

THE INFLUENCE OF SERVANT LEADERSHIP AND AUDITOR COMPETENCE ON THE IMPROVEMENT OF INTERNAL AUDIT EFFECTIVENESS WITH THE CREATION OF RISK CULTURE AS AN INTERVENING VARIABLE IN THE MAIN INSPECTORATE OF BRIN

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ABSTRACT

The National Research and Innovation Agency (BRIN), established in 2021, integrates various research institutions in Indonesia to focus on research and innovation without regulatory duties. This study investigates the impact of servant leadership, auditor competence, and risk culture on the effectiveness of internal audits at BRIN, utilizing a quantitative method with data collected via questionnaires from BRIN's Main Inspectorate. The results indicate that servant leadership significantly influences the creation of a risk culture but not internal audit effectiveness directly. However, auditor competence and risk culture significantly enhance internal audit effectiveness. Additionally, servant leadership indirectly improves internal audit effectiveness through the creation of a risk culture. The study highlights the need for fostering a risk culture and enhancing auditor competence to improve internal audit effectiveness in newly established institutions like BRIN.

KEYWORDS BRIN, Internal Control, Internal Audit Effectiveness, Servant Leadership, Risk Culture, Auditor Competence



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INTRODUCTION

The National Research and Innovation Agency (BRIN) was established by the President of the Republic of Indonesia through Presidential Regulation No. 74/2019. BRIN has the task of conducting research, development, assessment, and application of innovation in an integrated manner. Initially, BRIN was part of the Ministry of Research and Technology (Kemenristek). However, on May 5, 2021, through Presidential Regulation Number 33 of 2021, BRIN was established as the sole national research institute that integrates institutions such as BPPT, LIPI, LAPAN, and BATAN. This change makes BRIN a separate institution with the main function of conducting research and innovation, without the regulatory duties that are now in the hands of the ministry.

Internal control is a process that is influenced by various parties in the organization to provide assurance regarding the achievement of objectives. COSO defines internal control as a process designed to provide reasonable assurance about the achievement of operational, reporting, and compliance objectives. Research by Putu Ayu Yohana Putri and I Dewa Made Endiana (2020) shows that the internal control system has a positive effect on the performance of cooperative companies in Payangan District. Similar research by Yil Mustopa and his colleagues (2022) at the Bandar Lampung Administrative Court also found that good internal control improves employee performance.

Government Regulation No. 60/2008 on the Government Internal Control System stipulates that internal control aims to ensure that organizational activities run in accordance with predetermined standards. APIP, which consists of BPKP and various inspectorates, is tasked with conducting internal supervision to ensure compliance, economy, efficiency, and effectiveness in achieving the objectives of government organizations. Organizational effectiveness is achieved when goals are achieved, with indicators that show the level of success of the work process.

BRIN's Main Inspectorate is responsible to the Head of BRIN and has the task of conducting internal supervision within BRIN. This task includes the preparation of supervisory technical policies, conducting audits, evaluations and monitoring of BRIN's performance and finances. This supervision is regulated in the Annual Supervision Work Program (PKPT) which aims to avoid overlapping tasks and improve the efficiency and effectiveness of internal supervision.

Internal audit is an important part of internal control, assisting management by monitoring activities, identifying risks, providing audit reports, and reviewing organizational activities. The results showed that the compliance audit of petty cash control aims to ensure management complies with cash control procedures. SPIP aims to provide assurance that the state government runs effectively and efficiently, with reliable financial reports and compliance with laws and regulations.

Previous research shows that leadership style has a significant effect on internal audit effectiveness. The servant leadership style is considered suitable for an institution like BRIN because of its focus on public service. Research shows that servant leadership improves performance and productivity and creates a good organizational culture.

BRIN's APIP has a strategic role in supporting the effectiveness of the internal control system to build an accountable government free from corruption,

collusion and nepotism. However, BPK RI's findings show that there are still weaknesses in internal control at BRIN, indicating the need to improve the effectiveness of internal audit. The implementation of a risk culture is also important to ensure organizational goals are achieved. The research shows that servant leadership and risk culture can positively affect the effectiveness of internal control and internal audit at BRIN.

This research was conducted by researchers at the National Research and Innovation Agency (BRIN), especially in the Main Inspectorate Work Unit because there is a phenomenon of the problems described above and BRIN is a research institute that presents quality research results and has real benefits for the wider community and becomes a reference or reference in research development in Indonesia. In achieving quality research results, BRIN is expected to be able to take part globally and at the same time must be able to provide science and technology-based solutions to various problems in society.

The result of this research is to be able to contribute to efforts to improve the effectiveness of internal audit at BRIN, so that BRIN's duties and functions run effectively and in accordance with the provisions of applicable laws and regulations and can have an impact on Indonesian society and also globally in science and technology-based research.

The novelty of this research is that the variables used are different from the variables of previous studies, the object of research in this study is also the first time this has been done, because BRIN is a newly formed institution in 2021.

Hypothesis

Based on the above framework and in accordance with the research problem, the following hypotheses are formulated:

Hypothesis 1: Servant leadership positively influences the creation of risk culture.

Hypothesis 2: Servant leadership has a positive effect on internal audit effectiveness.

Hypothesis 3: Auditor competence has a positive effect on internal audit effectiveness.

Hypothesis 4: The creation of a risk culture has a positive effect on internal audit effectiveness.

Hypothesis 5: Servant leadership positively influences internal audit effectiveness through the creation of a risk culture.

RESEARCH METHOD

This study uses quantitative methods with the aim of examining the causal relationship between servant leadership and auditor competence (independent variables) on internal audit effectiveness (dependent variable), with the formation of a risk culture as a mediating variable. Data were collected through questionnaires completed by auditors at the BRIN Main Inspectorate. This study also evaluates the impact of servant leadership on internal audit effectiveness and risk culture, as well as the effect of risk culture on internal audit effectiveness. The object of the research is servant leadership and risk culture formation on internal audit effectiveness,

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while the research subjects are leaders and auditors at the BRIN Main Inspectorate. The research location is the BRIN Main Inspectorate office in Central Jakarta, and the data used are primary data obtained from questionnaires and secondary data from previous research and relevant journals. The data collection technique used an online questionnaire. Data analysis was conducted with SPSS version 26, including descriptive statistics, validity and reliability tests, and classical assumption tests (normality, multicollinearity, and heteroscedasticity) before conducting multiple linear regression for path analysis. Hypothesis testing uses the T test to test the significance of the influence of the independent variable on the dependent variable.

RESULT AND DISCUSSION

Research Results

The results of testing data analysis using the SPSS Version 26 program in this study based on the research objectives that have been stated in Chapter 1, the conclusions can be conveyed as follows:

- a. Servant leadership has a significant effect on the creation of *risk* culture at the BRIN Main Inspectorate;
- b. Servant leadership has no significant effect on increasing the effectiveness of internal audit at the BRIN Main Inspectorate;
- c. Auditor competence has a significant effect on increasing the effectiveness of internal audit at the BRIN Main Inspectorate;
- d. *Risk* culture has a significant effect on increasing the effectiveness of internal audit at the BRIN Main Inspectorate;
- e. Servant leadership has a significant effect on improving internal audit effectiveness through the creation of a *risk* culture at the BRIN Main Inspectorate.

Discussion

Descriptive Statistical Analysis

Respondents in this study were employees within the BRIN Main Inspectorate with a total of 100 (one hundred) respondents, while the required sample size in this study was 95 (ninety-five) respondents. Of the total of 100 (one hundred) questionnaires, all of them were used to process the data in this study.

Table 4.3 Questionnaire

NO	Description	Total
1	Complete questionnaire	100
2	Incomplete questionnaire	0
Total Questionnaire		100
3	X1 Variable Statement	8
4	X2 Variable Statement	12
5	Variable Statement Z	14
6	Y Variable Statement	19
Total Questionnaire Statements		53

Descriptive statistical analysis of the questionnaire data that has been collected, the results are as follows:

Table 4.4 Descriptive Statistical Analysis Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Servant Leadership	100	24	37	28.72	2.941
Auditor Competency	100	33	58	47.23	4.610
Risk Culture	100	31	69	53.01	5.830
Internal Audit Effectiveness	100	39	91	72.78	7.594
Valid N (listwise)	100				

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.4 above can be explained as follows:

- a. The number of questionnaire samples in this study was 100 (one hundred) questionnaires;
- b. The minimum value obtained on the Servant Leadership variable (X1) is 24, the Auditor Competency variable (X2) is 33, the Risk Culture variable (Z) is 31, and the Internal Audit Effectiveness variable (Y) is 39;
- c. The maximum value obtained on the Servant Leadership variable (X1) is 37, the Auditor Competency variable (X2) is 58, the Risk Culture variable (Z) is 69, and the Internal Audit Effectiveness variable (Y) is 91;
- d. The average value (*Mean*) obtained on the Servant Leadership variable (X1) is 28.72, the Auditor Competency variable (X2) is 47.23, the Risk Culture variable (Z) is 53.01, and the Internal Audit Effectiveness variable (Y) is 72.78;
- e. The standard deviation value (measure of data distribution) obtained on the Servant Leadership variable (X1) is 2.941, the Auditor Competency variable (X2) is 4.610, the Risk Culture variable (Z) is 5.830, and the Internal Audit Effectiveness variable (Y) is 7.594.

Validity Test

In the validity test conducted using SPSS Version 26, the Pearson Bivariate correlation technique was applied to assess the validity of various variables, including Serving Leadership (X1), Auditor Competency (X2), Risk Culture (Z), and Internal Audit Effectiveness (Y). For the Serving Leadership variable (X1), all statements (X1.1 to X1.8) were found to be valid, as they had significance values less than 0.05, indicating their effectiveness as measuring tools.

Similarly, the validity test for the Auditor Competency variable (X2) showed that all statements (X2.9 to X2.20) were valid, with each having a significance value of 0.000. This confirms that the questionnaire items for X2 are reliable for data collection.

The Risk Culture variable (Z) also had all its statements (Z.21 to Z.34) validated, with significance values of 0.000. This suggests that the variable accurately measures the intended concepts in the study.

Lastly, the Internal Audit Effectiveness variable (Y) demonstrated that all statements (Y.35 to Y.53) were valid, each with a significance value of 0.000. This result indicates that the items used in the questionnaire are valid for obtaining research data related to internal audit effectiveness. Overall, the validity tests confirmed the appropriateness of the questionnaires for all the variables under study.

Reliability Test

Analysis of the reliability test data using the *Cronbach Alpha* statistical test, the results are as follows:

Table 4.9 Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.945	53

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.9 above can be explained that, the *Cronbach Alpha* value is 0.945 and the number of statements tested is 53 statement items. According to Sugiyono (2019) an item is said to be reliable if the *Cronbach Alpha* value is > 0.6. So it can be concluded that all statements on the questionnaire are reliable and have consistency, so that the questionnaire can be relied on even though the research is carried out repeatedly with the same questionnaire at different times.

Classical Assumption Test

Before the Multiple Linear Regression Test is carried out, there are requirements that must be done beforehand, namely conducting a classical assumption test. If the classical assumptions are met, a regression model with unbiased estimates can be obtained and the test can be trusted. The classic assumption test can be conveyed as follows:

- a. Normality Test

The results of the normality test using the Coefficient of Variance can be seen in the table below:

Table 4.10 Normality Test

Descriptive Statistics			
	N	Mean	Std. Deviation
Servant Leadership	100	28.72	2.941
Auditor Competency	100	47.23	4.610
Risk Culture	100	53.01	5.830
Internal Audit Effectiveness	100	72.78	7.594
Valid N (listwise)	100		

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.10 above, will be calculated again using the following formula:

$$\text{Coefficient of Variance} = (\text{Standard Deviation}/\text{Mean}) \times 100$$

If the variance coefficient value < 30% then the data is normally distributed, if the variance coefficient value > 30% then the data is not normally distributed.

Servant Leadership Variable (X1)

Coefficient of Variance = $(2.941/28.72) \times 100 = 10.24\%$, so the data is normally distributed.

Auditor Competency Variable (X2)

Coefficient of Variance = $(4,610/47.23) \times 100 = 9.76\%$, so the data is normally distributed.

Risk Culture Variable (Z)

Coefficient of Variance = $(5.830/53.01) \times 100 = 11.00\%$, so the data is normally distributed.

Internal Audit Effectiveness Variable (Y)

Coefficient of Variance = $(7.594/72.78) \times 100 = 10.43\%$, so the data is normally distributed.

b. Multicollinearity Test

The results of the multicollinearity test using the *Tolerance* and VIF methods can be seen in the table below:

Table 4.11 Multicollinearity Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	10.141	5.358		1.893	.061		
	Servant Leadership	-.119	.168	-.046	-.708	.481	.768	1.302
	Auditor Competency	.330	.112	.200	2.956	.004	.710	1.409
	Risk Culture	.952	.090	.731	10.548	.000	.679	1.474

a. Dependent Variable: Internal Audit Effectiveness

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.11 above can be explained that, the *Tolerance* value of the Servant Leadership variable (X1) is 0.768, Auditor Competence (X2) is 0.710, and Risk Culture (Z) is 0.679. The criteria for testing the multicollinearity test with the *Tolerance* method are as follows:

TOLERANCE METHOD

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Tolerance value > 0.10 → No Multicollinearity
Tolerance value < 0.10 → Multicollinearity Occurs

As a result, the regression model in all the variables above has a *Tolerance* value > 0.10 with the following details:

Table 4.12 Variable *Tolerance* Value

NO	Variables	<i>Tolerance</i> Value	Description
1	Servant Leadership	0.768 > 0.10	No Multicollinearity
2	Auditor Competency	0.710 > 0.10	No Multicollinearity
3	Risk Culture	0.679 > 0.10	No Multicollinearity

Source: *Primary Data Processing* (2024)

Based on Table 4.12 above, it can be concluded that all independent variables and intervening variables do not occur multicollinearity with the independent variable, namely the Internal Audit Effectiveness variable.

Furthermore, based on the data in Table 4.11 above, the VIF value of the Servant Leadership variable (X1) is 1.302, Auditor Competence (X2) is 1.409, and Risk Culture (Z) is 1.474. The criteria for testing the multicollinearity test with the VIF method are as follows:

VIF METHOD

VTF < 10.00 → No Multicollinearity
VTF > 10.00 → Multicollinearity Occurs

As a result, the regression models of all the variables above have VIF values < 10.00 with the following details:

Table 4.13 VIF Value Variable

NO	Variables	VIF value	Description
1	Servant Leadership	1.302 < 10.00	No Multicollinearity
2	Auditor Competency	1.409 < 10.00	No Multicollinearity
3	Risk Culture	1.474 < 10.00	No Multicollinearity

Source: *Primary Data Processing* (2024)

Based on Table 4.13 above, it can be concluded that all independent variables and intervening variables do not occur multicollinearity (high correlation) with the independent variable, namely the Internal Audit Effectiveness variable.

c. Heteroscedasticity Test

The results of the heteroscedasticity test using the *park* test can be seen in the table below:

Table 4.14 Heteroscedasticity Test (*Park* Test)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.720	3.160		2.127	.036
	Servant Leadership	.045	.099	.052	.458	.648
	Auditor Competency	-.030	.066	-.053	-.453	.652
	Risk Culture	-.105	.053	-.236	-1.968	.052

a. Dependent Variable: LN_RES

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.14 above can be explained that, the significance value of the Serving Leadership variable (X1) is 0.648, Auditor Competence (X2) is 0.652, and Risk Culture (Z) is 0.052. The criteria for testing the heteroscedasticity test using the *park* test are as follows:

- Significance Value > 0.05 ➔ No Heteroscedasticity
- Significance Value < 0.05 ➔ Heteroscedasticity Occurs

The results of the regression model on all the variables above have a significance value > 0.05 with the following details:

Table 4.15 Significance Value of Variables

NO	Variables	Sig Value.	Description
1	Servant Leadership	0.648 > 0.05	No Heteroscedasticity
2	Auditor Competency	0.652 > 0.05	No Heteroscedasticity
3	Risk Culture	0.052 > 0.05	No Heteroscedasticity

Source: Primary Data Processing (2024)

Based on Table 4.15 above, it can be concluded that all independent variables and intervening variables do not occur heteroscedasticity (doubt / inaccuracy) on the independent variable, namely the Internal Audit Effectiveness variable.

Multiple Linear Regression Test (Path Analysis)

After all the classical test requirements are met, the next step will be multiple linear regression tests by conducting *path* analysis. In this test, it not only tests the direct effect but also explains whether or not there is an indirect effect given by the independent variable through the intervening variable on the dependent variable. The criteria for testing the path analysis test is to use the Significance Value as follows:

- Variable Significance Value < 0.05 ➔ Significant effect
- Variable Significance Value > 0.05 ➔ No significant effect

In this test, several stages of path analysis tests will be carried out in accordance with the existing hypothesis and can be explained as follows:

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a. Effect of X1 on Z

- Model 1 path testing is carried out to see the direct effect of variable X1 on variable Z and can be seen in the following figure below:

Figure 4.3 Model 1 Path Analysis Test



The results of this model 1 path analysis test can be seen in the table below:

Table 4.16 Multiple Linear Regression Test Model 1

Coefficients^a

Model		Unstandardized coefficients		Co-Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	28.077	5.198		5.402	.000
	Servant Leadership	.868	.180	.438	4.822	.000

a. Dependent Variable: Risk Culture

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.16 above can be explained that, the significance value of the Serving Leadership variable (X1) is 0.000 and the beta coefficient value is 0.438.

The result is that the significance value of the Servant Leadership variable is $0.000 < 0.05$, it can be concluded that the Servant Leadership variable (X1) has a significant effect on the Risk Culture variable (Z).

- The results of the R *square* analysis for path model 1 can be seen in the table below:

Table 4.17 R *Square* Path Model 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438 ^a	.192	.184	5.268

a. Predictors: (Constant), Servant Leadership

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.17 above can be explained that, the R *Square* value is 0.192 which means that the influence of the Serving Leadership variable (X1) on the Risk Culture

variable (Z) is 19.2%. While the value of e_1 can be found by using the formula $e_1 = \sqrt{1-0.192} = 0.899$.

- Based on the regression path analysis model 1 above, the regression equation is:

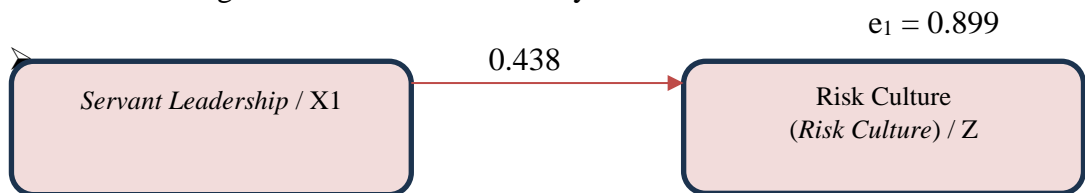
$$Z = a + b X_1 + e_{11}$$

$$Z = 28.077 + 0.868X_1 + 0.899$$

This means that if the value of the Serving Leadership variable (X1) increases by 1 unit, it will increase the value of the Risk Culture variable (Z) by 0.868 with an error value of 0.899.

- The following is a picture of the model 1 path diagram for the results of the data processing that has been explained above, with the following results:

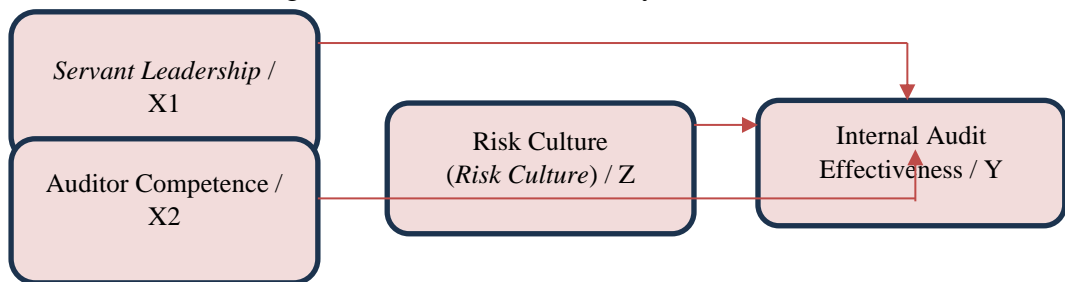
Figure 4.4 Model 1 Path Analysis Test Results



b. Effect of X1, X2 and Z on Y

- Model 2 path testing is carried out to see the direct effect of variables X1, X2 and Z on variable Y and can be seen in the following figure below:

Figure 4.5 Model 2 Path Analysis Test



The results of this model 2 path analysis test can be seen in the table below:

Table 4.18 Multiple Linear Regression Test Model Path 2

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.141	5.358		1.893	.061
	Servant Leadership	-.119	.168	-.046	-.708	.481
	Auditor Competency	.330	.112	.200	2.956	.004
	Risk Culture	.952	.090	.731	10.548	.000

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a. Dependent Variable: Internal Audit Effectiveness

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.18 above can be explained that, the significance value of the Servant Leadership variable (X1) is 0.481 and the beta coefficient value is -0.046, the significance of the Auditor Competency variable (X2) is 0.004 and the beta coefficient value is 0.200, and the significance of the Risk Culture variable (Z) is 0.000 and the beta coefficient value is 0.731.

The result is that the significance value of all the variables above can be explained in detail as follows:

Table 4.19 Significance Value of Variables

NO	Variables	Sig Value.	Description
1	Servant Leadership	0.481 > 0.05	No significant effect
2	Auditor Competency	0.004 < 0.05	Significant effect
3	Risk Culture	0.000 < 0.05	Significant effect

Source: Primary Data Processing (2024)

Based on Table 4.19 above, it can be concluded that the Servant Leadership variable (X1) has no significant effect on the Internal Audit Effectiveness variable (Y), while the Auditor Competency variable (X2) and the Risk Culture variable (Z) have a significant effect on the Internal Audit Effectiveness variable (Y).

- The results of the R square analysis for path model 2 can be seen in the table below:

Table 4.20 R Square Path Model 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.829 ^a	.687	.677	4.313

a. Predictors: (Constant), Risk Culture, Servant Leadership, Auditor Competence

Source: SPSS Data Processing Version 26 (2024)

The results of data processing using SPSS Version 26 based on the data in Table 4.20 above can be explained that, the R Square value is 0.687 which means that the influence of the Servant Leadership variable (X1), the Auditor Competency variable (X2), and the Risk Culture variable (Z) on the Internal Audit Effectiveness variable is 68.7%. While the value of e₂ can be found using the formula $e_2 = \sqrt{1 - 0.687} = 0.559$.

- Based on the regression path analysis of model 2 above, the regression equation is:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 Z + e_2$$

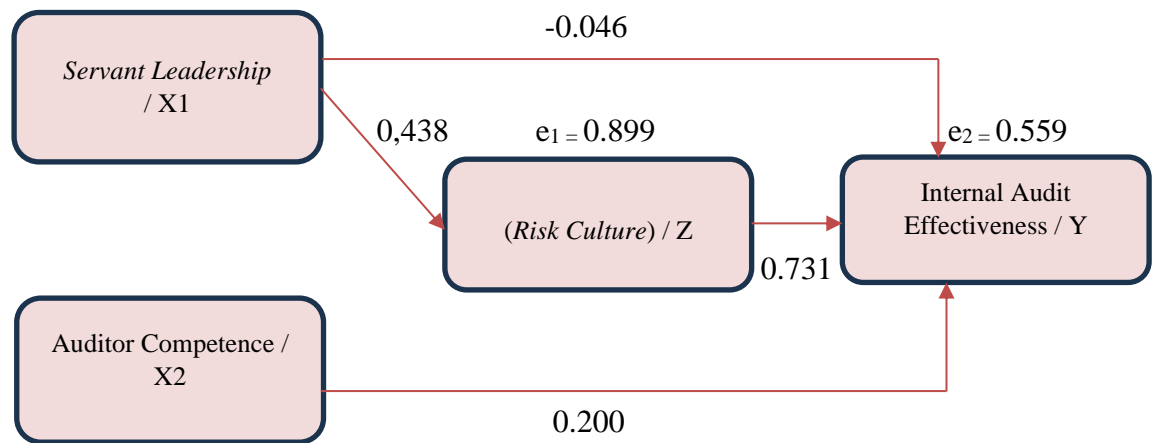
$$Y = 10.141 + 0.119X_1 + 0.330X_2 + 0.952Z + 0.559$$

This means that if the value of the Auditor Competency variable (X2) increases by 1 unit, it will increase the value of the Internal Audit Effectiveness variable (Y) by 0.330 with an error value of 0.559, and if the value of the Risk Culture

variable (Z) increases by 1 unit, it will increase the value of the Internal Audit Effectiveness variable (Y) by 0.952 with an *error* value of 0.559.

- The following is a picture of the model 2 path diagram for the results of the data processing that has been explained above, with the following results:

Figure 4.6 Model 2 Path Analysis Test Results



Hypothesis Test (T Test) and Conclusion

Based on the results of the path analysis test model 1 and model 2 above, hypothesis testing will then be carried out. This test uses a *level of significance* of 0.05. If the variable significance value <0.05 or $t \text{ count} > t \text{ table}$, the independent variable has a significant effect on the dependent variable, if the variable significance value > 0.05 or $t \text{ count} < t \text{ table}$, the independent variable does not have a significant effect on the dependent variable. The formula for determining the t table value is:

$$\begin{aligned}
 t &= [a; (df = n-k)] \\
 &= [5\%; (df = 100-4)] \\
 &= 0.05; 96 \text{ (Pr} = 0.05 \text{ \& } df = 96) \\
 &= 1.661
 \end{aligned}$$

The hypothesis test analysis and conclusions can be presented as follows:

- Hypothesis 1 (H1) is that servant leadership has a positive effect on creating a risk culture.
 - The results of the analysis of the effect of Servant Leadership (X1) on Risk Culture (Z) above obtained a significance value of X1 of 0.000 <0.05 , then variable X1 has a significant effect on variable Z. Obtained X1 t value of 4.822 > 1.661 value in t table, then variable X1 has a significant effect on variable Z.

- From the results of the Hypothesis Test above, it can be concluded that the Serving Leadership variable (X1) has a significant or positive effect on the Risk Culture variable (Z) or **H1 is accepted**.
- b. Hypothesis 2 (H2) is that servant leadership has a positive effect on internal audit effectiveness.
 - The results of the analysis of the effect of Servant Leadership (X1) on Internal Audit Effectiveness (Y) above obtained a significance value of X1 of $0.481 > 0.05$, then variable X1 does not have a significant effect on variable Y. Obtained X1 t value of $-0.708 < 1.661$ value in t table, then variable X1 has no significant effect on variable Y.
 - From the results of the Hypothesis Test above, it can be concluded that the Servant Leadership variable (X1) has no significant or negative effect on the Internal Audit Effectiveness variable (Y) or **H2 is rejected**.
- c. Hypothesis 3 (H3), namely auditor competence, has a positive effect on internal audit effectiveness.
 - The results of the analysis of the effect of Auditor Competence (X2) on Internal Audit Effectiveness (Y) above obtained a significance value of X2 of $0.004 < 0.05$, then the X2 variable has a significant effect on the Y variable. Obtained t value X2 of $2.956 > 1.661$ value in t table, then the X2 variable has a significant effect on the Y variable.
 - From the results of the Hypothesis Test above, it can be concluded that the Auditor Competency variable (X2) has a significant or positive effect on the Internal Audit Effectiveness variable (Y) or **H3 is accepted**.
- d. Hypothesis 4 (H4), namely the creation of a risk culture, has a positive effect on the effectiveness of internal audit.
 - The results of the analysis of the effect of Risk Culture (Z) on Internal Audit Effectiveness (Y) above obtained a significance value of Z of $0.000 < 0.05$, then variable Z has a significant effect on variable Y. Obtained t value X2 of $10.548 > 1.661$ value in t table, then variable Z has a significant effect on variable Y.
 - From the results of the Hypothesis Test above, it can be concluded that the Risk Culture variable (Z) has a significant or positive effect on the Internal Audit Effectiveness variable (Y) or **H4 is accepted**.
- e. Hypothesis 5 (H5) is that servant leadership has a positive effect on internal audit effectiveness through the creation of a risk culture.
 - Analysis of the proof of the mediation test (intervening variable) is carried out based on the analysis of the direct effect and indirect effect between the independent variable and the dependent variable. The results of the analysis of the effect of Servant Leadership (X1) on Internal Audit Effectiveness (Y) based on hypothesis test 2 at point b above found that, variable X1 has no significant effect / no direct effect on variable Y with a beta coefficient value of -0.046 .
 - The results of the analysis of the indirect effect of variable X1 on variable Y through variable Z based on hypothesis test 1 and hypothesis test 2 at point a and point d above show that variable X1 has a significant effect on variable Z and variable Z has a significant effect on variable Y. The indirect

effect value is the multiplication of the beta coefficient value of variable X1 on variable Z with the beta coefficient value of variable Z on variable Y, namely: $0.438 \times 0.731 = 0.320$.

- Based on the results of the above calculations, the indirect effect value is 0.320 and there is no direct effect of -0.046. From the results of the Hypothesis Test, it can be concluded that indirectly the Serving Leadership variable (X1) has a significant or positive effect on the Internal Audit Effectiveness variable (Y) through the Risk Culture variable (Z) or **H5 is accepted**.

CONCLUSION

This study concluded that servant leadership significantly influences the creation of a risk culture, but is not significant in improving internal audit effectiveness. In contrast, auditor competence and risk culture have a positive effect on improving internal audit effectiveness. In addition, servant leadership can improve internal audit effectiveness if supported by a strong risk culture. Suggestions for future researchers are to expand research with different variables and objects, increase the number of respondents, and examine alternative variables for more in-depth and relevant results. This research also provides practical guidance for BRIN's Main Inspectorate management in improving internal audit effectiveness through the proper application of leadership style, auditor competence, and risk culture.

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