

The Effect of Operational Audit and Internal Control on Service Effectiveness at Puskesmas Dramaga

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ABSTRACT

This study aims to determine (1) the effect of operational audit on service effectiveness at Dramaga Community Health Center, (2) the effect of internal control on service effectiveness at Dramaga Community Health Center, (3) the effect of operational audit and internal control on service effectiveness at Dramaga Community Health Center. This research adopts a quantitative approach with service effectiveness as the dependent variable, while operational audit and internal control are the independent variables. Data collection in this study involves primary data by distributing questionnaires to the targeted subjects as respondents. The study employs a total sampling method, where all employees of Dramaga Community Health Center are taken as samples, totaling 31 respondents. Hypotheses are tested using multiple linear regression method with the assistance of statistical tool, SPSS version 26. The results of the study indicate that operational audit partially and significantly influences service effectiveness, internal control partially and significantly affects service effectiveness, and both operational audit and internal control simultaneously influence service effectiveness. It can be concluded that the better the implementation of operational audit in the community health center, the better the service effectiveness provided. Similarly, internal control, where the enhancement of internal control quality in the community health center significantly contributes to the improvement of service effectiveness. Thus, the findings of this study affirm the importance of implementing operational audit and internal control to enhance service quality in community health center.

Keywords : Operational Audit, Internal Control, Service Effectiveness.

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Introduction

A community health centre, or puskesmas, is one of the primary health care units organised by the government at the district and city levels in Indonesia. According to the Regulation of the Minister of Health of the Republic of Indonesia Number 43 of 2019 concerning community health centres, a community health centre is a health service facility that provides public health efforts and individual health efforts at the first level, with a primary focus on promotive and preventive efforts in its working area. The main objective of a puskesmas is to provide basic health services that are easily accessible to the local community. As an important part of the primary health system, community health centres play a key function in providing basic health services to the community. PHCs also contribute to improving the health and well-being of communities at the local level.

The medical world is currently experiencing very rapid development, especially in the field of services, this also applies to health centres. The effectiveness of services in health centres leads to the extent to which the goals and objectives of health services are achieved by having a positive influence on public health. Puskesmas can be said to be effective if they pay attention to the needs of the local community, such as listening to community feedback, adapting programmes

to needs, and identifying emerging health problems. To achieve this, health centres must conduct operational audits to examine and assess their operations. The results of operational audits can serve as a basis for future improvements so that the health centre can continue to provide effective and efficient services. Internal control is also an important aspect in the sustainability of the company, because through the implementation of an internal control system the company is able to create a reliable and stable environment. One of the functions of internal control involves monitoring and evaluating operational work on a regular basis. This can help ensure that company goals are achieved and provide a basis for continuous improvement. The purpose of internal control is to help the organisation achieve its strategic goals and objectives, including effectiveness in carrying out the vision and mission of the organisation.

Internal control within the company is also one of the important factors that will determine the effectiveness of health services in addition to operational audits which are a tool for evaluating all operational activities within the company. Internal control is needed as a tool to regulate all activities within the company. The level of effectiveness of all activities carried out by the company depends on the strength and weakness of the internal control system (SPI) designed by management. If internal control is strong, errors that will be made and will reduce the effectiveness of health service activities will be minimised (Riyasari & Azra, 2020).

Research Methods

Object of Research

The object of this research is the Dramaga Health Centre which is located in Ciherang Village, Dramaga District, Bogor Regency.

Data Type and Source

This research uses quantitative methods. Quantitative method is a research approach that uses data in the form of numbers or quantities by applying statistical and mathematical techniques. According to Sugiyono (2017: 23), quantitative methods are methods based on a positivist philosophical approach used to study certain populations or samples using research tools for data collection, data analysis is carried out quantitatively or statistically with the aim of testing the hypothesis formulated and explaining the research results.

The data source taken is primary data. According to Sugiyono (2018: 223) states that primary sources are data sources that directly provide information to data collectors. In this context, information is collected by researchers directly from primary sources or from locations where the object of research is located. This study uses respondents' responses received from health centre employees as primary data related to the research topic. This questionnaire will be distributed on 30 March 2024.

Data Collection Technique

This research uses primary data, both quantitative and qualitative, obtained directly from the original source. The data collection method used was a survey with a questionnaire as the information collection tool.

Population and Sample

According to Sugiyono (2018: 148) population is a general area consisting of objects or subjects that have certain numbers and characteristics that have been determined by researchers to study and draw conclusions. From this definition, the population in this study were all employees at the Dramaga Health Centre as many as 31 employees.

The sample is a small part of the overall population chosen to represent the population in a study. In this study, comprehensive sampling (total sampling) was applied. According to Sugiyono (2017: 146) census or total sampling is a sampling method where all individuals in the population are sampled. So, what will be sampled in this study are all 31 employees of Puskesmas Dramaga.

Research Variables

Operational audit variables are tools used to evaluate the performance, programmes and methods implemented in a company and measure their effectiveness. Operational audits depend on auditor qualifications, operational audit implementation and operational audit objectives.

Internal control variables are the efforts of the company's board of directors, management and other employees to ensure the achievement of appropriate objectives. Internal control assessment can include aspects of the control environment, risk assessment, information provision and communication, and supervisory mechanisms. This service effectiveness variable measures the extent to which management has achieved the objectives set out in service law, service principles and service effectiveness.

Data Analysis Method

This study uses multiple linear regression analysis techniques with data processing carried out using descriptive statistical analysis. Multiple linear regression analysis is useful for determining the effect of two or more independent variables on the dependent variable. This study chose SPSS version 26.0 (Statistical Product and Service Solutions) as the software used to calculate, process and analyse data in regressing the model that has been formulated.

Descriptive Statistics

Descriptive statistics are statistical methods used to describe and present data numerically or in graphical form. Descriptive statistics according to Sugiyono (2019: 21) are statistical techniques used to analyse data by describing or explaining the data that has been collected without the intention of making general conclusions or generalisations.

Data Quality Test

Validity Test

This test relates to an evaluation process that evaluates the extent to which a measurement tool or instrument can accurately and adequately assess the intended variable or concept. The results of the validity test help ensure that the data collected using the measurement tool is reliable and valid for the purpose of the research or analysis being conducted. If respondents do not follow the instructions for filling out the questionnaire and there are inaccuracies in the representation of the meter, the validity of the data may decrease.

Reliability Test

According to Sujarweni (18: 134) the reliability test assesses the stability and consistency of respondents' answers when answering questions about the components of a variable, which are arranged in the form of a questionnaire. Noor (2014: 24) states that the reliability measurement uses Cronbach's alpha, which coefficient measures how positively the items in a collection correlate with each other. An instrument is considered reliable if the alpha value is > 0.60 .

Classical Assumption Test

Normality Test

The normality test according to Ghozali (2016: 154) is a test that determines whether the distribution of confounding or residual variables in a regression model has a pattern that is consistent with normal distribution. In this study, researchers used the Kolmogorov-Smirnov (K-S) test with a significant level of 0.05. If the alpha value > 0.05 , it can be concluded that the data has a normal distribution. However, if the alpha value < 0.05 then the data does not have a normal distribution.

Multicollinearity Test

Ghozali (2016: 103) states that this multicollinearity test has the aim of knowing whether there is a relationship between independent variables in the regression model. To test for multicollinearity, pay attention to the Variance Inflation Factor (VIF) and tolerance. Tolerance evaluates the degree of variation in an independent variable that cannot be explained by other independent variables. Therefore, the lower the tolerance value, the higher the VIF value because $VIF = 1/\text{tolerance}$. If the tolerance value is < 0.10 and the VIF value is > 10 , it can be concluded that there is multicollinearity.

Heteroscedasticity Test

In Ghozali (2016: 134) The heteroscedasticity test is used to evaluate whether there is a difference in the variance of residual residuals between one observation and another in the regression model. Based on the analysis as follows: 1) If there is a special pattern in the form of organised dots, for example forming a repeating wave pattern or a pattern that shows changes in the width and narrowness of the distribution, this explains the presence of heteroscedasticity in the data, 2) Conversely, if there is no clearly identifiable pattern and the dots are evenly distributed around the number 0 on the Y-axis, this indicates that there is no heteroscedasticity.

Hypothesis Test

In this study, hypothesis testing was carried out using the coefficient of determination (R²) test and statistical tests. The coefficient of determination (R²) test is used to assess how well the independent variables in a study explain the variation in the dependent variable. Currently, the statistical tests applied are partial test (T test) and simultaneous test (F test).

Multiple Linear Regression Analysis

Multiple linear regression analysis aims to understand the relationship between one dependent variable and two or more independent variables. With this analysis, it can assess how effectively operational audits and internal controls affect service effectiveness and measure their strength and significance. There is a multiple linear regression formula below:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Partial Test (T Test)

The partial test is used to test the significance of the effect of one independent variable on the dependent variable in a regression model, while the other independent variables remain constant. The decision in this test is seen in the probability value through the table which is the result of data analysis on SPSS, as follows: a) If the calculated T value > T table ($p < 0.05$) then H_0 is rejected and H_a is accepted, which means that the independent variable has an influence on the dependent variable, b) If the calculated T value < T table ($p > 0.05$) then H_0 is accepted and H_a is rejected, which means that the independent variable has no influence on the dependent variable.

Simultaneous Test (F Test)

The simultaneous test is used to test simultaneously the effect of the independent variables on the dependent variable in the regression model. In this study, it was carried out on all independent variables simultaneously to determine whether the overall impact was significant on the dependent variable. The characteristics of this test are as follows: a) If the value of F count < F table or Probability > 0.05 then H_0 is accepted and H_a is rejected, it can be concluded that the independent variable simultaneously has no influence on the dependent variable, b) If the value of F count > F table or Probability < 0.05 then H_0 is rejected and H_a is accepted, it can be concluded that the independent variable simultaneously has an influence on the dependent variable.

Result

Research Results

Data Description

The data in this study were taken by distributing questionnaires to employees who worked at Puskesmas Dramaga in March 2024. The number of respondents sampled was 31 respondents.

Table 1 Data Distribution

Description	Total	Percentage
Questionnaires distributed	31	100%
Incomplete questionnaires	0	0
The questionnaire used	31	100%

Source: Data processed, 2024

The table above shows that the distribution and coverage of the number of questionnaires distributed to 31 respondents, reaching 100% in percentage.

Descriptive Analysis

Table 2 Descriptive Analysis Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
Operational Audit	31	32.00	45.00	39.1935	3.67350
Internal Control	31	45.00	75.00	64.7419	7.91188
Service Effectiveness	31	39.00	65.00	58.8710	6.47427
Valid N (listwise)	31				

Source: Data processed using SPSS V26, 2024

From the descriptive test results above, the resulting data distribution can be described, that the Operational Audit Variable (X1) has a minimum value of 32, while the maximum value is 45. The average is 39.1935 with a standard deviation of 3.67350. The Internal Control Variable (X2) has a minimum value of 45, while the maximum value is 75. The average is 64.7419 with a standard deviation of 7.91188. The Service Effectiveness Variable (Y) has a minimum value of 39, while the maximum value is 65. The average is 58.8710 with a standard deviation of 6.47427.

Inferential Analysis

Validity Test

All question items in the instrument were checked for validity. The results of the validity test, which have been listed in the table, show that each item is valid because at the 5% significance level, the r-count value is greater than the r-table value of 0.355. This indicates that each question correlates with the others.

Reliability Test

Table 3 Reliability Test Results

Variables	Cronbach's Alpha	Description
Operational Audit	0,911	Reliabel
Internal Control	0,953	Reliabel
Service Effectiveness	0,960	Reliabel

Source: Data processed using SPSS V26, 2024

The research results listed in the table show that the Cronbach's Alpha coefficient value for operational audits reached 0.911, for internal control reached 0.878 and for service effectiveness reached 0.960. These figures far exceed the minimum reliability limit set at 0.60. From these results, it can be concluded that the question items in these variables are reliable and considered reliable.

Normality Test

Table 4 Normality Test Results

Uji Kolmogorov-Smirnov	Sig	Description
0,165	0,065	Normal

Source: Data processed using SPSS V26, 2024

From the values listed in the table, the Kolmogorov-Smirnov value is 0.165 and the significance value is 0.065. A significance value greater than 0.50 indicates that the data has a normal distribution or fulfils the assumption of normality. Therefore, it can be concluded that the data is normally distributed.

Multicollinearity Test

Table 5 Multicollinearity Test Results

Variables	Tolerance	VIF	Description
X1	0,472	2,118	No Multicollinearity
X2	0,472	2,118	No Multicollinearity

Source: Data processed using SPSS V26, 2024

Based on the results of the multicollinearity test table above, it is found that all independent variables have a Tolerance value > 0.10, namely 0.472 for Operational Audit and 0.472 for Internal Control. In addition, the VIF value is < 10, namely 2,118 for Operational Audit and 2,118 for Internal Control. From these results, it can be concluded that there are no symptoms of multicollinearity in all independent variables in this study.

Heteroscedasticity Test

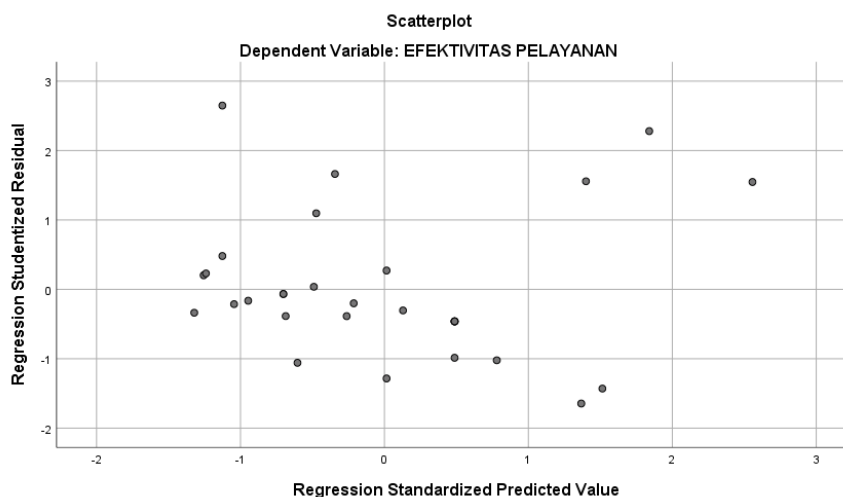


Figure 1 Heteroscedasticity Test Results

Source: Data processed using SPSS V26, 2024

The dots are randomly scattered above and below 0 on the Y-axis, in accordance with the results of the heteroscedasticity test in the previous figure. This indicates that there is no pattern or significant difference in the residual variance between various observations, so this regression remains suitable for use in predicting service effectiveness based on the independent variables, namely operational audit and internal control.

Hypothesis Test

Multiple Linear Regression Analysis Test

Table 6 Multiple Linear Regression Analysis Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.423	7.510		.589	.561
Audit Operasional	.843	.277	.478	3.041	.005
Pengendalian Internal	.331	.129	.404	2.568	.016

a. Dependent Variable: Efektivitas Pelayanan

Source: Data processed using SPSS V26, 2024

From the data documented in the table above, a multiple linear regression equation can be compiled as follows:

$$Y = 4.423 + 0.843 X1 + 0.331 X2 + e$$

From the above equation conclusions can be drawn, below: (1) The constant has a value of 4.423. This indicates that if there is no change in the operational audit and internal control variables (the value of X1 and X2 is 0), then service effectiveness will have a fixed value of 4.423, (2) The regression coefficient for operational audits is 0.843. This means that if the operational audit variable (X1) increases by 1% assuming the internal control variable (X2) and the constant is 0, then service effectiveness will also increase by 0.843. In this case, an increase in operational audits significantly contributes to an increase in service effectiveness, (3) The regression coefficient for internal control is 0.331. This means that if the internal control variable (X2) increases by 1% assuming the operational audit variable (X1) and the constant is 0, then the effectiveness of the service will also increase by 0.331. In this case, internal control significantly has a positive effect on increasing the effectiveness of services.

Coefficient of Determination

Table 7 Test Results of the Coefficient of Determination

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820 ^a	.673	.650	3.833

Source: Data processed using SPSS V26, 2024

Based on the test results in the table above, it is found that the correlation coefficient (R) value is 0.820. This indicates that the operational audit (X1) and internal control (X2) variables have a very strong and positive relationship in influencing changes in the service effectiveness variable (Y). With a correlation value of 0.820, it can be concluded that the independent variable (X) has a very strong correlation with the dependent variable (Y). In addition, the R-squared value (R²) is 0.673. This value indicates that the operational audit (X1) and internal control (X2) variables contribute 67.3% to the service effectiveness variable (Y) at Puskesmas Dramaga.

Partial Test (T Test)

Table 8 Partial Test Results (T Test)

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.423	7.510		.589	.561
<u>Audit Operasional</u>	.843	.277	.478	3.041	.005
<u>Pengendalian Internal</u>	.331	.129	.404	2.568	.016

a. Dependent Variable: Efektivitas Pelayanan

Source: Data processed using SPSS V26, 2024

In the table above, it can be concluded that: (1) The impact of operational audit variables on service effectiveness (H1), with a significance value of t equal to 0.005, which is smaller than 0.05 ($t < 0.005$), it can be concluded that there is a significant influence between the independent variable operational audit (X1) and the dependent variable service effectiveness (Y). This shows that the operational audit variable has a significant influence on service effectiveness, (2) The effect of internal control variables on service effectiveness (H2), with a significance t value of 0.016, which is smaller than 0.05 ($t < 0.05$) and beta has no negative value, it can be concluded that there is a significant influence between the independent variable internal control (X2) and the dependent variable service effectiveness (Y). These findings indicate that the internal control variable has a significant positive effect on service effectiveness.

Simultaneous Test (F Test)

Table 9 Simultaneous Test Results

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.423	7.510		.589	.561
<u>Audit Operasional</u>	.843	.277	.478	3.041	.005
<u>Pengendalian Internal</u>	.331	.129	.404	2.568	.016

a. Dependent Variable: Efektivitas Pelayanan

Source: Data processed using SPSS V26, 2024

The test results show that the fcount value is 28.803. With the number of respondents ($n = 31$) and the number of variables ($k = 3$), then:

$$Df1 = k - 1 = 2$$

$$Df_2 = n - k = 31 - 3 = 28$$

From the table, an f_{table} of 3.34 is obtained. These results indicate that the significance value for the effect of operational audit (X1) and internal control (X2) is $0.000 < 0.05$ and $f\text{-count } 28.803 > f\text{-table value } 3.34$. Therefore, H_0 is rejected and H_a is accepted. This means that there is a significant influence between Operational Audit (X1) and internal control (X2) on Service Effectiveness (Y) significantly.

Conclusions

Based on the results of the analysis and discussion that has been carried out in this study, several conclusions can be drawn from the results of the research at Puskesmas Dramaga, among others: 1) Operational audit has a significant influence on service effectiveness at Puskesmas Dramaga. An effective operational audit plays an important role in improving the effectiveness of services at the health centre. The audit ensures that services are in accordance with standards and provide maximum benefits to patients. Auditors also provide input and recommendations for improvement to the management of the health centre. Thus, the better the implementation of operational audits, the more optimal the effectiveness of services provided by the health centre 2) Internal control has a significant influence on the effectiveness of services at Puskesmas Dramaga. The implementation of good internal control at the health centre will increase the confidence of patients and employees. Conversely, weaknesses in internal control can lead to major failures. Therefore, improving the quality of internal control positively contributes to improving service effectiveness, 3) Operational audit and internal control together have a significant influence on service effectiveness. Service effectiveness is measured based on the achievement of predetermined targets in terms of quality, quantity and time. Operational audits help assess the efficiency and effectiveness of organisational activities, while effective internal controls improve the ability of health centres to provide quality services to patients.

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