

The Effect of Competence and Infrastructure on Service Quality Performance as Intervening Variables at the BPS Office of North Sulawesi Province

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Abstract: The bureaucratic reform movement at BPS continues. Public services, which are in the spotlight of various parties, continue to be improved on various sides. BPS as a data provider is certainly always trying to improve its services to meet consumer needs. This study discusses the influence of competence and infrastructure on performance with service quality as an intervening variable at the BPS Office of North Sulawesi Province. Agencies really need competent human resources (HR) so that agency goals can be achieved so that the management of human resources (HR) is something that must be done so that human resources (HR) can perform their role to the fullest in order to achieve agency targets. The purpose of this research is to analyze competence and infrastructure Against Performance Mediated By Service Quality. The data analysis technique used is path analysis using the SPSS 25 application. The results show that competence affects service quality and infrastructure affects service quality at BPS North Sulawesi Province. Competence affects performance. Infrastructure facilities affect performance and service quality affects performance in North Sulawesi Province. Competence influences performance through service quality. Infrastructure facilities affect performance through service quality at BPS Sulawesi Province.

Key words: Competence, Infrastructure Suggestions, Service Quality, Performance.

INTRODUCTION

background

Employees can become potential if managed properly and correctly, but will become a burden if mismanaged. HR management will affect organizational performance. HR management can be done by managing the various skills possessed by HR in an organization. To achieve organizational success, a strong foundation is needed in the form of competence from its employees. That way competence becomes very useful to help organizations improve the performance or achievements of their employees. This concept implies the ability to conduct complex operational activities or activities, this also applies to governance. The State Civil Apparatus functions as a public servant who is obliged to provide good service to the community and to help or take care of the needs of a person or group of people. In government organizations good service is reflected in the effectiveness and efficiency of every activity carried out. The faster and more accurate the service provided, the better the service quality.

To create success at work, the office must guarantee and provide facilities that support employee success at work. This is because the workforce alone is not enough to carry out an agency's activities, but must be supported by the existence of facilities so that the achievement of employee work is in accordance with what is desired. This office facility consists of two, namely facilities and infrastructure. Nowadays, speed and accuracy are needed and maximum quality work results from the office. Therefore, the office must be very concerned about the importance of facilities and infrastructure with its completeness so that the work achievements of employees produce very satisfying results.

The following table shows 1.1 the percentage of consumers who are satisfied with public services for existing facilities and infrastructure at the BPS North Sulawesi Province, from 2019-2022 the data was obtained from the publication of Analysis of the Results of the Data Needs Survey of the North Sulawesi ProvinceBPS.

Table 1.1. Community Satisfaction with Facilities and Infrastructure in the BPS of North Sulawesi Province in 2019-2022

Description	year			
	2019	2020	2021	2022
Percentage of consumers who are satisfied with facilities and infrastructure	100	99.08	100	99.58

Source: Publication Analysis of Data Needs Survey of North Sulawesi Province BPS

This is a gap phenomenon as BPS North Sulawesi Province is always trying to improve facilities and improve facilities and infrastructure but according to the assessment of service users the percentage of facilities and infrastructure is still not as expected, based on the Needs Survey questionnaire Data of respondents were asked about the level of interest and level of satisfaction of several attributes that produce satisfaction with facilities and infrastructure. Furthermore, related to efforts to improve the quality of public services, it is necessary to be supported by reliable service human resources (HR), as well as the availability of facilities and infrastructure including Information Technology (IT) support. therefore,

Efforts to provide quality services will not materialize if they are not supported by employees who have reliable and professional skills. Besides that, the success of a public service organization will not be separated from the role of human resources in it. Therefore, human resources working in public service units/organizations are not only required to have technical expertise and skills and mastery of the underlying laws and regulations, but more importantly, a good mental attitude and behavior, friendly in serving, honest, agile. and be responsible. This is because the people served will not care about what are the obstacles and obstacles in work, will not care about the personal problems of employees,

Data on the performance achievements of the North Sulawesi Central Bureau of Statistics for 2018-2022. The provision of statistical data to be used as a basis for development has increased by 1.87% in 2021-2022. In increasing collaboration, integration, synchronization and standardization in the implementation of SSN, there has been an increase of 19.59% in strengthening the commitment of K/L/D/I to SSN. For excellent service in implementing SSN in 2021-2022. In improving service excellence in the implementation of SSN, there has been a 20% increase in the percentage of K/L/D/I capable of independently carrying out sectoral statistics according to the 2021-2022 NSPK. Meanwhile, in strengthening institutional governance and bureaucratic reform, there has been a 1.

Based on the description above, researchers are interested in researching and discussing a research object, while the title to be proposed is: "The Influence of Competence and Infrastructure on Performance with Quality of Service as an intervening variable at the BPS Office of North Sulawesi Province".

Research purposes

1. To analyze the effect of Competence on Service Quality at the Central Bureau of Statistics of North Sulawesi.
2. To analyze the effect of facilities and infrastructure on service quality at the Central Bureau of Statistics of North Sulawesi.
3. To analyze the influence of competence on performance at the North Sulawesi Central Bureau of Statistics.
4. To analyze the effect of facilities and infrastructure on performance at the Central Bureau of Statistics of North Sulawesi.
5. To analyze the influence of Service Quality on Performance at the Central Bureau of Statistics of North Sulawesi.
6. To analyze the influence of Competence on Performance through Service Quality at the North Sulawesi Central Bureau of Statistics Office.
7. To analyze the effect of facilities and infrastructure on performance through service quality at the Central Bureau of Statistics of North Sulawesi.

LITERATURE REVIEWS

Human Resource Management

According to (Sedarmayanti, 2019) human resource management (MSDM) is an approach to managing human problems based on three basic principles:

1. Human resources are the most valuable and important assets owned by the organization/company, because the success of the organization is largely determined by the human element
2. Success is very likely to be achieved, if the policies, procedures and Human-related regulations from the organization/company are interconnected and benefit all parties involved in the organization/company.
3. Corporate culture and values as well as managerial behavior are derived from This culture will have a major influence on achieving the best results.

Competence

Competence is a characteristic that underlies a related person with the effectiveness of individual performance in their work or the basic characteristics of individuals who have a causal relationship or as a cause and effect with the criteria used as a reference. Competence lies within every human being and will forever exist in a person's personality which can predict behavior and performance broadly in all work situations and tasks (Triastuti, 2019).

Facilities and infrastructure

According to Priansa and Garnida (2013: 224) states that office facilities and infrastructure can be measured by the completeness of the equipment, the suitability of the equipment, the condition of the equipment and the ease of obtaining tools. A good office certainly has facilities and infrastructure that can support optimal work implementation.

Service Quality

According to Moenir (2010: 26) service is an activity carried out by a person or group of people on the basis of material factors through certain systems, procedures and methods in an effort to fulfill the interests of other people according to their rights. Service is essentially a series of

activities, therefore service is a process. As a process, the service takes place regularly and continuously, covering the whole life of people in society.

Organizational Performance

The word performance is often translated as: demonstrations, results of work, work, implementation of work and results of work implementation. In other terms, performance is called "performance". This is in accordance with what was mentioned by Sedarmayanti (2017: 52), namely: "Performance means performance, work implementation, work achievement or work results/work performance/work performance".

Previous Research Results

1. Hariyanto (2021) entitled: The Effect of Competence of Human Resources and Infrastructure on the Quality of SKCK Services through the Performance of SKCK Officers at the Bojonegoro Police. The results of the study show that competence has a significant effect on officer performance. Facilities and infrastructure have a significant influence on the performance of officers. Competence directly has a significant influence on service quality. Facilities and infrastructure directly have a significant influence on service quality. Officer performance directly has a significant influence on service quality. Competence has a significant effect on service quality through officer performance. Facilities and infrastructure have a significant influence on the quality of service through the performance of officers.
2. Mulfhiani D. W, Idris M, Maryadi (2021) entitled: The Influence of Infrastructure, Skills, Job Satisfaction on ASN Performance at the Personnel and Human Resource Development Agency in Bantaeng Regency. The results of the analysis are (1) Infrastructure, skills, job satisfaction simultaneously influence ASN performance at the Bantaeng Personnel and Human Resources Development Agency and (2) Infrastructure, skills, job satisfaction partially affect ASN performance at the Personnel Development Agency and Bantaeng Human Resources.
3. Lapping M, Echdar S, Maryadi (2020) entitled: The Influence of Competence, Compensation and Work Discipline on the Performance of State Civil Apparatuses at the Secretariat of the DPRD Pinrang district. The results of the study show the effect of competence, compensation, and discipline on ASN performance at the Pinrang Regency DPRD Secretariat. The results of the regression analysis show that there is a significant influence between the independent variables, namely: competency (X1), compensation (X2), and discipline (X3) with the dependent variable namely: ASN performance (Y). The greatest influence occurred in the competence variable (X1), namely 36%, followed by the discipline variable (X3) of 32%, and the smallest, namely the compensation variable (X2) of 29.7%. Simultaneously, there is a significant and positive influence between competence,

Research Model and Hypothesis

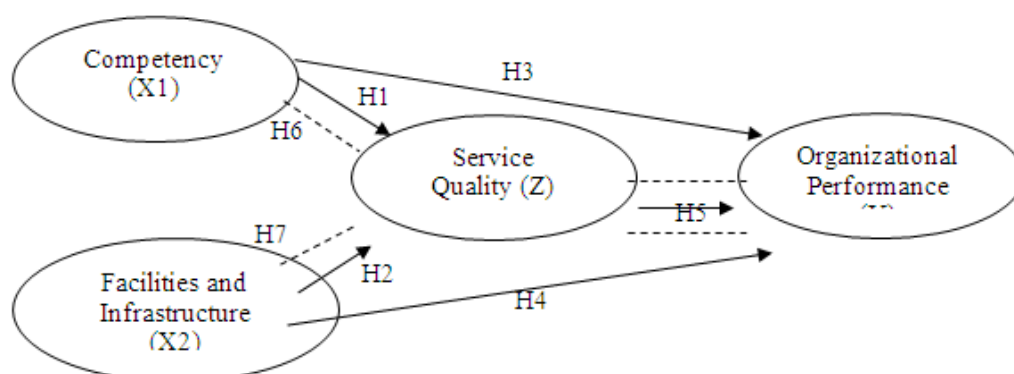


Figure 1. Research Concept Framework

Source: *Theoretical Studies and Empirical Studies* (2022)

hypothesis

Based on the previous description, the hypothesis can be formulated as follows:

H1: It is suspected that competence (X1) has an effect on service quality (Z)

H2: It is suspected that facilities and infrastructure (X2) have an effect on service quality (Z)

H3: It is suspected that competence (X3) has an effect on organizational performance (Y)

H4: It is suspected that facilities and infrastructure (X4) have an effect on organizational performance (Y)

H5: It is suspected that Service Quality (Z) has an effect on Organizational Performance (Y)

H6: It is suspected that Service Quality (Z) is able to moderate the effect of Competence (X1) on Organizational Performance (Y)

H7: Allegedly Service Quality (Z) is able to moderate the influence of Facilities and Infrastructure (X2) on Organizational Performance (Y)

RESEARCH METHODS

Research methods

According to Sugiyono (2018: 13) quantitative data is a research method that is based on positivistic (concrete data), research data is in the form of numbers that will be measured using statistics as a counting test tool, related to the problem being studied to produce a conclusion. This research is a research with a type of problem in the form of two or more variables to identify facts or events. The variables that influence the independent variables are Competence, Infrastructure Suggestions, and Service Quality as intervening variables, while the dependent variable is Organizational Performance.

Location and Research Object

The research location is a place where the researcher finds certain phenomena there and is set as a background for research. Moleong (2018: 127) explains that choosing a research location is directed by an empirical theory which is then formulated in the form of temporary data. Later this data will be juxtaposed and confirmed with the data found when the researcher has gone into the field (research location). This research will be conducted at the Central Bureau of Statistics of North Sulawesi with a total of 195 consumers. The data collection method in this study was a questionnaire using Google Forms, which is a data collection technique by providing a set of questions or written statements for respondents to answer. This research was conducted by distributing Google Forms questionnaires to consumers of the Central Bureau of Statistics of North Sulawesi, which was measured using a Likert scale. This study uses descriptive analysis techniques and path analysis.

Population and Research Sample

According to Sugiyono (2018: 117) Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. The population of this study are service users at the Central Bureau of Statistics of North Sulawesi, from 2018-2022. The number of service users is 195 consumers. According to Sugiyono (2018: 118) the sample is part of the number and characteristics possessed by the population. While sample size is a step to determine the size of the sample taken in carrying out a study. The notation of the Slovin formula is $n = \frac{N}{1 + Ne^2}$ with an error of 5% or 0.05 so that from a total population of 195 respondents, the number of samples required based on the Slovin formula is 140 respondents.

Research Instrument Scales

The instrument in question is a measuring tool for measuring research conducted According to Sugiyono (2018) The Likert scale is used to measure attitudes, opinions, and perceptions of a

person or group of people about social phenomena. The questionnaire or questionnaire uses a Likert scale in the form of a checklist. With a Likert scale, the measured variables are translated into indicator variables. Then these indicators are used as a starting point for compiling instrument items which can be in the form of statements or questions. For the purposes of quantitative analysis, the answers can be scored as follows: Strongly Disagree (STS); given a score of 1; Disagree (TS); given a score of 2; Undecided (RG); given a score of 3; Agree (ST); given a score of 4; Strongly Agree (SS); given a score of 5.

Testing Instruments

validity test

The intended validity test is a test validity question items or test research instruments. In this study, it is an item validity test, namely testing the validity of the measurement items, by correlating the score of each item with the total score which is the sum of each item's score. A questionnaire/questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. The validity test is done by comparing the value of r count with r table for degree of freedom (df) = $n-2$, in this case n is the number of samples. If r count is greater than r table and is positive, then the question is declared valid. (Sugiyono, 2017: 124).

Reliability Test

The reliability test is a value that shows the consistency of a measuring device in measuring the same symptoms. To test the level reliability the instrument is carried out through the Internal Test *Consistency* by using the Reliability Coefficient (Cronbach's Alpha). The value of the Cronbach Alpha Coefficient is said to be good if the coefficient is between 0.6 and 1.0 (Umar, 2019: 113).

Classic assumption test

The normality test was carried out to see whether the independent variable and dependent variable in the regression model have normally distributed data or not. According to Sugiono (2017), the Normality Test is a test to see whether the residuals obtained have a normal distribution. This statistical test uses the Kolmogorov-Smirnov test. If the Significant value > 0.05 , then it is said that the residuals are normally distributed, and vice versa. The classical assumption test is used to know whether the independent variables affect the dependent variable so that the formulated regression model can be established, it must meet several conditions. Several assumption tests are used as follows (Ghozali, 2011: 117):

Normality test

The normality assumption test is used to test whether in a regression model, the independent variables or both have a normal distribution or not. According to Santoso, to detect the existence of a normality is to look at the spread of data (points) on the diagonal source of the graph with the following conditions:

1. If the data spreads around the diagonal and follows the direction of the diagonal line, the regression model meets the normality assumption.
2. If it spreads far from the diagonal line or does not follow the direction of the diagonal line, the regression model does not meet the normality assumption.

Multicollinearity Test

Multicollinearity test aims to test in the regression model found a correlation between the independent variables. A good regression model should not have a correlation between the independent variables. In this study, the technique for detecting the presence or absence of multicollinearity in the regression is by looking at the Variance Inflation Factor (VIF) value and the Tolerance value. If the Tolerance value is close to 1, and the VIF is around the numbers 1 to

10 and not more than 10, it can be concluded that there is no multicollinearity between the independent variables in the regression model.

Heteroscedasticity Test

Heteroscedasticity is a variable variation that is not the same for all observations. In this test, the errors that occur are random but show a systematic relationship according to the magnitude of one or more independent variables. Heteroscedasticity in regression can cause:

The estimator obtained is inefficient, this is caused by the variation is no longer minimal (inefficient).

The standard error of the regression coefficient will be affected, thus giving a wrong indication and the coefficient of determination shows too much explanatory power.

Analysis Techniques

The data used in this study is path analysis with the help of the SPSS version 25 program. Researchers use path analysis because it aims to determine causal relationships, explain direct or indirect effects between exogenous variables and endogenous variables. According to Riduwan and Kuncoro (2017: 2) the path analysis model is used to analyze patterns of relationships between variables with the aim of knowing the direct and indirect effects of a set of independent (exogenous) variables on the dependent (endogenous) variable.

Basic Assumptions of Path Analysis

The effectiveness of using path analysis according to Sarwono (2015: 172), requires several assumptions, namely as follows:

1. The relationship between variables in the model is linear and adaptive.
2. All errors (residuals) are assumed to be uncorrelated with the others.
3. Variables are assumed to be directly measurable.
4. The model is only recursive or unidirectional.
5. Variables are measured by interval scales.

Hypothesis test

Partial Hypothesis Test (t test) Partial test or t test to show how far the influence of one independent variable individually in explaining the variation of the dependent variable. Ghozali's t-test testing stages (2018: 179). Indicates how far the influence of one independent variable individually in explaining the variation of the dependent variable. The test for the t statistical value is a test of the significance of individual parameters. The t statistic value shows how far the influence of the independent variables individually on the dependent variable. Test criteria if the sig value > 0.05 , it means that the independent variable is not an explanation for the dependent variable. The sig value < 0.05 means that the independent variable is an explanation for the dependent variable.

Simultaneous Hypothesis Test (f test) f test to test whether there is a significant effect between the independent variables jointly on the dependent variable with the feasibility of the model produced by using the model feasibility test at the α level of 5%. If the significance value of the F test is < 0.05 , the model used in this study is feasible and can be used for subsequent analysis, and vice versa (Ghozali, 2018: 179). The sig value < 0.05 , then all the independent variables (X) are simultaneously significant explanations for the dependent variable (Y) and this equation can be accepted as an estimator.

Variable Operational Definitions

1. Competence is a characteristic that is inherent in a person that causes that person to be able to predict his surroundings in a job or situation. Sugiyanto & Santoso (2018). Indicators: Knowledge, understanding, abilities/skills, values, attitudes, interests.
2. Facilities and infrastructure are anything that can be used as a tool in achieving a goal or goal. Infrastructure is everything that is the main support for the implementation of a process (business, development, project) Fauzina (2017). Indicators: Learning tools/media, textbooks, equipment, internet, rooms, places of worship, bathrooms.
3. Service quality can be assessed based on five dimensions which include tangibles, reliability, responsiveness, assurance, and empathy. Pasolong (2017). Indicators: Tangibles (direct evidence), Reliability (Reliability), Responsiveness (responsiveness), Assurance (Guarantee), Empathy (Empathy).
4. Performance is the result of work and work behavior that has been achieved in completing the tasks and responsibilities given within a certain period. Cashmere (2018). Indicators: Quality (Quality), Quantity (Total), Time (Term), Cost suppression, Supervision, Relations between employees.

RESEARCH RESULTS AND DISCUSSION

Research results

Validity Test Results

The results of testing the validity of the research instrument using the Statistical Product Service Solution (SPSS) for windows are summarized in table 2 below:

Table 2. Validity Test Results

<i>Variables</i>	<i>Statement</i>	<i>Person Correlation</i>	<i>Sig</i>	<i>Alpha</i>	<i>Status</i>
Competency (X1)	X1.1	0.652	0.000	0.05	Valid
	X1.2	0.766	0.000	0.05	Valid
	X1.3	0.732	0.000	0.05	Valid
	X1.4	0.785	0.000	0.05	Valid
	X1.5	0.842	0.000	0.05	Valid
	X1.6	0.726	0.000	0.05	Valid
	X1.7	0.729	0.000	0.05	Valid
	X1.8	0.865	0.000	0.05	Valid
	X1.9	0.864	0.000	0.05	Valid
	X1.10	0.763	0.000	0.05	Valid
Infrastructure (X2)	X2.1	0.781	0.000	0.05	Valid
	X2.2	0.825	0.000	0.05	Valid
	X2.3	0.812	0.000	0.05	Valid
	X2.4	0.864	0.000	0.05	Valid
	X2.5	0.718	0.000	0.05	Valid
	X2.6	0.842	0.000	0.05	Valid
	X2.7	0.911	0.000	0.05	Valid
	X2.8	0.889	0.000	0.05	Valid
	X2.9	0.798	0.000	0.05	Valid
	X2.10	0.85	0.000	0.05	Valid
Service Quality (Z)	Z1.1	0.752	0.000	0.05	Valid
	Z1.2	0.817	0.000	0.05	Valid
	Z1.3	0.736	0.000	0.05	Valid
	Z1.4	0.841	0.000	0.05	Valid
	Z1.5	0.821	0.000	0.05	Valid

	Z1.6	0.840	0.000	0.05	Valid
	Z1.7	0.750	0.000	0.05	Valid
	Z1.8	0.864	0.000	0.05	Valid
	Z1.9	0.751	0.000	0.05	Valid
	Z1.10	0.774	0.000	0.05	Valid
Performance (Y)	Y1.1	0.684	0.000	0.05	Valid
	Y1.2	0.785	0.000	0.05	Valid
	Y1.3	0.795	0.000	0.05	Valid
	Y1.4	0.765	0.000	0.05	Valid
	Y1.5	0.847	0.000	0.05	Valid
	Y1.6	0.684	0.000	0.05	Valid
	Y1.7	0.841	0.000	0.05	Valid
	Y1.8	0.878	0.000	0.05	Valid
	Y1.9	0.865	0.000	0.05	Valid
	Y1.10	0.756	0.000	0.05	Valid

Source: Data Processing (2023)

Based on table 2, the results of the validity test of the questionnaire on 140 respondents are explained as follows:

1. Competency variable (X1) from 10 statement items (X1.1 – X1.10) obtained the lowest correlation value on item X1.1 =0.652with a significant value = 0.000.
2. Infrastructure variable (X2) from 10 statement items (X2.1 – X2.10) obtained the lowest correlation value on item X2.5 =0.718with a significant value = 0.000.
3. Service Quality Variable (Z) of 10 statement items (Z.1 – Z.10) obtained the lowest correlation value on item Z.3 =0.736with a significant value = 0.000.
4. Performance Variable (Y) of the 10 question items (Y.1 – Y.10) obtained the lowest correlation value on item Y.1 =0.684 and Y.6 0.684with a significant value = 0.000.

Based onFrom these results it can be concluded that all question items from each variable in the questionnaire are valid because the correlation value is > 0.176 with a significant value of < 0.05 .

Reliability Test Results

The results of the instrument reliability test used in this study can be seen in table 3 below.

Table 3. Reliability Test Results

Variables	Cronbach' Alpha	Information
Competency (X1)	0.920	reliable
Infrastructure (X2)	0.942	reliable
Service Quality (Z)	0.933	reliable
Performance (Y)	0.928	reliable

Source: Data Processing (2023)

Based on the results of the reliability test in table 3. It is known that all instrument items have a Cronbach's Alpha value of more than 0.6. This means all items are reliable. Thus the entire statement (questionnaire) can be used for research.

Classical Assumption Test Results

Normality Test Results

The normality test, which is based on the Kolmogorov Smirnov (KS) nonparametric statistical test, can be seen in table 4 below:

Table 4. Results of the One-Sample Kolmogorov-Smirnov Test for Normality

		Unstandardized Residuals
N		140
Normal Parameters, b	Means	.0000000
	std. Deviation	4.55505643
Most Extreme Differences	absolute	.072
	Positive	.041
	Negative	-.072
Test Statistics		.072
asypm. Sig. (2-tailed)		.074c

Source: Data processed by SPSS 25 (2023)

Based on table 4. As the basis for customer decision guidelines in the normality test on the one sample Kolmogorov Smirnov Test, it can be concluded that the Asymp.Sig.(2-tailed) value is 0.074 so it fails to reject the null hypothesis , which means that the residuals generated from the model are normally distributed.

Imam Ghozali (2011: 161) The regression model is said to be normally distributed if the plotted data (dots) that describe the actual data follow a diagonal line.

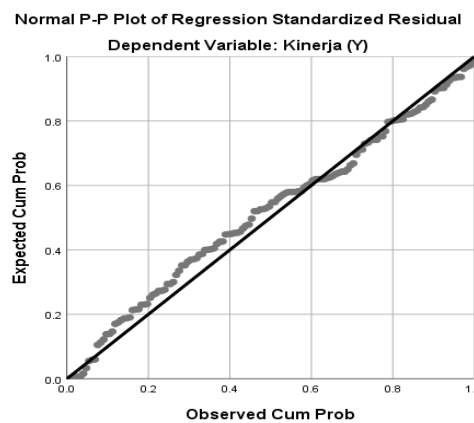


Figure 3. Graph of Normal PP Plot of Normality Test Results

Source: Data processed by SPSS 25 (2023)

Figure 3 shows that the PP Normal graph of Regression Standardized Residual describes the distribution of data around the diagonal line and the distribution follows the direction of the diagonal line of the graph, so the regression mode used in this study fulfills the Normality assumption. The graph shows no clear pattern and the points spread above and below the number 0 on the Y axis, so there is no heteroscedasticity.

Multicollinearity Test

Imam Ghozali (2011: 107-108) There are no symptoms of multicollinearity, if the tolerance value is > 0.100 and the VIF value is < 10.00.

Table 4. Multicollinearity Test Results

Model		Collinearity Statistics	
		tolerance	VIF
1	(Constant)		
	Competency (X1)	0.924	1,078
	Infrastructure (X2)	0.950	1,050
	Service Quality (Z)	0.885	1,130

Source: Data processed by SPSS 25 (2023)

The results in table 4 are known in the multicollinearity test as follows:

1. The Competency Variable (X1) has a Tolerance value of 0.927 and a VIF value of 1.078, which means that the Tolerance value is > 0.100 and the VIF value is <10.00, indicating that there are no symptoms of multicollinearity.
2. The Infrastructure Variable (X2) has a Tolerance value of 0.950 and a VIF value of 1.050, which means that the Tolerance value is > 0.100 and the VIF value is <10.00, indicating that there are no symptoms of multicollinearity.
3. The Variable Quality of Service (Z) has a Tolerance value of 0.885 and a VIF value of 1.130, which means that the Tolerance value > 0.100, the VIF value < 10.00, indicating that there are no symptoms of multicollinearity.

Heteroscedasticity Test Results

Imam Ghozali (2011: 139) There is no heteroscedasticity, if there is no clear pattern (wavy, widened, then narrowed) in the scatterplot image, and the dots spread above and below the number 0 on the Y axis.

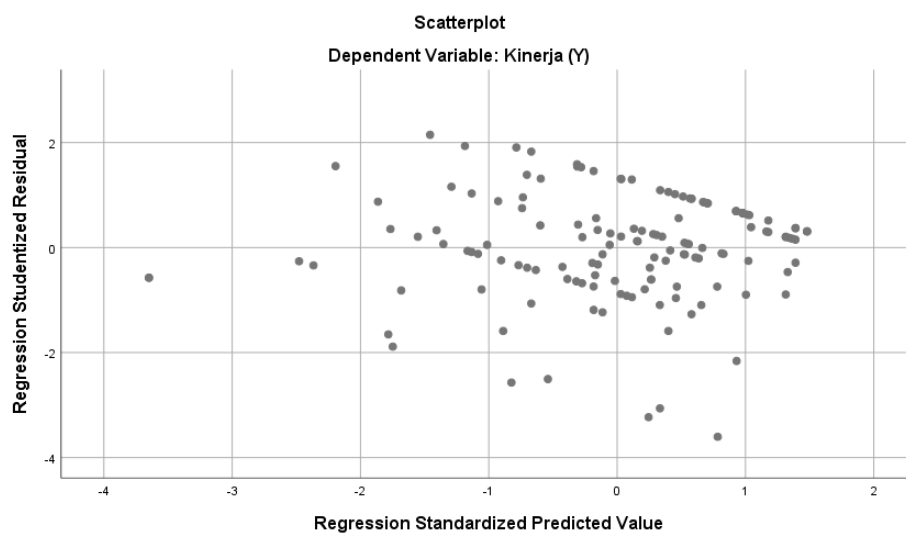


Figure 4. Heteroscedasticity Test Results

Source: Data processed by SPSS 25 (2023)

Figure 4. The results of the heteroscedasticity test show that in the scatterplots, the regression standardized predicted value shows that there is no clear pattern and the points spread above and below the number 0 on the Y axis. This shows that in this study there was no heteroscedasticity.

Path Analysis

Results of the First Sub Structural Path Analysis

Table 5. Coefficients First Sub-Structural Path Equation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	std. Error	Betas			
1	(Constant)	23,926	4,816		4,968	0.000
	Competency (X1)	0.265	0.082	0.259	3,216	0.002
	Infrastructure (X2)	0.189	0.074	0.205	2,553	0.012

a. Dependent Variable: Service Quality (Z)

Source: Data processed by SPSS 25 (2023)

H1: Competence has a positive and significant effect on service quality

Table 5 above shows that competency has a beta coefficient of 0.265 with a significant level of $0.002 < 0.05$ and this means that competency X1 has a positive and significant effect on service quality. So hypothesis 1 (H1) which states that competence has a positive and significant effect on service quality is accepted/proven.

H2: Facilities and infrastructure have a positive and significant effect on service quality

Table 5 above shows that infrastructure facilities have a beta coefficient of 0.189 with a significant level of $0.012 < 0.05$ and this means that Infrastructure X2 has a positive and significant effect on service quality. So hypothesis 2 (H2) which states that Infrastructure has a positive and significant effect on service quality is accepted/proven.

Table 6. Coefficients Second Sub Structural Path Equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	8,336	4,692		1,777	0.078
	Competency (X1)	0.158	0.077	0.151	2,059	0.041
	Infrastructure (X2)	0.283	0.068	0.302	4,172	0.000
	Service Quality (Z)	0.365	0.077	0.357	4,757	0.000

a. Dependent Variable: Performance (Y)

Source: Data processed by SPSS 25 (2023)

H3: Competence has a positive and significant effect on performance

Table 6 shows that competence has a beta coefficient of 0.158 with a significant level of $0.041 < 0.05$ and this means that competence has a negative and significant effect on performance. So hypothesis 3 (H3) which states that competence has a positive and significant effect on performance is accepted/proven.

H4: Facilities and infrastructure have a positive and significant effect on performance

Table 6 shows that infrastructure has a beta coefficient of 0.283 with a significant level of $0.000 < 0.05$ and this means that infrastructure has a positive and significant effect on performance. So hypothesis 4 (H4) which states that infrastructure has a positive and significant effect on performance is accepted/proven.

H5: Service quality has a positive and significant effect on performance

The table shows that service quality has a beta coefficient of 0.365 with a significant level of $0.000 < 0.05$ and this means that service quality has a positive and significant effect on performance. So hypothesis 5 (H5) which states service quality has a positive and significant effect on performance is accepted/proven.

Table 7. First Sub-Structural Path Equation Summary Model

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.319a	0.115	0.102	5,135

a. Predictors: (Constant), Infrastructure (X2), Competence (X1)

Source: Data processed by SPSS 25 (2023)

It is known that the R square value of 0.100 means that the influence of the Competency and Infrastructure variables on the Service Quality variable is 10%. Then for the value of ϵ_1 can be searched by the formula:

$$\sqrt{1 - 0,115} = 0,9407$$

Table 8. Second Sub-Structural Path Equation Summary Model

Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson
1	.568a	0.322	0.307	4,605	2,191

a) Predictors: (Constant), Service Quality (Z), Infrastructure (X2), Competence (X1)

b) Dependent Variable: Organizational Performance_Y

Source: Data processed by SPSS 25 (2023)

It is known that the R square value of 0.313 means that the influence of the Competency, Infrastructure and Service Quality variables on the Performance variable is 31.3%. Then for the value of ϵ^2 can be searched by the formula:

$$\sqrt{1 - 0,322} = 0,8234$$

After testing the direct effect, the next step is testing the indirect effect between the independent variables Competence (X1), Infrastructure (X2) on the dependent variable Performance (Y) through the mediating variable Service Quality (Z). In testing the indirect effect will use the Sobel Test. The Sobel Test is a test to find out whether the relationship through a mediating variable is significantly capable of being a mediator in the relationship. In the Sobel Test, the following formula will be used:

$$Z = \frac{ab}{\sqrt{(a^2SE_a^2) + (b^2SE_b^2)}}$$

where :

a = regression coefficient of the independent variable on the mediating variable

b = regression coefficient of the mediating variable on the dependent variable

sea = standard error of estimation of the effect of the independent variable on the mediating variable.

SEb = standard error of estimation of the effect of the mediating variable on the dependent variable.

Basis for decision making:

1. If the value of $Z < 1.96$ it is stated that it is unable to mediate the relationship between the influences of the independent variables on the dependent variable. Vice versa.
2. If the value of $Z > 1.96$, it is stated that it is capable of mediating the relationship between the influence of the independent variables on the dependent variable.

The following are the results of the Sobel Test to determine the indirect effect on the variables in this study.

H6: Service Quality is able to mediate the effect of Competence on Performance

Based on the results of the calculation of the Sobel test above, a Z value of .67 is obtained, because the Z value obtained is $2.67 > 1.96$ with a significance level of 5%, thus proving that Service Quality is able to mediate the relationship between Competence and Performance.2So hypothesis 6 (H6) which states Service Quality is able to mediate the effect of Competence on Performance is accepted/proven.

H7: Service Quality is able to mediate the influence of Facilities and Infrastructure on Performance

Based on the results of the calculation of the Sobel test above, a Z value of 2.24 is obtained, because the Z value obtained is $2.24 > 1.96$ with a significance level of 5%, thus proving that Service Quality is able to mediate the relationship between Infrastructure and Performance. So hypothesis 7 (H7) which states Service Quality is able to mediate the effect of Competence on Performance is accepted/proven.

Discussion results

The Effect of Competence on Service Quality

Based on the test results, it shows that competency has a positive and significant direct effect on service quality at the Central Bureau of Statistics office of North Sulawesi Province. To improve citizen trust and service delivery, applying the principles of good governance in the public sector is essential. Despite efforts to improve service delivery, criticism and complaints against public services remain visible. Improving service quality is a very crucial issue in management implementation or practice, both in public and private sector management. This result is in line with Hariyanto's research findings (2021) which states that competency directly has a positive and significant effect on service quality.

The Effect of Competence on Service Quality

Based on the test results, it shows that infrastructure has a positive and significant direct effect on service quality at the Central Bureau of Statistics office of North Sulawesi Province. One of the most critical concerns in the delivery of public services is satisfaction with the services of government officials in the community. This is because, on the one hand, there is an extraordinary tension between people's happiness with government services and the delivery of these services, which are either inadequate or insignificant. In addition to this, it is not uncommon for pressure or friction to occur regarding the implementation of good governance, demands for quality that can satisfy society are also increasing. So therefore, government apparatus must have the will or obligation to become a Public Servant (community service) in order to always try to satisfy community satisfaction (Wahyudianto, 2015). This result is in line with Hariyanto's research findings (2021) which states that infrastructure facilities directly have a positive and significant effect on service quality.

The Effect of Competence on Performance

Based on the test results, it shows that competence has a positive and significant direct effect on performance at the Central Bureau of Statistics office of North Sulawesi Province. Performance is accumulated as a result of employee achievement in actualizing tasks through the responsibilities given to them to achieve goals and objectives where highly competent employees are one of the most important human resources and contribute directly to increasing superior competitiveness. Competence is needed in the world of work as a basis for carrying out a well-organized series of work. These results are in line with the research findings of Mariani and Sasmita (2020) which state that competency directly has a positive and significant effect on performance.

Effect of Facilities and Infrastructure on Performance

Based on the test results, it shows that infrastructure has a positive and significant direct effect on performance at the Central Bureau of Statistics office of North Sulawesi Province. One that affects the improvement of human resource performance is the completeness of facilities and infrastructure. Inadequate facilities and infrastructure are the cause of decreased employee performance. If the facilities and infrastructure are inadequate, the effect will be on the comfort of the employee's work. In achieving comfort at work, this can be done by maintaining infrastructure such as a clean, comfortable work space. Therefore, the condition of good facilities and infrastructure within the company is very important, to create good employee performance in carrying out their work. These results are in line with the research findings of Sinta and Syelviani

(2021) which state that infrastructure has a direct positive and significant effect on performance. The same results were also found in research by Mulfhiani, Idris and Maryadi (2021), which stated that employee facilities and infrastructure had a positive and significant effect on performance.

Effect of Service Quality on Performance

Based on the test results, it shows that service quality has a positive and significant direct effect on performance at the Central Bureau of Statistics office of North Sulawesi Province. Public services have the essence of serving the needs of society. services provided by government officials is an obligation that must be done. Even in its development, these public services must refer to excellent service, in other words the quality of the public services provided must be able to answer the needs of the community. These results are in line with the research findings of Fattah and Haeranah (2021) which state that service quality directly has a positive and significant effect on performance.

The Effect of Competence on Performance is moderated by Quality of Service

The regression results show that the value of the competency coefficient on service quality is 0.265 with a standard error of 0.082 and a significant value of 0.002. Then for the quality of service on performance to get a regression coefficient value of 0.368 with a standard error of 0.077 with a significant value of 0.000. Based on the results of the sobel test calculations, the service quality mediating variable gets a Z value of 2.67 because the Z value obtained is $2.67 > 1.96$ with a significance level of 5%, proving that service quality is able to mediate the relationship between competency and performance.

The Effect of Infrastructure on Performance Moderated by Service Quality

The regression results show that the coefficient value of infrastructure facilities on service quality is 0.189 with a standard error of 0.074 and a significant value of 0.012. Then for the quality of service on performance to get a regression coefficient value of 0.365 with a standard error of 0.077 with a significant value of 0.000. Based on the results of the Sobel Test calculation, the service quality mediation variable gets a Z value of 2.24 because the Z value obtained is $2.24 > 1.96$ with a significance level of 5%, thus proving that service quality is able to mediate the relationship between infrastructure and performance.

CLOSING

Conclusion

Research conducted on consumers at BPS North Sulawesi Province in an effort to analyze Service Quality and Performance, the following conclusions can be drawn:

1. Partially Competence has a positive and significant influence on Service Quality at BPS North Sulawesi Province.
2. Partially Infrastructure has a positive and significant influence on the Quality of Service at BPS North Sulawesi Province.
3. Competence partially has a positive and significant effect on performance at the BPS of North Sulawesi Province.
4. Partially Infrastructure has a positive and significant influence on performance at BPS North Sulawesi Province.
5. Partially, service quality has a positive and significant influence on performance at BPS-Statistics of North Sulawesi Province.
6. Service Quality is able to moderate the influence of Competence on Performance at BPS North Sulawesi Province.

7. Service Quality is able to moderate the influence of Infrastructure on Performance at BPS North Sulawesi Province.

Suggestions

Based on the conclusions obtained in this study, suggestions are proposed as a complement, namely:

1. For the infrastructure variable on performance through service quality, it is hoped that BPS North Sulawesi Province employees will further improve services so that they are in accordance with the expectations of users, both consultation and publication, by providing the service and quality expected by the community .
2. Service improvements are needed to maximize the performance of each work unit in supporting the implementation of programs and activities at BPS North Sulawesi Province.
3. The results of this study can be used as a reference for further research to develop research by considering other variables that can affect service quality and performance. Thus the expected results can reveal more problems and provide more useful research findings for many parties.

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