y Public trust in government institutions	Y1	0.000	valid
	Y2	0.000	Valid
	Y3	0.000	valid
	Y4	0.000	valid
	Y5	0.000	Valid
	Y6	0.000	valid

Based on the validity test results in Table 1, all statement items in the variables of religiosity, administrative transparency, perceived service quality, and public trust in government institutions showed a significance value of 0.000 or less than 0.05. Thus, all instrument items were declared valid and suitable for use in research. In the religiosity variable (X1), the six statement items were able to accurately represent the dimensions of students' religious values and practices. The administrative transparency variable (X2) also showed all valid indicators, indicating that the items used were able to describe respondents' perceptions of the openness and accountability of government administration. Furthermore, in the variable

of perceived service quality (X3), all items were declared valid, so the instrument was able to accurately measure students' perceptions of the quality of public services. A similar finding was also found in the variable of public trust in government institutions (Y), where all statement items successfully represented the level of respondents' confidence and trust in government institutions. Overall, these results indicate that the research instrument has a good level of measurement accuracy, so it can be used for further statistical analysis, including multiple linear regression testing.

Reliability Test

Reliability testing is conducted to determine the level of consistency of the research instrument in measuring the variables studied. A reliable instrument indicates that each statement item has good stability and internal consistency, thus producing reliable data. In this study, reliability testing was conducted using the Cronbach's Alpha method. A variable is considered reliable if its Cronbach's Alpha value is greater than 0.70, indicating that the items within the variable have a high level of internal consistency.

Table 3. Reliability Test

Variables	Cronbach's Alpha>0.7	Information
X1 Religiosity	0.873	reliable
X2 Administrative transparency	0.925	reliable
X3 Perceived service quality	0.942	reliable
Y Public trust in government institutions	0.948	reliable

Based on the reliability test results in Table 2, all research variables showed a Cronbach's Alpha value above 0.70, so all instruments were declared reliable. The religiosity variable (X1) obtained a Cronbach's Alpha value of 0.873, which indicates a very good level of internal consistency in measuring aspects of respondents' religious values and practices. The administrative transparency variable (X2) had a Cronbach's Alpha value of 0.925, which indicates that the items in this variable were very consistent in representing the perception of openness of government administration. Furthermore, the perceived service quality variable (X3) obtained a value of 0.942, while the public trust in government institutions variable (Y) had the highest value of 0.948. The very high values for both variables indicate that the instruments have very strong measurement stability and consistency. Overall, these results confirm that all items in the research questionnaire are able to provide consistent and reliable measurement results, making them suitable for use in data collection and further statistical analysis.

Descriptive Statistics

Descriptive statistics were used to provide an initial overview of the data characteristics for each research variable, namely religiosity (X1), administrative transparency (X2), service quality (X3), and public trust (Y). This analysis included measures of central tendency (mean and median), as well as measures of data dispersion (standard deviation, variance, and range), which aimed to understand the general trend of respondents' answers and the level of variation. All variables were analyzed based on 353 respondents with no missing data, so that the statistical results obtained represent the entire research sample as a whole.

Table 4. Descriptive Analysis

		Statistics			
		X1	X2	X3	Y
N	Valid	353	353	353	353
	Missing	0	0	0	0
Mean		23.52	22.66	21.81	22.05
Standard Error of Mean		.295	.321	.320	.322
Median		24.00	24.00	22.00	23.00
Standard Deviation		5,538	6,030	6,021	6,046
Variance		30,671	36,361	36,251	36,549
Range		24	24	24	24
Minimum		6	6	6	6
Maximum		30	30	30	30

Based on the results of the descriptive statistical analysis in Table 3, the religiosity variable (X1) has the highest average value of 23.52, followed by administrative transparency (X2) at 22.66, public trust (Y) at 22.05, and service quality (X3) at 21.81. The average value, which is relatively close to the maximum score of 30, indicates that respondents generally tend to have a fairly high level of perception of all variables studied. The median for each variable is also in the range of 22–24, indicating a relatively symmetrical data distribution and no extreme deviations. In terms of data distribution, the standard deviation value ranges from 5.538 to 6.046, indicating a moderate level of variation in respondents' answers. This indicates that although there are differences in perceptions between respondents, the variation is not too wide and is still within acceptable limits of homogeneity for further analysis. In addition, the same range of values for all variables totaling 24 with a minimum value of 6 and a maximum of 30 indicates that all possible scores in the instrument are optimally filled by respondents. Overall, these results indicate that the data have a fairly good distribution and are suitable for use in further inferential analysis, such as multiple linear regression, to test the relationship between variables in this study.

RESEARCH DATA ANALYSIS

Model Summary

Summary model analysis in multiple linear regression is used to evaluate the level of ability of independent variables in explaining variations in the dependent variable. In this study, the analysis was conducted to determine the extent to which religiosity (X1), administrative transparency (X2), and service quality (X3) are simultaneously able to explain variations in public trust in government institutions (Y). The main parameters analyzed include the correlation coefficient (R), determination coefficient (R Square), Adjusted R Square, and the model significance test through the F Change value.

Table 5. Model Summary–Y

Model Summary									
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	R Square Change	Change Statistics F Change	df1	df2	Sig. F Change
1	.887a	.786	.784	2,807	.786	427,905	3	349	.000

a. Predictors: (Constant), X3, X1, X2

b. Dependent Variable: Y

Based on the analysis results in Table 4, the correlation coefficient (R) value of 0.887 was obtained, indicating that the relationship between the independent variables (X1, X2, X3) and the dependent variable (Y) is in the very strong category. The coefficient of determination (R Square) value of 0.786 indicates that 78.6% of the variation in public trust can be explained by a combination of religiosity, administrative transparency, and service quality variables. Meanwhile, the Adjusted R Square value of 0.784 indicates that after adjusting for the number of variables and sample size, the model still has very high explanatory power, so it can be said to be stable and does not experience significant overfitting.

The Std. Error of the Estimate value of 2.807 indicates that the model's prediction error rate is relatively small, so the model has a good level of accuracy in predicting the dependent variable. Furthermore, the results of the simultaneous test through the F Change value of 427.905 with a significance of 0.000 ($p < 0.05$) indicate that the regression model built as a whole is statistically significant. This means that the three independent variables together have a significant effect on students' public trust in government institutions. This finding confirms that the model used in this study has excellent goodness of fit and is suitable for further analysis, including testing the partial influence of each independent variable.

Analysis of Variance (ANOVA)

The ANOVA (Analysis of Variance) test in multiple linear regression is used to assess the feasibility of the model simultaneously, namely whether the independent variables used in

the model together have a significant influence on the dependent variable. In this study, the ANOVA test aims to examine whether religiosity (X1), administrative transparency (X2), and service quality (X3) simultaneously influence public trust in government institutions (Y). The parameters observed include the Sum of Squares value, Mean Square, F value, and the level of significance of the model.

Table 6. ANOVA

		ANOVA				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10115.264	3	3371.755	427,905	.000b
	Residual	2750.011	349	7,880		
	Total	12865.275	352			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X1, X2

Based on the results of the ANOVA test in table 5, the Sum of Squares value for the regression was 10115.264 and the residual was 2750.011, with a total variation of 12865.275. This indicates that most of the variation in the public trust variable (Y) can be explained by the constructed regression model. The Mean Square regression value of 3371.755 is much greater than the Mean Square residual of 7.880, which indicates that the variability explained by the model is more dominant than the error. Furthermore, the F value of 427.905 with a significance level of 0.000 ($p < 0.05$) indicates that the overall regression model is statistically significant. Thus, it can be concluded that the variables of religiosity, administrative transparency, and service quality simultaneously have a significant influence on students' public trust in government institutions. This finding strengthens the results of the model summary analysis, which shows that the model has excellent predictive ability and is worthy of use in further hypothesis testing, especially to see the partial influence of each independent variable on the dependent variable.

Regression Coefficients (Coefficients)

Regression coefficient analysis was conducted to test the partial influence of each independent variable on the dependent variable in a multiple linear regression model. In this study, the analysis aims to determine the extent to which religiosity (X1), administrative transparency (X2), and service quality (X3) individually influence public trust in government institutions (Y). Furthermore, a coefficient table was used to determine the direction of the relationship, the level of significance of the influence through a t-test, and to detect potential multicollinearity problems through the Tolerance and Variance Inflation Factor (VIF) values.

Table 7. Coefficients

Model	Coefficients						
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics
	B	Std. Error	Beta				Tolerance VIF
1	(Constant)	1,452	.705		2,059	.040	
	X1	.067	.034	.061	1,989	.048	.648 1,544
	X2	.061	.040	.061	1,534	.126	.387 2,586
	X3	.809	.038	.805	21,078	.000	.420 2,383

a. Dependent Variable: Y

Based on the analysis results in table 6, the following regression equation is obtained: $Y = 1.452 + 0.067X1 + 0.061X2 + 0.809X3$. The constant value of 1.452 indicates that when all independent variables are zero, public trust has a base value of 1.452. Partially, the religiosity variable (X1) has a coefficient of 0.067 with a significance value of 0.048 ($p < 0.05$), which means that religiosity has a positive and significant effect on public trust. This indicates that the higher the level of student religiosity, the tendency for trust in government institutions also increases, although the effect is relatively small (Beta = 0.061).

In contrast, the administrative transparency variable (X2) has a coefficient of 0.061 with a significance value of 0.126 ($p > 0.05$), indicating that administrative transparency does not have a statistically significant effect on public trust in this model. This finding indicates that students' perceptions of administrative openness have not been a major determinant in shaping their trust in government institutions.

Meanwhile, the service quality variable (X3) shows the most dominant influence with a coefficient of 0.809 and a significance value of 0.000 ($p < 0.05$), as well as a standard Beta value of 0.805. This indicates that service quality has a positive and very significant influence on public trust, so that the better the quality of service perceived by students, the higher their level of trust in government institutions.

In terms of multicollinearity, all variables have a Tolerance value above 0.10 and a VIF value below 10, indicating that there is no multicollinearity problem in the regression model. Overall, these results show that although all three variables simultaneously have a significant effect on public trust, partially service quality is the strongest factor, followed by religiosity, while administrative transparency does not show a significant effect in the context of this study.

DISCUSSION

The most significant finding in this study is that service quality (X3) has a very dominant and significant influence on public trust ($\hat{\alpha} = 0.805$; $p < 0.001$), far exceeding the influence of religiosity and administrative transparency. Simultaneously, the three variables are able to explain 78.6% of the variation in public trust, indicating that the model has very strong

explanatory power. This finding confirms that in the context of students as educated youth, direct experience with public services is a major determinant in forming trust in government institutions. This is in line with recent studies showing that responsive and effective service quality plays a central role in forming trust between the government and the public (Taufiqurokhman et al., 2024). Thus, public trust is not solely built on normative perceptions, but is more strongly influenced by concrete experiences in interactions with government services.

Interestingly, the results of this study indicate that administrative transparency has no significant effect, which is somewhat different from some international literature. Recent studies have found that transparency can increase trust, but its effect depends on how the information is understood and used by the public (Ripamonti, 2024). In fact, global reports show that while transparency is important, public perception of government is often low when transparency is not followed by real performance; more than 59% of respondents considered the government to be less transparent and accountable (Yakovenko, 2025). In addition, other studies show that the impact of transparency on macro indicators is even smaller than trust itself in influencing stability (Vasylieva et al., 2023). Thus, the results of this study strengthen the argument that transparency alone is not enough; without directly perceived service quality, transparency does not automatically increase public trust.

Meanwhile, the religiosity variable was shown to have a positive but relatively small effect on public trust. This suggests that religious values still play a role in shaping individual perceptions, but are less of a primary factor than service experience. Globally, surveys show that values-based institutions, such as religious institutions, often command higher levels of trust than formal political institutions (Yakovenko, 2025). However, recent literature also suggests that the influence of religiosity is contextual and does not always directly increase institutional trust, but rather influences the moral dimensions and ethical perceptions of individuals (Boonlert-U-Thai et al., 2025). This explains why religiosity is significant but not dominant in this study, as students tend to separate personal religious values from their evaluation of the performance of government institutions.

Overall, the findings of this study are consistent with a global trend that places government performance, particularly service quality, as the primary determinant of trust, rather than normative factors such as transparency or social values alone. A recent OECD report found that only about 39% of the public perceives government as responsive, while trust is higher when government is perceived as effective and reliable (OECD, 2024). Thus, the primary contribution of this study lies in confirming that, in the context of university students in a Muslim-majority region, trust is more performance-based than value-based. This is an important finding because it shifts the assumption that religious values or transparency are the dominant factors and suggests that improving the quality of public services is the most effective strategy in building trust in government institutions among the younger generation.

Limitations and Practical Implications

This study has several limitations. First, its cross-sectional design does not establish causal relationships between religiosity, administrative transparency, public service quality, and trust in government institutions. Second, the study focuses on university students in Mataram, limiting the generalizability of its findings to other populations and geographical contexts. Additionally, the use of self-reported questionnaires and a limited number of measurement items may not fully capture the complexity of religiosity and administrative transparency. Future research should involve broader populations, multiple regions, and validated measurement instruments. In practical terms, local government institutions should prioritize improving public service quality through efficient procedures, timely responses, equitable treatment, and accessible complaint mechanisms. They should also strengthen administrative transparency by providing clear and accessible public information and opportunities for citizen participation. In Muslim-majority contexts, ethical principles such as *amanah* (trustworthiness), justice, and *maslahah* (public interest) should be reflected in accountable and fair administrative practices. Collaboration with universities and youth participation initiatives may further help local governments understand citizens' expectations and build public trust through demonstrable institutional performance.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the research analysis, it can be concluded that religiosity, administrative transparency, and service quality simultaneously have a significant influence on students' public trust in government institutions, with a very strong explanatory power of the model ($R^2 = 0.786$). However, partially, only religiosity and service quality proved to have a significant influence, while administrative transparency showed no significant influence. The most crucial finding in this study is the dominance of the service quality variable as the main determinant of public trust, which indicates that students' direct experience with government service performance is the most determining factor in building trust. On the other hand, religiosity plays a supporting role that strengthens positive perceptions of government institutions, although its influence is relatively small. Meanwhile, administrative transparency has not been able to provide a significant impact, indicating that information disclosure alone is not enough to increase trust without being accompanied by tangible service quality. Thus, this study confirms that public trust among students is more performance-based than value-based.

Future research should further examine the role of mediating or moderating variables, such as public satisfaction or digital literacy, in strengthening the relationship between administrative transparency and public trust. Furthermore, it is important to expand the unit of analysis to more heterogeneous societal groups to test the consistency of findings across different social and demographic contexts.

REFERENCES

- Abdi, ANM, & Abdul Rahman, NB (2025). Public trust in local government in Somalia: effect of citizen participation and perceived local government performance. *Cogent Social Sciences*. <https://doi.org/10.1080/23311886.2024.2441405>
- Aditya, I.A., Haryadi, F.N., Haryani, I., Rachmawati, I., Ramadhani, D.P., Tantra, T., & Alamsyah, A. (2023). Understanding service quality concerns from public discourse in Indonesia's state electric company. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2023.e18768>
- Alessandro, M., Cardinale Lagomarsino, B., Scartascini, C., Streb, J., & Torrealday, J. (2021). Transparency and trust in government evidence from a survey experiment. *World Development*. <https://doi.org/10.1016/j.worlddev.2020.105223>
- Anggraeni, D. A., & Mursyidah, L. (2025). Service Quality Evaluation: The Empathy Gap in Ngampelsari Village Administration. *Indonesian Journal of Public Policy Review*, 26(2). <https://doi.org/10.21070/ijppr.v26i2.1446>
- Asmawanti-S, D., Afiah, NN, Ritchi, H., & Suharman, H. (2025). Literature review of government digital services based on public value theory and citizen perspectives. In *Cogent Business and Management*. <https://doi.org/10.1080/23311975.2025.2518494>
- Aziz, S., & Wediyanto, E. (2024). The Influence of Transparency, Accountability, Human Resource Competence, Technological Innovation, and Public Participation on Local Government Financial Performance. *Private Social Sciences Journal*. <https://doi.org/10.55942/pssj.v4i12.347>
- Azizah, S., Kholifah Al Rosyadah, H., & Yudha Pratama, V. (2024). Public Service Quality, Transparency, and Accountability as Determinants of Public Trust. *SINOMIKA JOURNAL | VOLUME*.
- Boonlert-U-Thai, K., Kitiwong, W., & Suttipun, M. (2025). Religiosity, secrecy culture, and corporate social responsibility report assurance. *Journal of International Accounting, Auditing and Taxation*. <https://doi.org/10.1016/j.intaccaudtax.2024.100667>
- Campbell, J. W. (2023). Public Participation and Trust in Government: Results From a Vignette Experiment. *Journal of Policy Studies*. <https://doi.org/10.52372/jps38203>
- Creel, N. (2022). In God we trust...and Caesar too? Evaluating the link between religiosity and trust in government. *International Journal of Sociology and Social Policy*. <https://doi.org/10.1108/IJSSP-06-2021-0156>
- Creswell, J.W. (2015). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Pearson Education Inc.

- de Menezes, VG, Pedrosa, GV, da Silva, MPP, & Figueiredo, RM d. C. (2022). Evaluation of Public Services Considering the Expectations of Users—A Systematic Literature Review. Information (Switzerland). <https://doi.org/10.3390/info13040162>
- Ferdiana Arief, A., Suwastanto, C., Aga Sekamdo, M., Puspita Harti, F., & Tinggi Ilmu Administxasi Madani, S. (2024). The Internalization of Islamic-Based Public Service Ethics in Enhancing the Service Quality of Village Officials. In *Journal of Community Service* (Vol. 2, Number 6).
- Fox, J., Eisenstein, M., & Breslawski, J. (2024). State Support for Religion and Social Trust. *Political Studies*. <https://doi.org/10.1177/00323217221102826>
- Grimmelikhuijsen, S. G., & Meijer, A. J. (2014). Effects of transparency on the perceived trustworthiness of a government organization: Evidence from an online experiment. *Journal of Public Administration Research and Theory*. <https://doi.org/10.1093/jopart/mus048>
- Hamzah, M., Surahman, F., Abdurahman, A., Saputri, E., & Basyarahil, A. (2024). Public Budget Transparency as the Key to Increasing Public Trust in Local Government. *Assyarikah: Journal of Islamic Economic Business*. <https://doi.org/10.28944/assyarikah.v5i2.1891>
- Handayani, N. (2025). Exploring the Relationship Between Administrative Transparency and Public Trust in Government Institutions and Agencies. In *The Journal of Academic Science*.
- Hartanto, D., Agussani, A., & Dalle, J. (2021). Antecedents of public trust in government during the COVID-19 pandemic in Indonesia: Mediation of perceived religious values. *Journal of Ethnic and Cultural Studies*. <https://doi.org/10.29333/EJECS/975>
- Jayanto, P., & Munawaroh, S. (2019). The Influences of Reputation, Financial Statement Transparency, Accountability, Religiosity, and Trust on Interest in Paying Zakat of Profession. *JDA Journal of Accounting Dynamics*.
- Judijanto, L., Mulyapradana, A., & Hidayati, U. (2024). Analysis of the Effect of Public Administration Transparency on Public Trust in Indonesia. *Sciences Du Nord Humanities and Social Sciences*. <https://doi.org/10.58812/snhss.v1i2.27>
- Ministry of Administrative and Bureaucratic Reform. (2023). Regulation of the Minister of Administrative and Bureaucratic Reform Number 3 of 2023 concerning Public Service Innovation. Jakarta.
- Kim, S., Rho, E., & Teo, Y. X. J. (2024). Citizen Satisfaction Research in Public Administration: A Systematic Literature Review and Future Research Agenda. *The American Review of Public Administration*, 54(5), 460–485. <https://doi.org/10.1177/02750740241237477>
- Kumagai, S., & Iorio, F. (2020). Building Trust in Government through Citizen Engagement. In *Building Trust in Government through Citizen Engagement*. <https://doi.org/10.1596/33346>

- Levi, M., & Stoker, L. (2000). Political trust and trustworthiness. In *Annual Review of Political Science*. <https://doi.org/10.1146/annurev.polisci.3.1.475>
- Masruroh, N., Zahra, H., Widyawati, N., Rahayu, I., Sami, M., Kiai, H., Achmad, S., & Jember, I. (2026). Islamic New Public Management Model for Excellent Service in Government Institutions. <https://doi.org/10.70095/alamwalv17i2>
- Mansoor, M. (2021). Citizens' trust in government as a function of good governance and government agency's provision of quality information on social media during COVID-19. *Government Information Quarterly*. <https://doi.org/10.1016/j.giq.2021.101597>
- Muhammad Dhafin Atha Azka, Nadya Fitri Aulia, Farel Ananda, & Purwanto Putra. (2025). The Influence of Deepfake on Public Trust in Visual Information on Social Media. *Public Administration and Communication Studies*. <https://doi.org/10.62383/kajian.v2i2.401>
- Mustika Rani, B., & Malau, GC (2025). Analysis of Smart Urban Governance from the Perspective of Dynamic Governance in the City of Surabaya. *Journal of Public Administration*. <https://doi.org/10.33509/jan.v31i2.3782>
- Ocampo, L., Alinsub, J., Casul, R. A., Enquig, G., Luar, M., Panuncillon, N., Bongo, M., & Ocampo, C. O. (2019). Public service quality evaluation with SERVQUAL and AHP-TOPSIS: A case of Philippine government agencies. *Socio-Economic Planning Sciences*, 68, 100604. <https://doi.org/10.1016/j.seps.2017.12.002>
- OECD. (2024). OECD Survey on Drivers of Trust in Public Institutions – 2024 Results Building Trust In A Complex Policy Environment. In *OECD Survey on Drivers of Trust in Public Institutions in Latin America and the Caribbean 2025 Results*.
- OECD Digital Economy Outlook 2017 (Summary in Danish). (2017). <https://doi.org/10.1787/b3e3a27c-da>
- Paramita, RWD, Rizal, N., & Suliptyan, RB (2021). Quantitative Research Methods. In *Quantitative Research Methods Textbook of Research Methodology for Accounting & Management Students*.
- Pearce, L.D., Hayward, G.M., & Pearlman, J.A. (2017). Measuring Five Dimensions of Religiosity Across Adolescence. *Review of Religious Research*. <https://doi.org/10.1007/s13644-017-0291-8>
- Prasodjo, T. (2025). Rethinking Bureaucracy in the Digital Era: A Qualitative Review of Public Sector Transformation in Indonesia. *Golden Ratio of Social Science and Education*. <https://doi.org/10.52970/grsse.v5i2.1425>
- Pratolo, S., Sofyani, H., & Maulidini, RW (2022). The roles of accountability and transparency on public trust in the village government: The intervening role of COVID-19 handling services quality. *Cogent Business and Management*. <https://doi.org/10.1080/23311975.2022.2110648>

- Ripamonti, J.P. (2024). Does being informed about government transparency boost trust? Exploring an overlooked mechanism. *Government Information Quarterly*. <https://doi.org/10.1016/j.giq.2024.101960>
- Sabrina, R., Akrim, A., Hartanto, D., & Dalle, J. (2023). Role of Perceived Religious Values to Facilitate Predictors of Public Trust in Government: The Case of a Muslim-Majority Culture. *Journal of Ethnic and Cultural Studies*. <https://doi.org/10.29333/ejecs/1776>
- Taufiqurokhman, T., Satispi, E., Andriansyah, A., Murod, M., & Sulastri, E. (2024). The impact of e-service quality on public trust and public satisfaction in e-government public services. *International Journal of Data and Network Science*. <https://doi.org/10.5267/j.ijdns.2024.1.002>
- Valente, R.R., & Okulicz-Kozaryn, A. (2021). Religiosity and Trust: Evidence from the United States. *Review of Religious Research*. <https://doi.org/10.1007/s13644-020-00437-8>
- Vasylieva, T., Kasperowicz, R., Tiutiunyk, I., & Lukács, E. (2023). Transparency and trust in the public sector: Targets and benchmarks to ensure macroeconomic stability. *Journal of International Studies*. <https://doi.org/10.14254/2071-8330.2023/16-4/8>
- Widodo, MA (2021). The Influence of Transparency, Service Quality, and Religiosity on Muzakki's Interest in Paying Zakat at Lazismu Salatiga City with Trust as an Intervening Variable. <http://e-repository.perpus.uinsalatiga.ac.id/id/eprint/10790>.
- Wijaya, E., Junaedi, A.T., Fransisca, L., Chandra, S., & Suyono, S. (2023). Trust, Satisfaction, and Loyalty of Islamic Bank Customers: The Role of Religiosity. *Journal of Management Applications*. <https://doi.org/10.21776/ub.jam.2023.021.02.17>
- Yakovenko, D. (2025). Digital Transformation Of Public Administration As A Factor In Enhancing The Efficiency Of Territorial Development In The Context Of European Integration. *Dnipro Academy of Continuing Education Herald Series Public Management and Administration*. <https://doi.org/10.54891/2786-698x-2025-2-7>
- Yuliantini, L. S., & Purnomo, E. P. (2024). Citizens' Satisfaction on Service Quality of Mobile Government (Case Study/ : Wargaku Surabaya Application). *Kinetik: Game Technology, Information System, Computer Network, Computing, Electronics, and Control*. <https://doi.org/10.22219/kinetik.v9i1.1884>
- 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>