

SEM ANALYSIS: INTERNAL CONTROL QUALITY AND DECISION-MAKING QUALITY AT VOCATIONAL HIGH SCHOOL

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Keyword

*internal quality audit, internal control
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Abstract

The study aimed to examine (1) internal quality audit relationship between internal control quality at Vocational High School and (2) internal quality audit relationship between decision-making quality at Vocational High School. The study, which relied on the quantitative approach, targeted 57 of A-accredited public and private Vocational High School in Solo Raya, which includes Surakarta City, Sukoharjo Regency, Karanganyar Regency, Sragen Regency, Klaten Regency, and Boyolali Regency. The questionnaires were adopted as a tool for data collection and the Structural Equation Modelling (SEM) with SmartPLS 3.0 Version software was used to analyses data. The study found that internal quality audit has a positive and significant relationship between internal control quality at Vocational High School. The study also found that internal quality audit has a positive and significant relationship between decision-making quality at Vocational High School.

INTRODUCTION

Education plays a crucial role in creating high-quality human resources. Indonesian education has undergone significant changes, transitioning from centralized management to decentralized management, impacting the broader management of education and allowing for the development of local educational strategies to achieve high-quality educational outcomes. However, granting autonomy to local governments often leads to conflicts of interest between central and local authorities in several countries (Irtanto, 2021). This occurs due to the reduction of local dependency on the central government, which simultaneously diminishes central authority. Transparency International (2015) shows that poor governance between central and local governments increases the risk of corruption. In Indonesia, corruption in the education sector remains prevalent. According to Indonesia Corruption Watch (ICW, 2021), the country suffered a loss of Rp1.6 trillion from corruption in the education sector between 2016 and 2021.

The misuse of School Operational Assistance (BOS) funds is frequent within schools. The National Coordinator of the Indonesian Education Monitoring Network (JPPI) revealed that cases of BOS fund corruption have been increasing, with 23 cases in 2019, 29 cases in 2020, 44 cases in 2021, and 93 cases in 2022 (Arrahmah, 2022). Corruption in the education sector negatively affects the quality and efficiency of educational services. Therefore, addressing the misuse of BOS funds is crucial as it impacts the program's objective of supporting schools to achieve optimal educational success and quality. Research by Rahmadhani and Suparno (2020) indicates that internal control systems significantly influence the prevention of fraud in BOS fund management. Ineffective internal controls can lead to fraud detrimental to the entity (Prihandoko and Rusdi, 2020).

The problem of BOS funds corruption is attributed to the lack of public transparency and cooperation within school communities in managing the funds. This aligns with findings by Elvira (2021) and Welch (2020), which indicate that a lack of transparency in decision-making

contributes to BOS funds corruption. Internal quality audits are fundamental management tools used to verify objective evidence of processes, evaluate how well processes are implemented, assess the effectiveness of achieving set objectives, and provide evidence of problem areas. School internal quality audits play a crucial role in school management by providing quality information on strategic plan implementation for better managerial oversight.

Internal auditors, through independent and objective assessments, help identify weaknesses or nonconformities in internal control systems, providing relevant recommendations and assisting schools in implementing necessary steps to optimize internal controls (Nurjanah and Suryatimur, 2023). Research by Agustina (2020) found that the internal quality audit has a positive and significant relationship between the internal control system effectiveness.

Internal quality audit assists in decision-making through independent assessment evidence of activities, policies, and operations implementation in the organization (Januri et al., 2018). Alqudah et al. (2023) explains the significant role of internal auditors in producing quality internal audit results that support diverse decision-making.

This research aims to explore the relationship between internal quality audits with internal control quality and decision-making quality. Therefore, this study will focus on internal control quality and decision-making quality at Vocational High School in Solo Raya.

METHOD

This study used a quantitative descriptive approach. Quantitative approach research is research that uses data in the form of numbers and emphasizes the measurement of objective results using statistical analysis (Sugiyono, 2019). Data was collected using survey techniques by distributing questionnaires about internal quality audit variable (X), internal control quality variable (Y1), and decision-making quality (Y2) to respondents.

The population in this study were all A-accredited public and private Vocational High School in Solo Raya, which includes Surakarta City, Sukoharjo Regency, Karanganyar Regency, Sragen Regency, Klaten Regency, and Boyolali Regency with total of 72. Sampling of the study population was carried out using simple random sampling, which is a sampling technique that is done randomly without regard to the strata in the population (Sugiyono, 2019). The number of samples used in this study were 57 respondents. Convergent validity and discriminant validity were used for validity test of instruments, whereas the composite reliability and cronbach's alpha were used for reliability test of instruments. The Structural Equation Modelling (SEM) with SmartPLS 3.0 Version software was used to analyses data.

RESULTS

This test was conducted to understand the relationships among constructs, significance values, R-square values, and the research model. Hypothesis testing was performed by using the bootstrapping method to observe the significance of coefficients. The first analysis was conducted by examining the R-square values, followed by examining the P-value.

The R-square value is used to explain the influence of exogenous manifest variables on endogenous manifest variables. The R-square criteria of 0.75, 0.50, and 0.25 respectively indicate strong, moderate, and weak model (Hair et al., 2021, p.118). The R-square analysis results of the research model are presented in the following table.

Table 1. R-Square Values for Internal Control Quality and Decision-Making Quality at Vocational High School

Variable	R-Square	Description
Y1	0.143	Weak
Y2	0.154	Weak

Based on the table above, the R-square value for internal control quality is 0.143, categorized as weak as it is below 0.25. This means that internal quality audit can explain 14.3% of internal control quality, while the remaining 85.7% is explained by other variables outside the study. The R-square value for decision-making quality is 0.154, also categorized as weak, indicating that internal quality audit explains 15.4% of decision-making quality, with the remaining 84.6% explained by other variables.

A significance coefficient value is ≤ 0.05 (Hair et al., 2021). The following are the results of the T-statistic and P-value analysis.

Table 2. Significant Coefficient Values for Internal Control Quality and Decision-Making Quality at Vocational High School

Hypothesis	Variable	Original Sample	T-Statistic	P-Value	Description
H ₁	X -> Y1	0.378	2.981	0.003	Significant
H ₂	X -> Y2	0.393	3.685	0.000	Significant

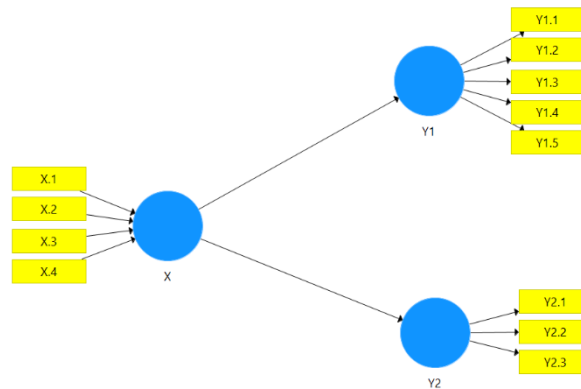


Figure 1. SEM-PLS Model

Based on the table above, it is evident that internal quality audit has a positive and significant relationship between internal control quality, with an original sample value of 0.378. The significance value of 0.003 is less than the alpha level of 0.05. This is also shown by a T-statistic value of 2.981, greater than 1.960. The results also indicate that internal quality audit has a positive and significant relationship between decision-making quality, with an original sample value of 0.393. The significance value of 0.000 is less than the alpha level of 0.05. This is also shown by a T-statistic value of 3.685, greater than 1.960.

DISCUSSION

Based on hypothesis testing and data analysis, the results show that internal quality audit has a positive and significant relationship between internal control quality and decision-making quality. The analysis of internal quality audit with internal control quality and decision-making quality is presented as follows:

1. Relationship Between Internal Quality Audit and Internal Control Quality

Hypothesis testing shows a positive and significant relationship between internal quality audit and internal control quality at Vocational High School. This is supported by the correlation between latent variables, with an original sample value of 0.378. The positive correlation means a direct and aligned relationship. The significance value obtained is ≤ 0.05 , which is 0.003, indicating a significant relationship between internal quality audit and internal control quality.

Hence, H_0 is rejected, and H_a is accepted, indicating a positive and significant relationship between internal quality audit and internal control quality at Vocational High School.

This aligns with stewardship theory, which emphasizes the involvement of all school committees in creating effective internal quality audit. Internal quality audit is an essential part of the management system and quality standards. The role of all school committees in creating effective internal quality audit ensures a good internal control quality within the school. Internal auditors play a crucial role as an input in stewardship theory to achieve good internal quality audit. The internal audit function operates effectively when auditors possess high professionalism. Internal auditors significantly impact the effectiveness of internal control systems by assessing and evaluating their effectiveness. Through testing, monitoring, and providing recommendations, internal auditors can identify weaknesses in internal control systems and offer necessary recommendations for improvement, helping schools implement steps to optimize internal controls (Nurjanah and Suryatimur, 2023).

According to Kristanti et al. (2023), internal quality audit positively and significantly affects the effectiveness of internal control systems. This is supported by research from Agustina (2020), Apandi and Nasution (2022), Chang et al. (2019), Jung and Cho (2022), which also found a positive relationship between internal quality audit and internal control quality. High-quality internal audit includes meeting relevant audit standards, such as planning, executing, and timely, accurate reporting. High-quality internal audits give management confidence that the internal control system is functioning well, helping to identify risks and opportunities. With high-quality internal audits, schools can identify and correct deficiencies in their internal control systems, thereby enhancing their effectiveness. Effective internal controls provide benefits to schools in planning and controlling operational activities (Wu et al., 2024). Based on this, it can be concluded that there is a positive and significant relationship between internal quality audit and internal control quality at Vocational High School.

2. Relationship Between Internal Quality Audit and Decision-Making Quality

Hypothesis testing shows a positive and significant relationship between internal quality audit and decision-making quality at Vocational High School. This is supported by the correlation between latent variables, with an original sample value of 0.393. The positive correlation means a direct and aligned relationship. The significance value obtained is ≤ 0.05 , which is 0.000, indicating a significant relationship between internal quality audit and decision-making quality. Hence, H_0 is rejected, and H_a is accepted, indicating a positive and significant relationship between internal quality audit and decision-making quality at Vocational High School.

This aligns with stewardship theory, which emphasizes the involvement of all school committees in creating effective internal quality audit due to the alignment of managerial objectives with the school's objectives. This relationship is based on managers acting upon the headmaster's requests, thus playing a significant role in improving internal quality audit (Al-Khasawneh et al., 2022). Alzeban and Gwilliam (2014) explain that internal quality audit plays a crucial role in supporting school activities to ensure operational effectiveness and efficiency. The school's internal auditor conducts assessments developed independently with the aim of testing and evaluating the activities in the school operational sector. The school's internal auditor systematically and objectively evaluates whether operational information is accurate and reliable as a basis for better managerial decision-making by the school committee.

School internal auditors must possess the necessary skills to control the internal control system by ensuring the delivery of accurate and well-communicated information for all school operational levels and external parties in appropriate manner and thus it can be used in rational decision-making. Good quality internal audits are expected to assist school management in making decisions based on analysis, evaluation, objective, and independent recommendations, therefore the school objectives can be achieved. Alqudah et al. (2023) explains the significant role of internal auditors in producing high-quality internal audit results, providing a diverse range of decision-making options.

The results of this hypothesis testing empirically align with the findings of previous research conducted by Anwar and Amyar (2020), Nugroho and Bayunitri (2021), Jayawardene et al. (2021), Christensen et al. (2020), and Januri et al. (2018) which concluded that there is a positive and significant relationship between internal quality audit and decision-making quality. Based on what has been described, it can be concluded that there is a positive and significant relationship between internal quality audit and decision-making quality in Vocational High School.

CONCLUSION

There is a positive and significant relationship between internal quality audit with internal control quality at Vocational High School. Internal quality audits are carried out to evaluate the adequacy, efficiency, effectiveness of management, control, and school governance, thus can improve a sustainable internal control quality.

There is a positive and significant relationship between internal quality audit with decision-making quality at Vocational High School. Internal quality audit is needed for planning and reporting, the results of internal quality audit are used as an independent source of information in making objective decisions by the school committee.

The limitation of this study is that researchers cannot control respondents in filling out questionnaires according to the respondent's criteria that researchers expect. Appropriate respondents in the questionnaire of internal quality audit variable and internal control quality variable are school internal auditors or school quality control circle, while appropriate respondents on decision-making variable are school principals.

The research recommends that further research should be able to continue this research by providing solutions to school related to internal control quality and decision-making with respondents who are more representative. Further research is also expected not to be fixated only on the variables in this study, although can increase other variables outside this study that have relationship to internal control and decision-making.

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