

Auditor Capability on the Effectiveness of Red Flags in Detecting Fraud

*Auditor Capability
on the Effectiveness*

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ABSTRACT

Fraud detection remains a major challenge in the auditing field, as fraudulent activities are often concealed and difficult to identify directly. Red flags, or early warning indicators, are commonly used as tools to assist in detecting potential fraud. This study aims to analyze the influence of tenure, education level, experience in detecting fraud, and training in fraud detection on the effectiveness of red flags in identifying fraud. A quantitative approach was employed by distributing questionnaires to 42 auditors from 7 Public Accounting Firms (PAFs) located in Medan City. Data were analyzed using multiple linear regression with the aid of SPSS software. The results show that tenure does not have a significant effect on the effectiveness of red flags. However, education level, experience in detecting fraud, and training in fraud detection each have a positive and significant influence on the effectiveness of red flags in uncovering fraudulent activities. These findings suggest that enhancing auditors' competencies—particularly through education, relevant experience, and training—plays a crucial role in optimizing the use of red flags as early detection tools in fraud examination.

Keywords: Education, Fraud Detection, Red Flags, Tenure, Training.

ABSTRAK

Deteksi penipuan tetap menjadi tantangan utama di bidang audit, karena aktivitas penipuan seringkali disembunyikan dan sulit diidentifikasi secara langsung. Bendera merah, atau indikator peringatan dini, biasanya digunakan sebagai alat untuk membantu mendeteksi potensi penipuan. Penelitian ini bertujuan untuk menganalisis pengaruh masa kerja, tingkat pendidikan, pengalaman dalam mendeteksi penipuan, dan pelatihan deteksi penipuan terhadap efektivitas tanda bahaya dalam mengidentifikasi penipuan. Pendekatan kuantitatif digunakan dengan mendistribusikan kuesioner kepada 42 auditor dari 7 Kantor Akuntan Publik (PAF) yang berlokasi di Kota Medan. Data dianalisis menggunakan regresi linier berganda dengan bantuan perangkat lunak SPSS. Hasil penelitian menunjukkan bahwa tenurial tidak memiliki efek yang signifikan terhadap efektivitas

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tanda bahaya. Namun, tingkat pendidikan, pengalaman dalam mendeteksi penipuan, dan pelatihan dalam deteksi penipuan masing-masing memiliki pengaruh positif dan signifikan terhadap efektivitas tanda bahaya dalam mengungkap aktivitas penipuan. Temuan ini menunjukkan bahwa meningkatkan kompetensi auditor—terutama melalui pendidikan, pengalaman yang relevan, dan pelatihan—memainkan peran penting dalam mengoptimalkan penggunaan tanda bahaya sebagai alat deteksi dini dalam pemeriksaan penipuan.

Kata kunci: Bendera Merah, Deteksi Penipuan, Masa Kerja, Pelatihan, Pendidikan.

INTRODUCTION

Fraud is a deliberate unlawful act committed with the intent to manipulate or mislead other parties, either within or outside an organization, resulting in indirect harm to others and direct personal or group gain. The Association of Certified Fraud Examiners (ACFE) categorizes occupational fraud into three main types, corruption, asset misappropriation, and fraudulent financial reporting (Rustiarini & Novitasari, 2014). To understand the underlying causes of fraud, the ACFE often employs the Fraud Triangle framework. This model highlights three key conditions that lead to fraud: pressure (incentives), opportunity, and rationalization. An enhancement of this theory is the Fraud Diamond model, which adds a fourth factor are capability (Siddiq & Hadinata 2016; Sari & Lestari, 2020; Abbas & Laksito, 2022). Fraud pressure can stem from personal or organizational financial instability, intense market competition, unrealistic profit expectations, or personal issues such as high debt and excessive medical bills. Professional dissatisfaction, unfair treatment, and job insecurity can also serve as significant pressures. One notable fraud case illustrating these dynamics occurred in Medan, where the Head of the Public Accounting Firm (*Kantor Akuntan Publik / KAP*) Hasnil M. Yasin & Partners was charged with misappropriating income tax refunds in collaboration with a local government official, resulting in a state loss exceeding IDR 1.19 billion. The case exemplifies how weaknesses in fraud detection and audit practices can lead to substantial financial harm.

The ability of auditors to detect fraud depends on various demographic and professional factors, such as tenure, education, experience, and training (Rustiarini & Novitasari, 2014). Longer tenure is believed to provide auditors with extensive exposure to diverse audit cases, enhancing their judgment and detection skills. Likewise, higher levels of education contribute to an auditor's technical knowledge, while fraud-related training programs improve their ability to identify irregularities. According to Putra & Dwirandra (2019), Gizta (2020) and Yuniati and Banjarnahor (2021) the number of hours devoted to fraud audit training significantly affects an auditor's fraud detection capability. However, detecting fraud is inherently challenging due to its complex nature and the ever-evolving strategies employed by perpetrators. Suryandari and Yuesti (2017), Agustina and Rusydi (2021), Noch et al. (2022), and Ngesti and Djamil (2024) state that auditors need tools or cues to assist in fraud detection. One such tool is the use of red flags—warning signs that suggest the possibility of fraudulent activity. These indicators help auditors focus on areas of higher fraud risk. defines red flags as “a set of circumstances that are unusual in nature or vary from the normal activity.” Statement on Auditing Standards (SAS) No. 99 mandates the use of red flags by external auditors as part of the fraud risk assessment process.

Despite their significance, auditors' perceptions of the effectiveness of red flags may vary depending on individual factors (Novi, & Muhammad, 2019; Pramuki, & Agustine, 2023). Several studies, including those by Moyes et al. (2019), Ammanath (2022), and Bachas et al. (2023) have investigated the impact of demographic variables—such as gender, job position, tenure, education, experience, and training—on auditors' evaluations of red flags. Interestingly, found that job position did not influence red flag utilization, while Schierstedt & Corten (2021), Oktaroza (2022), and Feng et al. (2024) identified a positive correlation between tenure and red flag perception. While these studies provide valuable insights, most were conducted in contexts outside Indonesia, and

limited empirical evidence exists regarding the Indonesian auditing environment, particularly in Medan. This presents a research gap in understanding how Indonesian auditors perceive and utilize red flags in fraud detection, especially considering local cases of audit failure (Narayana & Ariyanto, 2020; Takasenserang & Indarto, 2021; Iskandar et al., 2022). Based on the above background, this study aims to analyze the influence of tenure, education, experience in detecting fraud, and fraud detection training on the effectiveness of red flags in detecting fraud among auditors in Medan. By identifying the key factors that enhance red flag utilization, the research seeks to contribute to the development of more robust and responsive audit practices to prevent and detect fraud effectively.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

The Effect of Tenure and Auditor Experience

Tenure or length of service refers to the total duration an auditor has been employed in the profession or with a specific firm. This period is crucial because it directly correlates with the accumulation of practical experience and exposure to diverse audit engagements, which collectively enhance the auditor's ability to make sound judgments and detect fraudulent activities. As auditors gain more experience over time, they develop a keener eye for recognizing unusual patterns and anomalies in financial data, allowing them to interpret audit evidence with greater critical thinking and skepticism. This application of professional skepticism—questioning the validity and reliability of information—is fundamental in identifying potential fraud (Sofyan & Novita, 2015; Novita, 2015; Pratiyasa & Rasmini, 2020). Furthermore, experienced auditors tend to demonstrate more mature behavior and a refined professional attitude, both of which positively impact the overall quality of audits conducted (Rustiarini & Novitasari, 2014). However, it is important to note that tenure alone does not guarantee effectiveness in fraud detection. The constantly evolving nature of fraudulent schemes requires auditors to engage in continuous learning and professional development. Without ongoing education and targeted training, auditors may become less effective as new methods of deception emerge. Therefore, to maintain and enhance their fraud detection capabilities, auditors must complement their accumulated tenure with regular updates in knowledge and skills through formal training programs and practical experiences.

H1: Tenure has a significant effect on the level of effectiveness of red flags on detecting fraud.

Education Level on the Effectiveness of Red Flags in Detecting Fraud

Education provides auditors with the essential technical foundation needed to perform auditing tasks effectively. It ensures that auditors possess a sound understanding of accounting principles, auditing procedures, financial regulations, and ethical standards, all of which are critical in identifying fraudulent financial reporting and maintaining audit quality (Futri & Juliarsa, 2014; Prasetyo & Utama, 2015; Handayani & Khairunnisa, 2024). Auditors with higher levels of education are more likely to approach audits with enhanced analytical thinking and a broader perspective, enabling them to detect inconsistencies and irregularities that may otherwise go unnoticed (Rustiarini & Novitasari, 2014). Educational attainment also fosters the development of professional skepticism—a fundamental auditing attitude that involves maintaining a questioning mindset and critically evaluating audit evidence to uncover potential fraud (Rahim et al., 2019; Surya et al., 2021; Rubiyanty et al., 2024). Furthermore, continuous education through formal training, certifications, and specialized courses in fraud detection is vital in strengthening auditors' technical abilities and keeping them updated on evolving fraud tactics. This ongoing learning process contributes to better decision-making and increases the auditor's capacity to respond effectively to complex financial schemes. According to Gizta (2020), auditors who attain higher educational qualifications often exhibit greater confidence and are more efficient in identifying red flags during audits. This suggests that

education not only improves auditors' cognitive skills but also boosts their overall effectiveness in fraud detection. Therefore, education remains a crucial determinant of an auditor's ability to recognize and respond to fraudulent activities (Kurnia, 2021).

H2: Education has a significant effect on the level of effectiveness of red flags on detecting fraud.

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Fraud Detection Training on the Effectiveness of Red Flags on Detecting Fraud

Training plays a vital role in enhancing auditors' competencies, particularly in the area of fraud detection. It serves as a specialized educational process designed to provide auditors with in-depth knowledge and practical skills necessary for identifying, analyzing, and investigating fraudulent financial activities (Primasatya & Hady, 2022). Unlike general education, fraud-focused training targets specific red flags—early warning signals that suggest the possibility of financial irregularities (Rubiyanty et al., 2024). These red flags serve as critical cues, helping auditors to narrow their focus and conduct more effective and efficient audits. Research has consistently demonstrated that auditors who undergo fraud-specific training are more adept at applying professional skepticism and are better equipped to detect signs of manipulation (Gizta, 2020). In fact, according to Dwirandra (2019) and Yuniati & Banjarnahor (2021), the number of hours spent in fraud audit training is positively associated with the auditor's ability to identify fraudulent schemes. Such training not only reinforces theoretical understanding but also provides exposure to real-world fraud cases, investigative methods, and recent developments in auditing standards and regulations. As fraud tactics become more sophisticated and harder to detect, continuous training becomes essential to ensure auditors remain vigilant and up to date (West et al., 2016; Hilal et al., 2022). Without regular professional development, auditors risk falling behind the complex and evolving techniques employed by fraud perpetrators (Bello et al., 2023).

H3: Fraud training has a significant effect on the level of effectiveness of red flags on detecting fraud.

The Effect of Red Flags on Fraud Detection

Red flags refer to unusual or suspicious conditions that may signal the presence of fraud. These indicators play a crucial role in guiding auditors to areas that warrant closer scrutiny. Red flags may emerge from inconsistencies in financial statements or during interactions with clients that raise questions about the integrity of reported information. While the presence of a red flag does not conclusively prove that fraud has occurred, it acts as a warning sign that further investigation is necessary (Rahim et al., 2019; Surya et al., 2021; Rubiyanty et al., 2024). The significance of red flags in audit practice is underscored by the Statement on Auditing Standards (SAS) No. 99, which requires auditors to incorporate red flag assessments as part of their fraud risk evaluation process. This regulatory mandate reflects the profession's acknowledgment of red flags as an essential tool in the early detection of fraud. However, the effectiveness with which auditors identify and respond to red flags can vary significantly based on personal attributes such as experience, educational background, and training (Moyes et al., 2019; Schierstedt & Corten 2021; Oktaroza, 2022; Feng et al., 2024). These factors influence how auditors interpret audit evidence and determine the likelihood of fraud. Therefore, a deeper understanding of what shapes auditors' sensitivity to red flags is critical to enhancing audit quality and fraud detection efforts.

H4: Experience in detecting fraud has a significant effect on the level of effectiveness of red flags on detecting fraud.

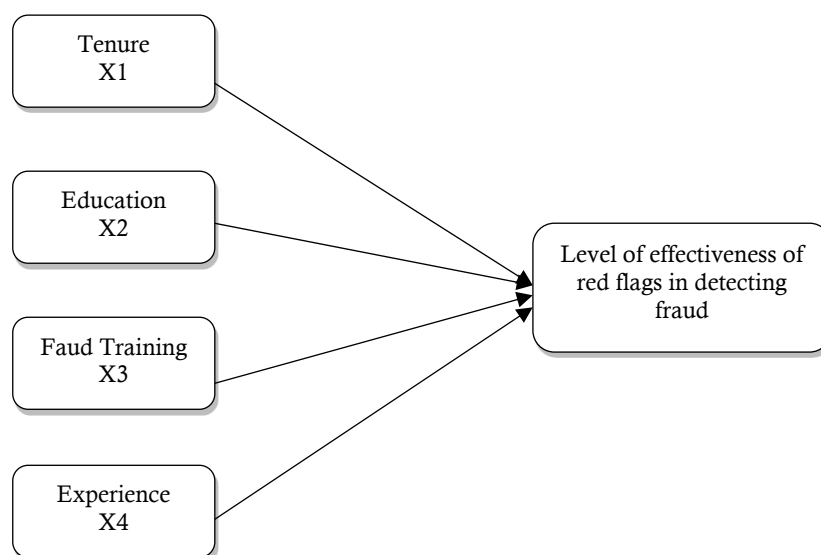


Figure 1. Theoretical Framework

Based on Figure 1, outlines four hypotheses that investigate the influence of individual factors on the effectiveness of red flags in detecting fraud. H1 to H4 respectively examine the impact of tenure, education level, fraud training, and experience in detecting fraud on the ability of red flags to identify fraudulent activities. These variables are considered key components of human resource competence in fraud detection, as emphasized by previous studies (Primasatya & Hady, 2022; Hutabarat et al., 2023; Rony et al., 2024). Specialized training and relevant experience have been shown to enhance auditors' professional skepticism, thereby improving their fraud detection capabilities (Sofyan et al., 2015; Novita, 2015; Praktiyasa & Rasmini, 2020; Gizta, 2020). Furthermore, educational background and years of service contribute to the auditor's ability to analyze and interpret red flag indicators effectively (Futri & Juliarsa, 2014; Rustiarini & Novitasari, 2014; Prasetyo & Utama, 2015; Handayani & Khairunnisa, 2024). Overall, this study supports the findings of Andriani (2019) and Amarakamini and Suryani (2019) who asserted that various personal attributes of auditors significantly affect the identification and prevention of fraud through the use of red flags.

RESEARCH METHOD

This study employed a quantitative research approach to examine the influence of demographic and professional factors—tenure, education level, experience in detecting fraud, and participation in fraud detection training—on the perceived effectiveness of red flags in identifying fraudulent activities among auditors in Medan. The research aimed to provide empirical insights into how these variables impact auditors' ability to detect fraud using red flag indicators. The research population consisted of auditors working at Public Accounting Firms in Medan City, as listed in the Directory of the Indonesian Public Accountants Association (*Ikatan Akuntan Publik Indonesia/IAPI*). Using purposive sampling, the study selected auditors who met the following criteria: a minimum of one year of professional tenure, at least a diploma-level education, previous experience in detecting at least one fraud case, and participation in fraud detection training. A total of 42 auditors from eight accounting firms were included in the final sample.

Primary data were collected through structured interviews and questionnaires distributed to the selected auditors. The questionnaire contained items designed to measure the independent variables (tenure, education, experience, training) and the dependent variable (effectiveness of red flags in detecting fraud). The questionnaire's validity and reliability were tested using SPSS version 25. The validity test applied Pearson's correlation, with a minimum r -table value of 0.257 at a 5% significance level. All items were found to be valid. The reliability of the instrument was confirmed through

the Cronbach's Alpha method, which produced a value of 0.835, indicating that all variables were reliable. The data analysis began with descriptive statistics to summarize the characteristics of the respondents and variables. Classical assumption tests, including normality, multicollinearity, and heteroscedasticity tests, were conducted to validate the regression model.

The normality of residuals was confirmed using the Kolmogorov-Smirnov test, showing a significance level above 0.05. Multicollinearity was assessed through tolerance and Variance Inflation Factor (VIF) values, all of which met acceptable thresholds (tolerance > 0.1 and VIF < 10). The regression model was also confirmed to be free of heteroscedasticity based on the scatterplot pattern. Multiple linear regression analysis was used to determine the influence of each independent variable on the effectiveness of red flags. The model was tested using both t-tests for individual significance and the coefficient of determination (R^2) to evaluate the model's explanatory power. The regression model demonstrated an R^2 value of 0.429, indicating that 42.9% of the variation in red flag effectiveness could be explained by the four independent variables examined.

RESULTS

Validity testing is carried out to see whether the question items on the questionnaire can be used to measure a variable. The number of respondents in this study were 42 respondents, so a df value of 40 was obtained which came from n-2. So that the r table value used in the validity test is 0.257.

Table 1. Results of Validity Test of Variable

Variable	Question No.	r count	r table	Description
X1	1	0.340	0.257	Valid
	2	0.265	0.257	Valid
	3	0.407	0.257	Valid
X2	1	0.312	0.257	Valid
	2	0.505	0.257	Valid
	3	0.872	0.257	Valid
X3	1	0.338	0.257	Valid
	2	0.264	0.257	Valid
	3	0.395	0.257	Valid
X4	1	0.265	0.257	Valid
	2	0.604	0.257	Valid
	3	0.377	0.257	Valid
Y	1	0.660	0.257	Valid
	2	0.438	0.257	Valid
	3	0.564	0.257	Valid
	4	1	0.257	Valid

Table 1 shows the results of the validity test for each item used to measure the study variables. A questionnaire item is considered valid if its correlation coefficient (r count) exceeds the r table value of 0.257 (n = 42). All items in this study met that criterion, indicating strong validity. For the tenure variable (X1), r count values ranged from 0.265 to 0.407, confirming all items as valid. Similarly, the education level variable (X2) showed high validity, with r count values between 0.312 and 0.872. The fraud detection experience variable (X3) also demonstrated acceptable validity, with r count values of 0.264 to 0.395. Despite one item being close to the threshold, all values were above 0.257. The training variable (X4) had r counts from 0.265 to 0.604, supporting the validity of all items. For the dependent variable (Y), representing the effectiveness of red flags, all four items had r counts between 0.438 and 1.000, indicating strong validity. In conclusion, all

questionnaire items across the five variables were validated and are suitable for further analysis.

The reliability test aims to measure a relatively consistent measurement result if the measurement is repeated two or more times. In this study how to calculate the reliability test using IBM SPSS 25.0 for windows.

Table 2. Reliability Test Results

Analysis	Value
Cronbach's Alpha	0.835
N of Item	16

All variables used in this study have a Cronbach's alpha value on Table 2 above 0.60, so all variables are declared reliable. The data normality test aims to determine whether in the regression model, the dependent variable and the independent variable have a normal distribution or not.

Table 3. Normality Test

Parameter	Unstd Residual	
N	42	
Normal Parameters	Mean	0.000000
	Std.Deviation	2.55519203
Most Extreme Differences	Absolute	0.112
	Positive	0.112
	Negative	-0.077
Test Statistic	0.112	
Asymp. Sig. (2-tailed)	0.200	

Table 3 presents the results of the normality test using the Kolmogorov-Smirnov method. With a sample size of 42 and a significance value (Asymp. Sig. 2-tailed) of 0.200, which is greater than 0.05, the data are considered normally distributed. The test statistic value of 0.112 further supports this conclusion, indicating no significant deviation from normality. Looking at the test results above, it can be seen that the magnitude of the significance value is greater than 0.05, so the residual data is normally distributed.

Table 4. Multicollinearity Test

Model	Tolerance	VIF
(Constant)		
Tenure	0.602	1.662
Level Education	0.753	1.329
Experience Detecting Defects	0.648	1.544
Training Defecting Defects	0.679	1.474

Based on Table 4 multicollinearity test aims to test whether the regression model finds a correlation between the independent variables and the dependent variable. A good regression model should not have a correlation between the independent variables. It can be seen that this study produced a tolerance value greater than 0.1 and VIF less than 10 in all independent variables used. So it can be said that there is no multicollinearity in this research data.

The heteroscedasticity test is used to examine whether the regression model occurs variable inequality from the residuals of one observation to another. If the variable from the residuals of one observation to another is constant, it is called homoscedasticity and if it is different it is called heteroscedasticity.

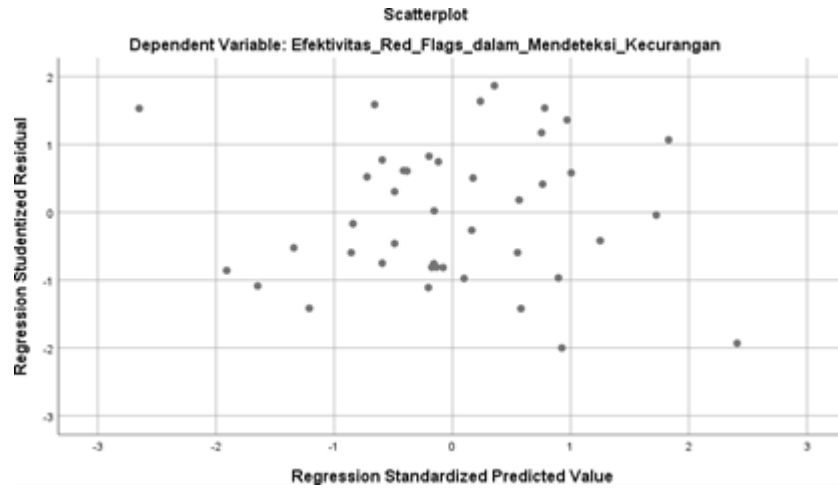


Figure 2. Heteroscedasticity Test

Based on Figure 2, the scatterplot shown above illustrates the distribution of standardized residuals against standardized predicted values from a regression analysis, with the dependent variable being Effectiveness of Red Flags in Detecting Fraud. From the plot, the data points appear randomly scattered around the horizontal axis ($y = 0$) without forming any clear pattern or curve. This randomness suggests that the assumption of homo-scedasticity (constant variance of residuals) is met. Additionally, the distribution does not show any signs of outliers or extreme deviations, indicating that the residuals are fairly normally distributed and the regression model fits the data appropriately.

Regression is free from cases of heteroscedasticity and meets the requirements of the classical assumption test on heteroscedasticity test. The following are the results of data management with multiple linear regression analysis.

Table 5. Multiple Linear Regression Test and Test t (Partial)

Model	Un-std. B	Un-std. std. Error	Std. Coef. Beta	t	Sig.
(Constant)	5.252	4.304		-1.22	0.23
Tenure	-0.651	0.287	-0.363	-2.268	0.059
Level_Education	1.05	0.309	0.486	3.394	0.002
Experience_Detecting_Fraud	-0.232	0.3	-0.119	-0.774	0.444
Training_Detecting_Defects	1.193	0.372	0.483	3.205	0.003

Based on Table 5, regression results indicate that the constant value is 5.252, suggesting that even if the independent variables (tenure, education level, experience, and training) are zero, the detection of fraud would still be 5.252 units due to other influencing factors outside the model. The regression coefficient for education level (X_2) is 1.050, meaning that a one-unit increase in education level leads to a 1.050-unit increase in fraud detection. For experience (X_3), the coefficient is -0.232, indicating that a one-unit increase in experience slightly reduces the effectiveness of fraud detection by 0.232 units. Meanwhile, training (X_4) has a positive coefficient of 1.193, showing that each additional unit of training increases fraud detection effectiveness by 1.193 units.

The t test was conducted to determine the effect of the independent variables on the dependent variable partially. Based on the Table 5, partial test results of each variable, it can be seen that tenure and experience have no effect on detecting fraud with a level of detecting fraud greater than 5% and the level of education and training has an effect on detecting fraud with a level of detecting fraud smaller than 5%, it can be concluded that tenure has no positive effect on detecting fraud, education level has a positive and significant effect, tenure has no positive effect and training has a positive and significant effect on detecting fraud.

The Determination Test is carried out to measure the ability of how much the independent variable contributes to the dependent variable. The results of the determination test show that the model has an R value of 0.655, indicating a moderate to

strong correlation between the independent variables and the dependent variable. The R Square value of 0.429 means that approximately 42.9% of the variation in fraud detection effectiveness can be explained by the variables included in the model. Meanwhile, the Adjusted R Square value of 0.367 accounts for the number of predictors in the model, suggesting that 36.7% of the variance is explained after adjusting for potential overfitting. The standard error of the estimate is 2.690, indicating the average distance that the observed values fall from the regression line.

DISCUSSION

The results of the partial t-test on the research variables indicate that tenure does not have a significant effect on the ability to detect fraud. This finding is in line with the results of previous research conducted by Rustiarini and Novitasari (2014), which concluded that tenure does not have a positive and significant effect on fraud detection. The hypothesis related to tenure is therefore rejected. This suggests that the length of service or how long an auditor has worked in the field does not necessarily improve their capability to detect fraudulent acts. This may occur because fraud detection often requires specific analytical skills and updated knowledge, which are not always acquired solely through longer working years. On the other hand, the level of education is found to have a significant and positive effect on fraud detection. This is consistent with the findings of Putri and Juliarsa (2014), who stated that the higher the auditor's education level, the better their ability to detect fraud. A higher level of education typically equips auditors with broader theoretical insights and critical thinking abilities, which are essential for understanding complex financial schemes and identifying irregularities. Auditors with advanced educational backgrounds may also be more familiar with current standards, forensic audit techniques, and risk assessment tools. Furthermore, Rubiyanty et al. (2024) emphasized that auditors with stronger academic foundations tend to possess a higher level of professional skepticism, which is a key factor in identifying fraud during an audit process.

In contrast, the experience variable does not show a significant effect on detecting fraud. This is in accordance with the results of the study by Sofyan et al. (2015), Novita (2015), and Pratiyasa and Rasmini (2020) who found that the experience of auditors does not have a significant effect on their ability to detect fraud. Thus, the hypothesis related to experience is rejected. Although experience can provide auditors with exposure to various types of cases, it appears that this alone is insufficient in enhancing fraud detection capabilities. Experience measured by the number of years worked or the number of audits performed may not directly translate into competence if not supported by continuous learning and specialization. Moyes et al. (2019) also noted that experience without relevant fraud detection training and tools often results in limited fraud identification performance. Finally, the training variable demonstrates a significant and positive effect on fraud detection, in line with the study by Primasatya and Hady (2022). This finding suggests that training, especially when it is focused on fraud detection and forensic auditing, can greatly enhance an auditor's ability to recognize and respond to fraudulent activities. Training sessions conducted by professional organizations such as Public Accounting Firms or Indonesian Public Accountants Association offer practical approaches, case studies, and updates on fraud detection techniques that are highly relevant to fieldwork. According to Gizta (2020), auditors who participate in structured training programs are better prepared to apply analytical procedures, use data-driven audit tools, and recognize fraud patterns.

In conclusion, the study highlights that while tenure and experience do not significantly affect fraud detection, education and training play an essential role in equipping auditors with the necessary knowledge and skills to uncover fraud. Therefore, organizations should prioritize the continuous development of auditors through formal education and targeted training programs to enhance audit effectiveness in fraud detection.

CONCLUSION

This study examined the influence of tenure, education, experience, and training on the effectiveness of red flags in detecting fraud among auditors in Medan. The findings reveal that not all professional and demographic factors equally contribute to an auditor's ability to detect fraud. Specifically, tenure and experience were found to have no significant impact on fraud detection. This suggests that the length of service or accumulated experience alone may not enhance auditors' awareness or responsiveness to fraud indicators. Conversely, education and training showed a positive and significant effect on fraud detection. A higher level of education is likely to provide auditors with a deeper understanding of audit principles, critical thinking skills, and the ability to analyze complex transactions. Likewise, participation in fraud-related training enhances auditors' competencies, equipping them with up-to-date tools and methodologies for identifying irregularities and recognizing red flags.

Given that fraud continues to evolve in complexity, the ability to detect it requires more than just experience; it demands specialized knowledge and continuous professional development. The use of red flags remains an important element in identifying potential fraud risks, but its effectiveness depends on how well auditors are prepared to interpret and act on these signals. This research was limited to public accounting firms in Medan. Future studies should consider expanding the geographical scope and refining the measurement of key variables to obtain broader and more comprehensive insights. Enhancing auditors' education and access to targeted training can serve as a strategic approach to strengthening audit quality and fraud prevention efforts across the profession.

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