

Determinant Factors of Auditor's Ability to Detect Fraud: Auditor Professional Scepticism as Moderation

Ardiani Ika Sulistyawati¹, Yulianti², Saifudin³, Annisa Qurrota A'yun⁴, Arief Himmawan Dwi Nugroho⁵, Agus Dwianto⁶

Abstract

With the moderating effect of auditor professional distrust in mind, this study attempts to investigate the relationship between three key factors fraud audit training, auditor competence, and auditor experience and the auditor's capacity to identify fraud. This study utilized data collected from 117 auditors who work in Public Accounting Firms located in the center of Java, Indonesia. This study used the Partial Least Squares (PLS) method to address the research hypothesis. The study's findings demonstrate that an auditor's expertise and training in fraud auditing have a direct, beneficial impact on their capacity to spot fraud. Nevertheless, the auditor's expertise has been demonstrated to have no impact on their capacity to identify fraud. The results of this study also managed to demonstrate how an auditor's professional skepticism enhances the impact of their expertise, experience, and fraud audit training on their capacity to identify fraud.

Keywords: Auditor's Ability to Detect Fraud, Auditor Professional Skepticism

Introduction

Many business organizations experience difficulties in dealing with the issue of accounting fraud and its impact on performance (DeZoort and Harrison, 2018; Porporato and Epelbaum, 2021). Company performance is very vulnerable to fraudulent accounting practices, which can damage the company's reputation (Yaqoub et al., 2023). Academics argue that accounting fraud is a major and challenging problem in today's business world. The presence of fraud can cause a business organization to become unhealthy and lose competitiveness if it cannot be detected (Halbouni, 2015). When companies try to resolve the problem of accounting fraud, implementing an effective audit process becomes very important to link potential fraud with company performance (Rezaee, 2002). Companies must be prepared with prevention, detection and remedial measures to deal with various signs of fraud. Several previous studies have explored the factors that influence the risk of material errors in financial reports (Rustiarini et al., 2020; Yaqoub et al., 2023).

In carrying out the task of examining client financial reports, auditors are expected to fulfill their responsibilities carefully (Knechel et al., 2020), especially when identifying fraudulent acts in client companies as regulated in Audit Standard 200 and Audit Standard 240. Fraud refers to intentional and causing substantial errors in financial reports, which is the main focus in the audit process (Awang and Ismail, 2018; Rashid et al., 2023). Detecting fraud in financial statements is much more challenging than finding errors in presentation that occur unintentionally. This is because actual fraud committed by employees or management members will be hidden as well as possible (Kagias et al., 2022).

Fraud detection is the first step to find clues of possible fraudulent acts, as well as limiting the space for perpetrators of fraud (Abdallah et al., 2016; Baader and Krcmar, 2018; Dwianto et al., 2024). Auditors usually start fraud detection by identifying signs that indicate potential fraud (Abdallah et al., 2016; Hilal et al., 2022). However, detecting fraud is often difficult due to the underlying motivation and

¹ Accounting Department, Economic, Universitas Semarang, Semarang, Indonesia Email: ardiani@usm.ac.id (Correspondence author)

² Accounting Department, Economic, Universitas Semarang, Semarang, Indonesia. Email: yulianti@usm.ac.id

³ Accounting Department, Economic, Universitas Semarang, Semarang, Indonesia Email: aifudin@usm.ac.id

⁴ Management Department, Economic and Business, Universitas Diponegoro, Semarang, Indonesia Email: aqannisa@lecturer.undip.ac.id

⁵ Accounting Department, Economic, Universitas Stikubank, Semarang, Indonesia Email: ariefhimmawan@edu.unisbank.ac.id

⁶ Accounting Department, Economic and Business, Universitas Muhammadiyah Surakarta, Surakarta, Indonesia Email: agusdwianto90@gmail.com

the variety of fraud methods used (Al-Hashedi and Magalingam, 2021; Bao et al., 2020; Bart et al., 2021). Attribution theory developed by Fritz Heider in 1958 aims to explain the causes of a person's behavior, including the behavior of auditors in this case, related to their difficulty in detecting fraud. In the audit domain, attribution theory is often used by researchers to analyze auditors' behavior, performance appraisals, and their decision-making processes. This behavior can be influenced by internal and external factors (Barnes, 2017). When auditors try to detect fraud, internal factors, such as the auditor's ability, play an important role in determining how good the detection is (Bonrath and Eulerich, 2024; Kassem and Turksen, 2021).

Amid a constantly changing and complex environment, the identification of fraudulent activities becomes more and more crucial in safeguarding the accuracy and reliability of financial statements. Several previous research have examined the impact of several conditions on auditors' capacity to identify fraud. Adnan and Kiswanto (2017) discovered that fraud audit training had an influence on auditors' capacity to identify fraud, however Munajat and Suryandari (2017), as well as Wahidahwati and Asyik (2022), reached a different conclusion. In contrast, Ayem and Astuti (2019), Said and Munandar (2018), and Sulistyowati and Supriyati (2016) have established that auditor competence has a considerable impact on fraud detection abilities. However, Azizah and Reskino (2023) have reached a contradictory conclusion. The variable of auditor experience has been examined by several researchers. Munajat and Suryandari (2017), Murtanto and Umar (2023), Putra and Dwirandra (2019), and Suryandari and Yuesti (2017) found significant impacts. However, studies by Brown, Majors, and Peecher (2020), Ode et al. (2020), Rahim et al. (2023), suggested otherwise. This study aims to fill knowledge gaps by examining the impact of deception audit training, auditor skill, and experience on the ability to identify fraud, while considering professional auditor skeptical as a moderating factor. Therefore, this study emphasizes the importance of promptly revising knowledge and methods in this area.

This study attempts to look into how auditor experience, competency, and training affect their capacity to spot fraud. The benefits of this study include enhancing comprehension of the variables that impact auditors' capacity to identify fraud, and also enhancing the performance of financial audits. The implications encompass aiding audit organizations and regulators in developing more efficient training programs and formulating suitable rules to enhance auditors' capacity to confront obstacles in detecting fraud. The objective of this research is to incorporate the viewpoints of stakeholders in the examination of fraud audits in order to enhance comprehension of the interplay between different aspects that impact auditors' proficiency.

Literature Review

Theory of Planned Behavior

The Theory of Planned Behavior, an extension of the Theory of Reasoned Action, elucidates the connection between attitudes and behavior (Chen and Hung, 2016; Tsai et al., 2022). It posits that intention, shaped by attitudes, subjective norms, and perceived behavior control, drives behavior (Ajzen et al., 2021). This theory suggests individuals act consciously, weighing implicit and explicit information (Barth and de Jong, 2017). In this study, the Theory of Planned Behavior serves as a framework to comprehend how fraud audit training influences attitudes, subjective norms, and perceived control in fraud detection, with auditor experience moderating these relationships (Sarikhani and Ebrahimi, 2022; Tuan Mansor et al., 2022).

Fraud Audit Training

Fraud audit training is a type of training on an auditor's techniques in detecting fraud through various evidence in the form of auditee statements which really helps auditors in detecting, preventing and disclosing fraud (Campa et al., 2023; Kassem and Turksen, 2021). In an effort to fulfill the requirements as a professional, auditors must undergo adequate training (Behzadian and Nia, 2017; Tuan Mansor et al., 2022). The more fraud audit training that auditors participate in, it is hoped that there will be an increase in producing and explaining various types of audit findings (Indrawati, 2022; Mock and Turner, 2005; Rezaee, 2002). But, if the auditor has never attended fraud audit training, it will be increasingly

difficult to explain or discover audit findings (Bauer et al., 2020). Auditors who frequently participate in training will always question and carry out critical evaluations based on the insights and understanding gained from the training (Putra and Dwirandra, 2019; Westermann et al., 2015).

Auditor's Competence

The competency of an auditor Hurr (2010) is determined by formal education, technical training, experience in the audit field, and continuous professional development activities during his career as an auditor. The auditor's competency level can also be measured through the certification or certificate he or she has as well as the number of relevant participations in training, seminars or symposiums (Siriwardane, 2020). Carrying out an audit of financial reports carries a high risk for auditors (Hogan & Wilkins, 2008; Pratt and Stice, 1994). When the auditor fails to detect errors or irregularities contained in the audited financial statements, the consequences can be in the form of sanctions given to the auditor and the public accounting firm that involves them (Vanasco, 1998). These consequences can vary from fines to closure of the public accounting firm (Said and Munandar, 2018).

Auditor's Experience

Auditor's experience is considered a crucial factor in estimating an auditor's performance (Lewis, 2011). The auditor will combine his audit experience with the knowledge he already has. Experienced auditors have broader knowledge and a better level of memory structure compared to less experienced auditors (Daoust and Malsch, 2020; Ye et al., 2021). Khaksar et al (2022), Rahmawati and Usman (2014), Yulianti et al. (2024), found a positive correlation between audit experience and the ability to detect fraud. Endaya and Hanefah (2016) Mohd Sanusi et al. (2018) explains that auditor experience is able to moderate the relationship between individual attitudes and behavior on performance in the fields of business management and auditing. Adnan and Kiswanto (2017), Billy (2021), Zengin (2020) also found that specific experience in audit assignments can moderate the impact of fraud risk assessment on an auditor's audit ability

Auditor Professional Skepticism Moderation Variable

Auditor Professional Skepticism is an attitude of always questioning, being alert to conditions that indicate possible misstatements due to fraud and an important assessment of audit evidence (DeZoort and Harrison, 2018; Laupe et al., 2022). According to the Professional Standards for Public Accountants in Indonesia, professional skepticism is a mindset for questioning and criticizing audit evidence (Gierusz et al., 2022). Professional skepticism requires auditors to maintain a skeptical, alert and critical attitude in all audit engagements (Carpenter et al., 2005; Nolder and Kadous, 2018). Auditors must apply and increase their skeptical attitude to maintain their professionalism, until the desired evidence and information can be obtained (Andi, 2018; Siriwardane, 2020).

Auditor's Ability to Detect Fraud

Fraud refers to dishonest actions that have the potential to cause harm to individuals, bodies or other parties (Guelpa et al., 2017). The importance of fraud detection is an aspect that must be continuously paid attention to because fraud continues to grow (Abdallah et al., 2016). Auditor's ability to detect fraud is an auditor's ability to unravel irregularities in the presentation of financial reports submitted by a company or organization by recognizing and proving the existence of fraud (Kaur et al., 2023; Satopää et al., 2011). Auditor capabilities are the skills and expertise possessed to carry out their duties, including collecting evidence, making decisions, evaluating internal controls, and assessing audit risks (D'Onza et al., 2015; Siriwardane, 2020; Van Poppel et al., 2011).

Fraud Audit Training on Auditor's Ability to Detect Fraud

The more fraud audit training there is, the more expectations there will be in explaining audit findings, always questioning and evaluating critically based on the insight and understanding gained from the training (Billy, 2021; Griffith et al., 2015). Meanwhile, if the auditor has never attended fraud audit training, it will

be difficult to explain the audit findings so as to reduce professional skepticism (Janssen et al., 2020; Tiron-Tudor and Deliu, 2022). The research results of Indrawati (2022) Munajat and Suryandari (2017) concluded the opposite, where it was proven that there was no influence between fraud audit training on the auditor's ability to detect fraud.

Auditor's Competence on Auditor's Ability to Detect Fraud

According to Ayem and Astuti (2019), auditors rarely design audit procedures to detect fraud because they use the same procedures from year to year. The research results of Said and Munandar (2018), Sulistyowati and Supriyati (2016) prove that there is an influence of auditor competence on the ability to detect fraud. On the other hand, the empirical findings of Azizah and Reskino (2023), Hassink, Meuwissen, and Bollen (2010) actually prove that auditor's competence has no impact on the auditor's ability to detect fraud.

Auditor's Experience on Auditor's Ability to Detect Fraud

Auditor's experience is proven to influence the auditor's ability to detect fraud (Hadija and Kuntadi, 2023). Through experience, auditors gain an understanding of the various types of fraud they have encountered and reflect the level of expertise of a professional (Fitriana, 2019). In accordance with their competencies, experts provide their best performance when facing specific problems (Boyle et al., 2015; Wicaksono and Suryandari, 2021). Research by Munajat and Suryandari (2017), Putra and Dwirandra (2019) succeeded in proving that the auditor's experience has a significant positive effect on the auditor's ability to detect fraud. However, Ode et al. (2020), Rahim et al. (2023) concluded that there was no influence of the auditor's experience on the auditor's ability to detect fraud.

Fraud Audit Training on Auditor's Ability to Detect Fraud : Auditor's Professional Skepticism as Moderation

Apart from having attended fraud audit training, every auditor also needs to have a professional skeptical attitude (Dwianto et al., 2024). The auditor's mental attitude must be critical, careful and not easily believe the financial information being audited (Khaksar et al., 2022). The auditor's professional skepticism will affect the auditor's capability in identifying fraudulent acts. Audit Standard 200 in SPAP [10] underlines the importance of an attitude of professional skepticism for an auditor in evaluating audit evidence (Murtanto et al., 2023). One of the factors causing auditors to fail to detect fraud is a lack of knowledge and the application of professional skepticism when carrying out audit tasks (Wahidahwati and Asyik, 2022). Auditors with a high level of professional skepticism will actively seek additional information when they encounter symptoms of fraud (Rahim et al., 2023). As a form of vigilance against fraud, auditors will expand audit evidence, postpone assessments, change audit planning and audit procedures until they obtain adequate and accurate evidence to ensure the decisions taken are correct (Said and Munandar, 2018).

Auditor's Competence on Auditor's Ability to Detect Fraud : Auditor's Professional Skepticism as Moderation

When conducting an audit, the auditor must act as an expert in accounting and auditing. Achieving expertise starts from formal education and is expanded through practical experience in the audit field (Sulistyowati and Supriyati, 2016). The auditor's professional skepticism attitude refers to being careful and not easily trusting the information obtained during the audit. When auditors are skeptical, this strengthens the influence of competence on the auditor's ability to detect (Wahidahwati and Asyik, 2022). When professional skepticism is combined with strong competence, auditors will have a higher sensitivity to potential fraud during the audit process (Rahim et al., 2023).

Auditor's Experience on Auditor's Ability to Detect Fraud : Auditor's Professional Skepticism as Moderation

A skeptical attitude integrated with experience makes auditors more sensitive to signs of fraud in the audit process (Astuti, 2019; Dwianto et al., 2024; Prianthara et al., 2022). As experience increases, auditors gain insight into the types and strategies of fraud, and understand how to hide dishonest acts (Rahim et al., 2023). A strong professional skeptical attitude not only strengthens the influence of the auditor's

experience in detecting fraud, but also allows the auditor to use that experience more effectively (Ode et al., 2020; Putra and Dwirandra, 2019).

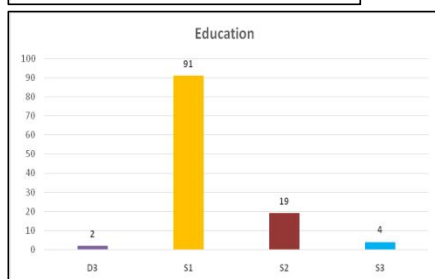
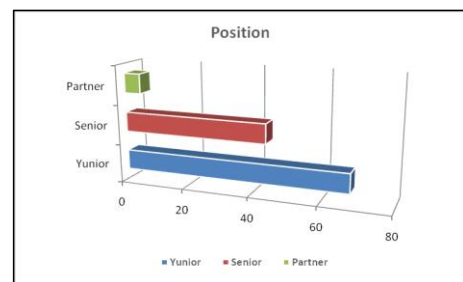
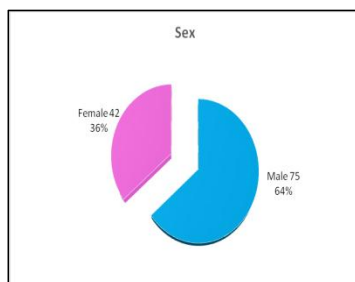
Research Design

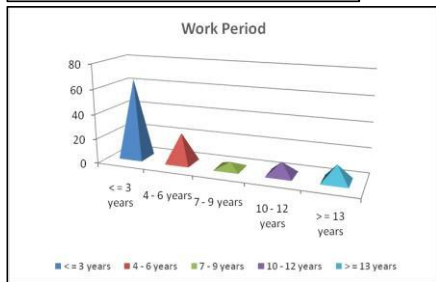
In accounting firms located in Central Java, Indonesia, 117 auditors participated in this study. A questionnaire was used as part of the survey procedure to collect data. consists of one dependent variable, the auditor's capacity to spot fraud; three separate variables, such as the auditor's training in fraud auditing, expertise, and experience; along with a moderator variable, the auditor's level of professional skepticism (M). This study used the partially least-squares (PLS) analysis technique.

Results and Discussion

Profile of Research Respondents

The following is the profile of 117 auditor respondents who participated in this research based on sex, auditor's position, education, marital status, work period and fraud audit training.





Data processed by the author 2024

Figure 1. Outer Model

Loading Factor

An indicator is considered to have good validity if the value is > 0.70. However, for models that are still in the development stage, a loading factor of 0.50 to 0.60 is still acceptable. The results of the outer model analysis are presented in the following table and figure:

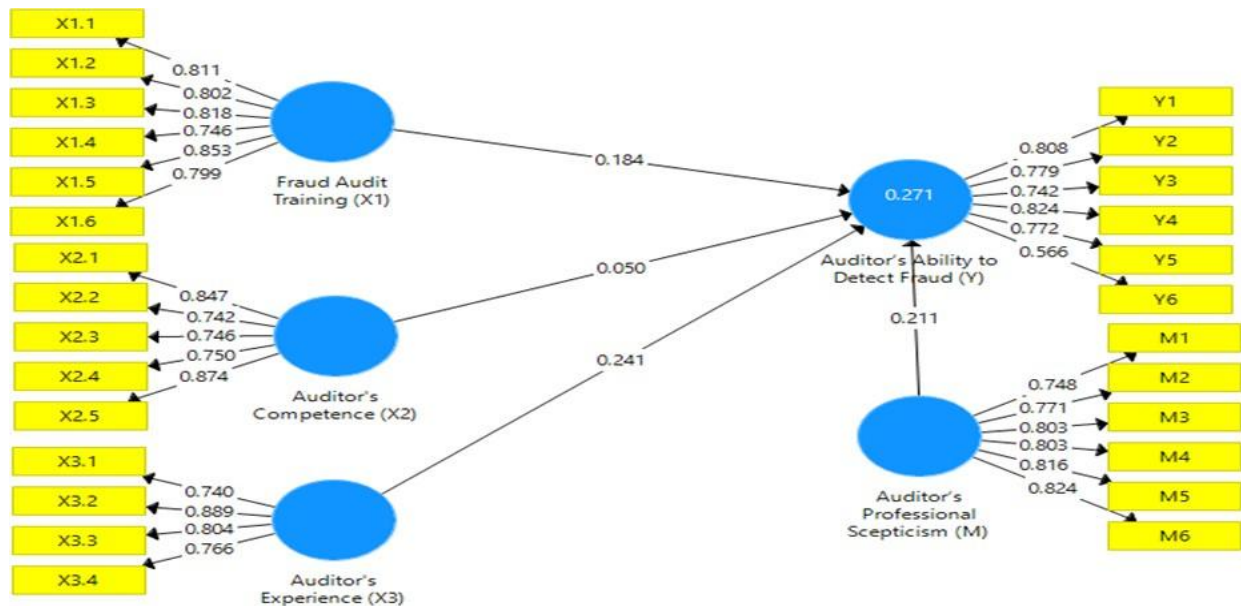


Figure 2. Loading Factor

Based on this criterion, indicators with a loading factor value > 0.50 will be retained and can be used for further analysis.

Table 1. Loading Factor Result of each Item

Latent Construct	Indicator	Loading Factor Value	%
<i>Fraud Audit Training</i>	X1.1	0.811	> 0.5
	X1.2	0.802	> 0.5
	X1.3	0.818	> 0.5
	X1.4	0.746	> 0.5
	X1.5	0.853	> 0.5
	X1.6	0.799	> 0.5
<i>Auditor's Competence</i>	X2.1	0.847	> 0.5
	X2.2	0.742	> 0.5
	X2.3	0.746	> 0.5
	X2.4	0.750	> 0.5
	X2.5	0.874	> 0.5
<i>Auditor's Experience</i>	X3.1	0.740	> 0.5
	X3.2	0.889	> 0.5
	X3.3	0.804	> 0.5
	X3.4	0.766	> 0.5
<i>Auditor's Professional Skepticism</i>	M1	0.748	> 0.5
	M2	0.771	> 0.5
	M3	0.803	> 0.5
	M4	0.803	> 0.5
	M5	0.816	> 0.5
	M6	0.824	> 0.5
<i>Auditor's Ability to Detect Fraud</i>	Y1	0.808	> 0.5
	Y2	0.779	> 0.5
	Y3	0.742	> 0.5
	Y4	0.824	> 0.5
	Y5	0.772	> 0.5
	Y6	0.566	> 0.5

Data processed by the author 2024

The results of the outer model analysis showed that all latent constructs had loading factors > 0.5 so that it could be continued with the inner model analysis to determine the effects between latent constructs.

Table 2. Average Variance Extracted

Latent Construct	Average Variance Extracted (AVE)
Fraud Audit Training	0.649
Auditor's Competence	0.630
Auditor's Experience	0.643
Auditor's Professional Skepticism	0.631
Auditor's Ability to Detect Fraud	0.568

Data processed by the author 2024

Based on table 2, the AVE value for each latent construct is > 0.5 , which means that this research questionnaire is reliable and valid for measuring the latent construct, thereby increasing the credibility and accuracy of the research findings.

Reliability Test Result

In reliability testing, it can be seen the extent of confidence in an instrument and its ability as a data collection tool. One of the methods used is Cronbach's Alpha. The research instrument is considered reliable if the resulting alpha value is > 0.7

Table 3. Reliability Test Result

Latent Construct	Cronbach's Alpha	rho_A	Composite Reliability
Fraud Audit Training	0.891	0.892	0.917
Auditor's Competence	0.856	0.891	0.895
Auditor's Experience	0.813	0.830	0.878
Auditor's Professional Skepticism	0.884	0.898	0.911
Auditor's Ability to Detect Fraud	0.846	0.871	0.886

Data processed by the author 2024

Based on table 3, all latent constructs are reliable and trustworthy. Reliability is determined by the composite reliability coefficient (rho_A), with a value > 0.7 , which means the reliability of the measurement results is said to be good. Cronbach's Alpha value ranges from 0.813 - 0.891; rho_A values range between 0.830 - 0.898; Composite Reliability values range between 0.886 - 0.917.

Diskriminant Analysis

Validity means measuring what should be measured. Discriminant validity is carried out to ensure that each concept from each latent model is different from other variables.

Table 4. Discriminant Analysis Result

	Fraud Audit Training (X1)	Auditor's Competence (X2)	Auditor's Experience (X3)	Auditor's Professional Skepticism (M)	Auditor's Ability to Detect Fraud (Y)
Fraud Audit Training	0.805*				
Auditor's Competence	0.397	0.794*			
Auditor's Experience	0.402	0.446	0.802*		
Auditor's Professional Skepticism	0.321	0.371	0.444	0.795*	
Auditor's Ability to Detect Fraud	0.369	0.309	0.432	0.396	0.753*

Data processed by the author 2024

The results of the discriminant analysis in table 4 show that the square root value of AVE Fraud Audit Training (X1) is 0.805 which is greater than the construct correlation value on other latent variables. Likewise, the root value of AVE Auditor's Competence (X2) is 0.794; The root value of AVE Auditor's Experience (X3) is 0.802, and the square root value of AVE Auditor's Professional Skepticism (M) is 0.795,

all of which are greater when compared to the construct correlation values on other latent variables. This proves that all research variables have met good discriminant validity in the preparation of each variable.

Heterotrait Monotrait (HTMT) Ratio

Heterotrait Monotrait (HTMT) ratio is one of the evaluation metrics used in Partial Least Squares (PLS) analysis to evaluate the relationship between the constructs (variables) being measured.

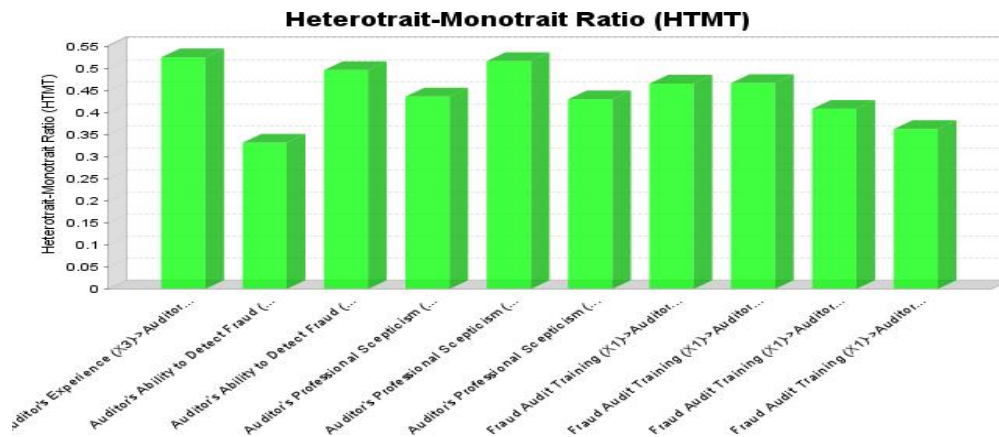


Figure 3. Heterotrait-Monotrait Ratio (HTMT)

In PLS analysis, the HTMT ratio is calculated as the geometric mean of all combinations of correlations between different constructs divided by the correlations between similar constructs. The HTMT ratio has a value range between 0 and 1, where a value of 0 indicates there is no relationship between the constructs being measured. A value of 1 indicates that the relationship between the constructs being measured is very high, which can cause multicollinearity problems.

The results of the HTMT analysis showed that there were no scores > 0.9. This means that the model does not show very high correlation or in other words there is no multicollinearity. The use of the HTMT ratio in PLS analysis is very important to ensure that the constructs being measured are truly interrelated as expected and are not mixed with other constructs that should not be related. In this case, the HTMT ratio can be used to evaluate the convergent and discriminant validity of the constructs measured in PLS analysis. Thus, the HTMT ratio can help ensure that the PLS analysis results obtained are truly valid and reliable.

Coefficient of Determination Test Results

The Partial Least Square outer model also produces an R Square value for the endogenous construct which is a test of the Goodness of Fit model. There are three categories in grouping R-square values, namely 0.75 (strong), 0.50 (moderate) and 0.25 (weak) (Hair et al, 2010).

Table 5. Determination Coefficient

	<i>R Square</i>	<i>R Square Adjusted</i>
Auditor's Ability to Detect Fraud	0.271	0.245

Data processed by the author 2024

Based on table 5, it is known that the adjusted R-square value for the Auditor's Ability to Detect Fraud (Y) variable is 0.245, which means that 24.5% of the variation in the Auditor's Ability to Detect Fraud (Y) can be explained by variations in the exogenous construct, namely Fraud Audit Training (X1), Auditor's

Competence (X2) and Auditor's Experience (X3) as well as Auditor's Professional Skepticism (M), while the rest is explained by other variables outside the model.

Inner Model Direct Effect Test Results

In structural model analysis, there are two types of tests, namely direct influence tests and indirect influence tests through moderation. The results of this analysis are shown by the output in the PLS analysis which includes the original sample value, t-statistic value, and p value. If the original sample value is positive, then the direction of influence is positive and if the original sample value is negative, then the direction of influence is negative. The t-statistics value is used to show significance. If the t-statistic value is > 1.96 and the p value is < 0.05 then the hypothesis is accepted. The results of the direct influence test aim to determine the influence between latent constructs directly and can be seen in the following figure and table.

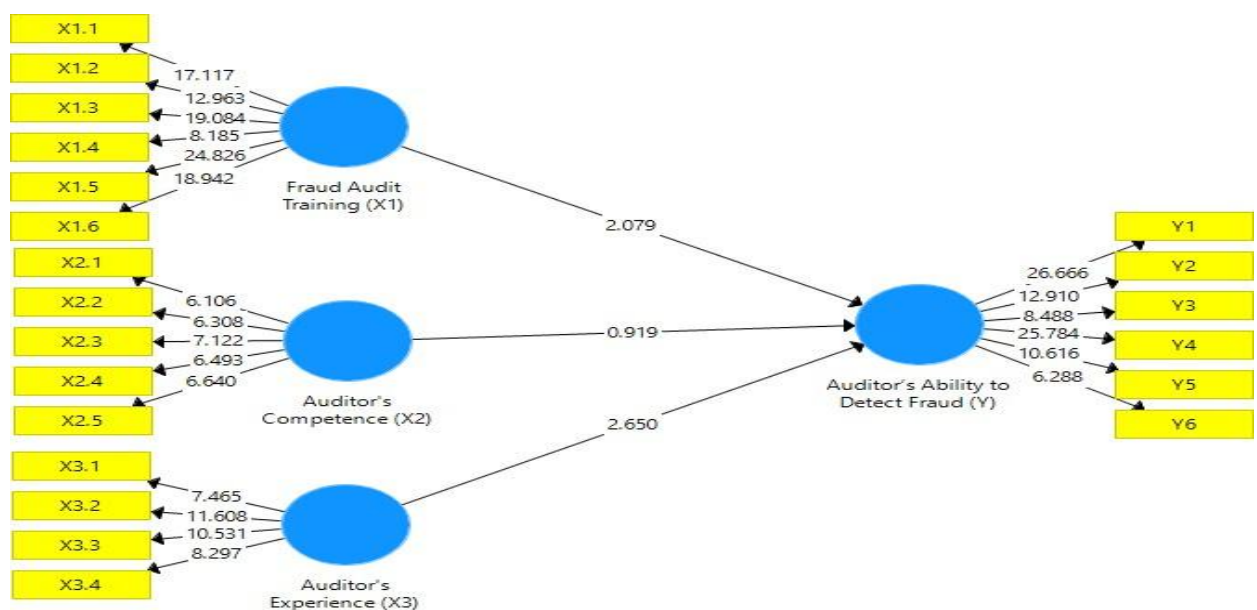


Figure 3. Structural Model of Direct Effect Analysis

Table 6. Direct Effect Test Results

Relationship between Constructs	Original Sample	STDEV	PValues
Fraud Audit Training > Auditor's Ability to Detect Fraud	0.214	2.079	0.038
Auditor's Competence > Auditor's Ability to Detect Fraud	0.089	0.919	0.358
Auditor's Experience > Auditor's Ability to Detect Fraud	0.308	2.650	0.008

Data processed by the author 2024

Fraud Audit Training (X1) has a t-statistic value of $2.079 > 1.96$. These results indicate that Fraud Audit Training (X1) has a significant positive influence on the Auditor's Ability to Detect Fraud (Y) so that H1 is accepted. Auditor's Competence (X2) has a t-statistic value of $0.919 < 1.96$. These results indicate that Auditor's Competence (X2) does not have a significant positive influence on Auditor's Ability to Detect Fraud (Y) so H2 is rejected. Auditor's Experience (X3) has a t-statistic value of $2.650 > 1.96$. These results indicate that Auditor's Experience (X3) has a significant positive influence on Auditor's Ability to Detect Fraud (Y) so that H3 is accepted.

Moderation Effect Test Results

The moderating influence test aims to evaluate the indirect impact of the independent variable on the dependent variable through the mediating variable, taking into account the influence of the moderator variable as in figure 4 and table 6 as follows:

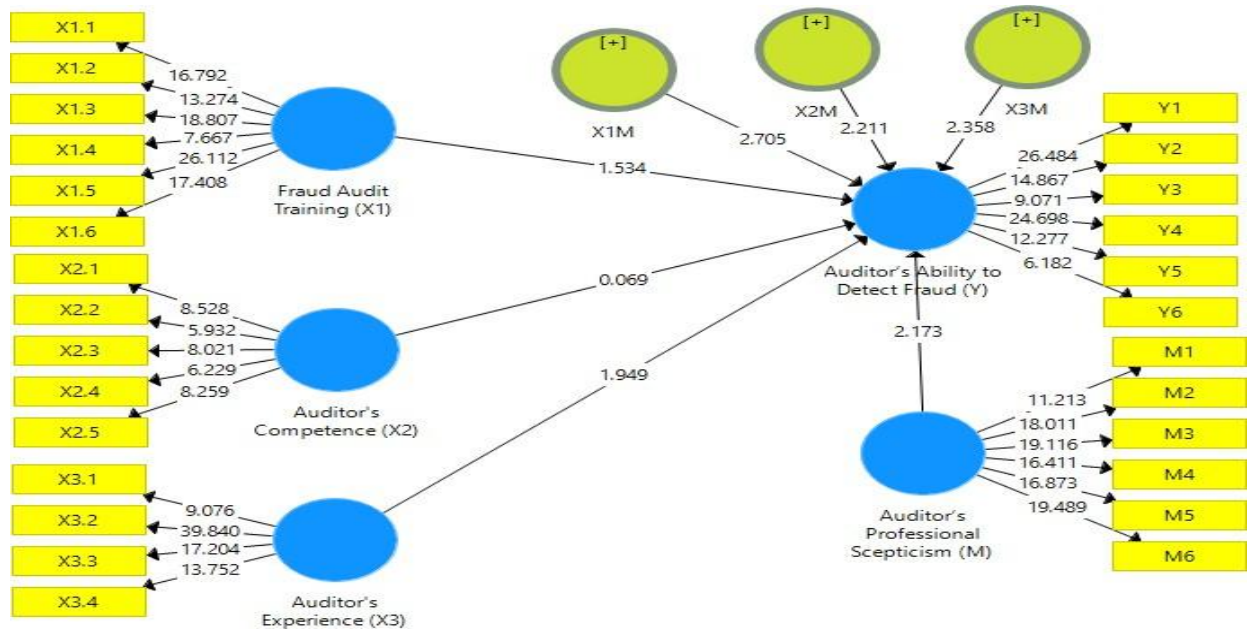


Figure 4. Moderation Effect Test Results

Table 7. Moderation Effect Test Results

Relationship between Constructs	Original Sample (O)	STDEV	P Values
Auditor's Professional Scepticism > Auditor's Ability to Detect Fraud	0.201	2.173	0.030
X1.M > Auditor's Ability to Detect Fraud	0.169	2.705	0.018
X2.M > Auditor's Ability to Detect Fraud	0.118	2.211	0.033
X3.M > Auditor's Ability to Detect Fraud	0.131	2.358	0.028

Data processed by the author 2024

Based on the results of the moderation effect test, it is known that the influence of Auditor's Professional Skepticism (M) on Auditor's Ability to Detect Fraud (Y) is significant with a calculated t value of 2.173 > 1.960 and a sig of 0.030 < 0.05. So it can be concluded that Auditor's Professional Skepticism has a significant influence on Auditor's Ability to Detect Fraud. Thus, Auditor's Professional Skepticism is an important factor in increasing the auditor's ability to handle fraud situations.

The original sample value of the positive interaction variable X1.M was 0.169 with t value 2.705 > 1.960 and sig value 0.018 < 0.05 so it can be interpreted that the Auditor's Professional Skepticism strengthens the influence of Fraud Audit Training (X1) on the Auditor's Ability to Detect Fraud (Y) (H4 is accepted). The original positive value of the interaction sample of Auditor's Professional Skepticism (M) and Fraud Audit Training (X1) (X1.M) was 0.169. It shows that the combination of these two factors has a greater impact than the influence of individual Fraud Audit Training on the auditor's ability to detect fraud. In other words, auditors who have a high level of Auditor's Professional Skepticism and have attended Fraud Audit Training (X1) tend to have Auditor's Ability to Detect Fraud (Y). This shows that Auditor's

Professional Skepticism together with Fraud Audit Training can synergistically increase the auditor's ability to detect fraud (Griffith et al, 2015).

The original sample value of the positive interaction variable X2.M was 0.118 with t value $2.211 > 1.960$ and sig value $0.033 < 0.05$ so it can be interpreted that the Auditor's Professional Skepticism strengthens the influence of auditor's competence (X2) on the Auditor's Ability to Detect Fraud (Y) (H5 is accepted). The original positive value of the interaction sample of Auditor's Professional Skepticism (M) and auditor's competence (X2) (X2.M) was 0.118. It shows that the combination of these two factors has a greater impact than the influence of individual auditor's competence on the auditor's ability to detect fraud. In other words, auditors who have a high level of Auditor's Professional Skepticism and have attended auditor's competence (X2) tend to have Auditor's Ability to Detect Fraud (Y). This shows that Auditor's Professional Skepticism together with auditor's competence can synergistically increase the auditor's ability to detect fraud. In other words, auditors who have high levels of Auditor's Professional Skepticism and Auditor's Competence (X2) tend to have Auditor's Ability to Detect Fraud (Y). This shows that Auditor's Professional Skepticism together with Auditor's Competence can increase the auditor's ability to detect fraud.

The original sample value of the positive interaction variable X3.M was 0.131 with t value $2.358 > 1.960$ and sig value $0.028 < 0.05$ so it can be interpreted that the Auditor's Professional Skepticism strengthens the influence of auditor's experience (X3) on the Auditor's Ability to Detect Fraud (Y) (H6 is accepted). The original positive value of the interaction sample of Auditor's Professional Skepticism (M) and auditor's experience (X3) (X3.M) was 0.131. It shows that the combination of these two factors has a greater impact than the influence of the individual Auditor's Experience on the auditor's ability to detect fraud. In other words, auditors who have high levels of Auditor's Professional Skepticism and Auditor's Experience (X3) tend to have Auditor's Ability to Detect Fraud (Y). This shows that Auditor's Professional Skepticism together with Auditor's Experience can increase the auditor's ability to detect fraud.

According to this study, an auditor's capacity to identify fraud is greatly enhanced by fraud auditing training or auditor experience, but not by auditor competence. These results suggest that auditors' skills can be enhanced by specific training in fraud detection, especially when combined with more extensive real-world experience. The absence of a substantial impact from auditor competence underscores the intricate nature of the factors that influence auditor capability, which encompass professional and ethical sensitivities. Incorporating the viewpoints of stakeholders can offer more understanding of these issues, including the various pressures or incentives that impact auditors in their professional work. Thus, while experience and training are important, a deeper comprehension of the dynamics and context of audits might support attempts to enhance auditors' capacity for fraud detection (Guelpa et al, 2017).

The findings emphasize the crucial significance of professional skepticism in improving auditors' ability to detect fraud. The discovery that Auditor Professional Skepticism has a significant impact on an auditor's capacity to identify fraud is consistent with other studies that have indicated the importance of auditors' mental attitudes and psychological characteristics in audit practice (Bierstaker et al., 2010; Davis, 2010). In addition, the correlation between Auditor Professional Skepticism (M) and other variables, including Fraud Audit Training, auditor competence, and auditor experience, suggests that the combination of professional skepticism with these factors can enhance auditors' ability to detect fraud (Hammersley, 2018; Nelson and Shukeri, 2011). This is consistent with the discovery that auditors' capacity to identify fraud can be boosted by experience and improved abilities acquired via training (Adnan and Kiswanto, 2017; Earley, 2015). This debate highlights the significance of strengthening psychological elements, such as professional skepticism, in conjunction with other factors like training and experience, to enhance the efficiency of audit techniques in identifying fraud (Olsen and Gold, 2018; Ta et al., 2022).

Increasing auditors' professional skepticism is a proactive measure to improve the trustworthiness of financial reporting and reduce the risk of fraud in firms (Halbouni, 2015; Mangala and Kumari, 2017; Yaqoub et al., 2023). The inclusion of the theory of planned behavior in this study allows for a deeper understanding of how attitudes, subjective norms, and perceived behavioral control influence auditors' intentions and behavior when it comes to detecting fraud (Awang et al., 2019; Kashif et al., 2018; Sarikhani and Ebrahimi, 2022; Tuan Mansor et al., 2022).

Conclusion

An auditor's capacity to identify fraud is greatly increased by fraud audit experience and education, but not by auditor skill, as this study shows. The results emphasize the significance of specialized education and hands-on practice, in addition to a critical mindset, in enhancing the ability to identify and prevent fraud. The findings indicate that psychological characteristics and ethical considerations play a vital role in the field of auditing. By strengthening professional skepticism and acquiring appropriate training and actual experience, one can improve the ability to detect fraud, hence increasing the trustworthiness of financial reporting and lowering the risk of fraud. Subsequent investigations should delve into the wider framework and intricacies of auditing in order to enhance the efficacy of fraud detection endeavors.

References

- Abdallah, A., Maarof, M. A., and Zainal, A. (2016). Fraud detection system: A survey. *Journal of Network and Computer Applications*, 68, 90–113. <https://doi.org/10.1016/j.jnca.2016.04.007>
- Adnan, J., and Kiswanto. (2017). Determinant of Auditor Ability to Detect Fraud with Professional Scepticism as A Mediator Variable. *Accounting Analysis Journal*, 6(3), 313–325. <http://journal.unnes.ac.id/sju/index.php/aaaj>
- Ajzen, I., Lohmann, S., and Albarracin, D. (2021). The Influence of Attitudes on Behavior. *The Handbook of Attitudes*, May, 187–236. <https://doi.org/10.4324/9781410612823-13>
- Al-Hashedi, K. G., and Magalingam, P. (2021). Financial fraud detection applying data mining techniques: A comprehensive review from 2009 to 2019. *Computer Science Review*, 40, 100402. <https://doi.org/https://doi.org/10.1016/j.cosrev.2021.100402>
- Andi Kusumawati, S. (2018). The effect of auditor quality to professional skepticism and its relationship to audit quality. *International Journal of Law and Management*, 34(1), 1–5. <https://app.cafeproze.com/storage/files/project/9KDTsy6wJQJyeBnebtvu2e6SbtKfh9jzcOvLAUI.pdf>
- Astuti, J. P. (2019). PENGARUH INDEPENDENSI, KOMPETENSI DAN PROFESIONALISME AUDITOR INTERNAL TERHADAP KEMAMPUAN MENDETEKSI KECURANGAN (Studi Kasus di Bank Panin, Bank CIMB Niaga, dan Bank National Nobu). 13(2), 123–142.
- Awang, Y., and Ismail, S. (2018). Determinants of financial reporting fraud intention among accounting practitioners in the banking sector: Malaysian evidence. *International Journal of Ethics and Systems*, 34(1), 32–54. <https://doi.org/10.1108/IJOES-05-2017-0080>
- Awang, Y., Abdul Rahman, A. R., and Ismail, S. (2019). The influences of attitude, subjective norm and adherence to Islamic professional ethics on fraud intention in financial reporting. *Journal of Islamic Accounting and Business Research*, 10(5), 710–725. <https://doi.org/10.1108/JIABR-07-2016-0085>
- Ayem, S., and Astuti. (2019). Konsep Fraud Diamond Dan Financial Statement Fraud (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Tahun 2014-2018). *Jurnal Ilmiah Akuntansi Dan Humanika*, 9(3), 235–246.
- Azizah, S., and Reskino, R. (2023). Pendeteksian Fraudulent Financial Statement: Pengujian Fraud Heptagon Theory. *Jurnal Akuntansi Dan Governance*, 4(1), 17. <https://doi.org/10.24853/jago.4.1.17-37>
- Baader, G., and Kremar, H. (2018). Reducing false positives in fraud detection: Combining the red flag approach with process mining. *International Journal of Accounting Information Systems*, 31, 1–16. <https://doi.org/https://doi.org/10.1016/j.accinf.2018.03.004>
- Bao, Y., Ke, B., Li, B., Yu, Y. J., and Zhang, J. (2020). Detecting Accounting Fraud in Publicly Traded U.S. Firms Using a Machine Learning Approach. *Journal of Accounting Research*, 58(1), 199–235. <https://doi.org/10.1111/1475-679X.12292>
- Barnes. (2017). Social determinants of adaptive and transformative responses to climate change. *Nature Climate Change*, 5–24. http://repo.iain-tulungagung.ac.id/5510/5/BAB_2.pdf
- Bart, B., Sebastiaan, H., Tim, V., Baesens, B., and Sebastiaan, H. (2021). This item is the archived peer-reviewed author-version of : Data engineering for fraud detection Reference : Data Engineering for Fraud Detection (Vol. 150).
- Barth, S., and de Jong, M. D. T. (2017). The privacy paradox – Investigating discrepancies between expressed privacy concerns and actual online behavior – A systematic literature review. *Telematics and Informatics*, 34(7), 1038–1058. <https://doi.org/10.1016/j.tele.2017.04.013>
- Bauer, T. D., Hillison, S. M., Peecher, M. E., and Pomeroy, B. (2020). Revising Audit Plans to Address Fraud Risk: A Case of “Do as I Advise, Not as I Do”?*. *Contemporary Accounting Research*, 37(4), 2558–2589. <https://doi.org/https://doi.org/10.1111/1911-3846.12590>
- Behzadian, F., and Nia, N. I. (2017). An Investigation of Expectation Gap between Independent Auditors and Users from Auditing Services Related to the Quality of Auditing Services Based on Their Role and Professional Features. *Asian Journal of Accounting Research*, 2(2), 36–47. https://doi.org/10.1108/AJAR-2017-02_02-B005
- Bierstaker, J. L., Brazel, J., Caster, P., and Reed, B. J. (2010). American Institute of Certified Public Accountants' (AICPA) Professional Ethics Executive Committee's (PEEC) omnibus proposal of professional ethics division

- interpretations and rulings. *Current Issues in Auditing*, 4(1), 2009–2010. <https://doi.org/10.2308/ciia.2010.4.1.C10>
- Billy. (2021). *Contemporary Accting Res - 2021 - Brewster - Do Stronger Wise-Thinking Dispositions Facilitate Auditors Objective.pdf*.
- Bonrath, A., and Eulerich, M. (2024). Internal auditing's role in preventing and detecting fraud: An empirical analysis. *International Journal of Auditing*, October 2023, 1–17. <https://doi.org/10.1111/ijau.12342>
- Boyle, D. M., DeZoort, F. T., and Hermanson, D. R. (2015). The effect of alternative fraud model use on auditors' fraud risk judgments. *Journal of Accounting and Public Policy*, 34(6), 578–596. <https://doi.org/https://doi.org/10.1016/j.jaccpubpol.2015.05.006>
- Brown, T., Majors, T. M., and Peecher, M. E. (2020). Evidence on how different interventions affect juror assessment of auditor legal culpability and responsibility for damages after auditor failure to detect fraud. *Accounting, Organizations and Society*, 87, 101172. <https://doi.org/https://doi.org/10.1016/j.aos.2020.101172>
- Campa, D., Quagli, A., and Ramassa, P. (2023). The roles and interplay of enforcers and auditors in the context of accounting fraud: a review of the accounting literature. *Journal of Accounting Literature*. <https://doi.org/10.1108/jal-07-2023-0134>
- Carpenter, T., Durtschi, C., and Gaynor, L. M. (2005). The Effect of Experience on Professional Skepticism, Knowledge Acquisition, and Fraud Detection. *SSRN Electronic Journal*, October. <https://doi.org/10.2139/ssrn.346921>
- Chen, S. C., and Hung, C. W. (2016). Elucidating the factors influencing the acceptance of green products: An extension of theory of planned behavior. *Technological Forecasting and Social Change*, 112, 155–163. <https://doi.org/10.1016/j.techfore.2016.08.022>
- D'Onza, G., Selim, G. M., Melville, R., and Allegrini, M. (2015). A Study on Internal Auditor Perceptions of the Function Ability to Add Value. *International Journal of Auditing*, 19(3), 182–194. <https://doi.org/10.1111/ijau.12048>
- Daoust, L., and Malsch, B. (2020). When the Client Is a Former Auditor: Auditees' Expert Knowledge and Social Capital as Threats to Staff Auditors' Operational Independence. *Contemporary Accounting Research*, 37(3), 1333–1369. <https://doi.org/10.1111/1911-3846.12582>
- Davis, C. (2010). Characteristics and Skills of the Forensic Accountant. *American Accounting Association*, 1–34. <papers3://publication/uuid/9D036A93-5FE7-4977-BDF9-46E402CF8F33>
- DeZoort, F. T., and Harrison, P. D. (2018). Understanding Auditors' Sense of Responsibility for Detecting Fraud Within Organizations. *Journal of Business Ethics*, 149(4), 857–874. <https://doi.org/10.1007/s10551-016-3064-3>
- Dwianto, A; Puspitasari, D and Setiawati, E. (2024). Moderasi Komite Audit Sebagai Peredam Kecurangan Pelaporan Keuangan. *Owner*, 8(1), 839–860. <https://doi.org/10.33395/owner.v8i1.1899>
- Dwianto, A; Puspitasari, D; A,A Q., Sulistyawati, A. I., & Pugara, A. (2024). Sustainability Environmental Performance Future Investment for Company Value. *6798(March)*, 233–250.
- Earley, C. E. (2015). Data analytics in auditing: Opportunities and challenges. *Business Horizons*, 58(5), 493–500. <https://doi.org/10.1016/j.bushor.2015.05.002>
- Endaya, K. A., and Hanefah, M. M. (2016). Internal auditor characteristics, internal audit effectiveness, and moderating effect of senior management. *Journal of Economic and Administrative Sciences*, 32(2), 160–176. <https://doi.org/10.1108/jeas-07-2015-0023>
- Fitriana, A. V. (2019). Faktor Internal Auditor yang Mempengaruhi Kemampuan Auditor dalam Mendeteksi Kecurangan. *Jurnal Online Insan Akuntan*, 4(2), 239–252.
- Gierusz, J., Kolesnik, K., Silska-Gembka, S., and Zamojska, A. (2022). The influence of culture on accounting judgment- Evidence from Poland and the United Kingdom. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2021.1993556>
- Griffith, E. E., Hammersley, J. S., and Kadous, K. (2015). Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice. *Contemporary Accounting Research*, 32(3), 833–863. <https://doi.org/10.1111/1911-3846.12104>
- Guelpa, A., Marini, F., du Plessis, A., Slabbert, R., and Manley, M. (2017). Verification of authenticity and fraud detection in South African honey using NIR spectroscopy. *Food Control*, 73, 1388–1396. <https://doi.org/10.1016/j.foodcont.2016.11.002>
- Hadija, S., and Kuntadi, C. (2023). Faktor-Faktor yang Mempengaruhi Kemampuan Auditor dalam Mendeteksi Kemampuan Auditor Mendeteksi Kecurangan (Literatur Review). *Jurnal Ekonomi Manajemen Sistem Informasi*, 4(3), 580–586. <https://creativecommons.org/licenses/by/4.0/>
- Hair, Joseph Franklin; Black, W.C; Babin, BJ and Anderson, R.E. (2010). *Multivariate Data Analysis*. 7th Edition, Pearson, New York.
- Halbouni, S. S. (2015). The Role of Auditors in Preventing, Detecting, and Reporting Fraud: The Case of the United Arab Emirates (UAE). *International Journal of Auditing*, 19(2), 117–130. <https://doi.org/https://doi.org/10.1111/ijau.12040>
- Hammersley, M. (2018). What is ethnography? Can it survive? *Ethnography and Education*, 13(1), 1–17. <https://doi.org/10.1080/17457823.2017.1298458>
- Hassink, H., Meuwissen, R., and Bollen, L. (2010). Fraud detection, redress and reporting by auditors. *Managerial Auditing Journal*, 25(9), 861–881. <https://doi.org/10.1108/02686901011080044>
- Hilal, W., Gadsden, S. A., and Yawney, J. (2022). Financial Fraud: A Review of Anomaly Detection Techniques and Recent Advances. *Expert Systems with Applications*, 193, 116429. <https://doi.org/https://doi.org/10.1016/j.eswa.2021.116429>
- Hogan, C. E., and Wilkins, M. S. (2008). Evidence on the audit risk model: Do auditors increase audit fees in the presence of internal control deficiencies? *Contemporary Accounting Research*, 25(1), 219–242. <https://doi.org/10.1506/car.25.1.9>

- Hurt, R. K. (2010). Development of a scale to measure professional skepticism. *Auditing*, 29(1), 149–171. <https://doi.org/10.2308/aud.2010.2> 9.1.149
- Indrawati, S. (2022). The Effect of Director's Remuneration, Audit Fee, and Director's Expertise on Earnings Management with Sales Growth as Moderating Variable. *THE INDONESIAN JOURNAL OF ACCOUNTING RESEARCH*, 25(1), 107–136. <https://doi.org/10.33312/ijar.581>
- Janssen, S., Hardies, K., Vanstraelen, A., and Zehms, K. M. (2020). Professional Skepticism Traits and Fraud Brainstorming Quality. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3719155>
- Kagias, P., Cheliatsidou, A., Garefalakis, A., Azibi, J., and Sariannidis, N. (2022). The fraud triangle – an alternative approach. *Journal of Financial Crime*, 29(3), 908–924. <https://doi.org/10.1108/JFC-07-2021-0159>
- Kashif, M., Zarkada, A., and Ramayah, T. (2018). The impact of attitude, subjective norms, and perceived behavioural control on managers' intentions to behave ethically. *Total Quality Management & Business Excellence*, 29(5–6), 481–501. <https://doi.org/10.1080/14783363.2016.1209970>
- Kassem, R., and Turksen, U. (2021). Role of public auditors in fraud detection: A critical review. *Contemporary Studies in Economic and Financial Analysis*, 105, 33–56. <https://doi.org/10.1108/S1569-375920200000105004>
- Kaur, B., Sood, K., and Grima, S. (2023). A systematic review on forensic accounting and its contribution towards fraud detection and prevention. *Journal of Financial Regulation and Compliance*, 31(1), 60–95. <https://doi.org/10.1108/JFRC-02-2022-0015>
- Khaksar, J., Salehi, M., and Lari DashtBayaz, M. (2022). The relationship between auditor characteristics and fraud detection. *Journal of Facilities Management*, 20(1), 79–101. <https://doi.org/10.1108/JFM-02-2021-0024>
- Knechel, W. R., Thomas, E., and Driskill, M. (2020). Understanding financial auditing from a service perspective. *Accounting, Organizations and Society*, 81(xxxx), 101080. <https://doi.org/10.1016/j.aos.2019.101080>
- Laupe, S., Abdullah, M. I., Kahar, A., Saleh, F. M., Zahra, F., and Syamsuddin, N. A. (2022). Auditor's Skepticism, Forensic Accounting, Investigation Audit and Fraud Disclosure of Corruption Cases. *Journal of Governance and Regulation*, 11(3), 189–196. <https://doi.org/10.22495/JGRV1113ART16>
- Lewis, B. L. (2011). Accounting Research Center, Booth School of Business, University of Chicago. 28(1990), 1–20.
- Mangala, D., and Kumari, P. (2017). Auditors' Perceptions of the Effectiveness of Fraud Prevention and Detection Methods. *Indian Journal of Corporate Governance*, 10(2), 118–142. <https://doi.org/10.1177/0974686217738683>
- Mock, T. J., and Turner, J. L. (2005). Auditor Identification of Fraud Risk Factors and their Impact on Audit Programs. *International Journal of Auditing*, 9(1), 59–77. <https://doi.org/https://doi.org/10.1111/j.1099-1123.2005.00102.x>
- Mohd Sanusi, Z., Iskandar, T. M., Monroe, G. S., and Saleh, N. M. (2018). Effects of goal orientation, self-efficacy and task complexity on the audit judgement performance of Malaysian auditors. *Accounting, Auditing and Accountability Journal*, 31(1), 75–95. <https://doi.org/10.1108/AAAJ-12-2015-2362>
- Munajat, S., and Suryandari, D. (2017). The Effect of Experiences, Training, Personal Type, and Workload of the Auditor on the Ability of Auditor to Detect Fraud. *Accounting Analysis Journal*, 6(1), 73–80. <https://journal.unnes.ac.id/sju/index.php/aaj/article/view/12007>
- Murtanto, Nugroho, B. M., and Umar, H. (2023). The Effect of Forensic Audit Knowledge, Audit Experience and Workload on Auditor's Corruption Detection Skill. *Proceedings of the 3rd Borobudur International Symposium on Humanities and Social Science 2021 (BIS-HSS 2021)*, 806–810. https://doi.org/10.2991/978-2-494069-49-7_136
- Nelson, S. P., and Shukeri, S. N. (2011). Corporate governance and audit report timeliness: Evidence from Malaysia. In *Research in Accounting in Emerging Economies (Vol. 11, Issue 1)*. Emerald Group Publishing Ltd. [https://doi.org/10.1108/S1479-3563\(2011\)0000011010](https://doi.org/10.1108/S1479-3563(2011)0000011010)
- Nolder, C. J., and Kadous, K. (2018). Grounding the professional skepticism construct in mindset and attitude theory: A way forward. *Accounting, Organizations and Society*, 67(March), 1–14. <https://doi.org/10.1016/j.aos.2018.03.010>
- Ode, A. La, Wahyuniati, H., Angela, F., and Oktri, S. (2020). AUDITOR'S ABILITY TO DETECT FRAUD: INDEPENDENCE, AUDIT EXPERIENCE, PROFESSIONAL. *Rjoas*, 11(November), 192–205.
- Olsen, C., and Gold, A. (2018). Future research directions at the intersection between cognitive neuroscience research and auditors' professional skepticism. *Journal of Accounting Literature*, 41(December), 127–141. <https://doi.org/10.1016/j.acclit.2018.03.006>
- Porporato, M., and Epelbaum, N. (2021). Benford's law for integrity tests of high-volume databases: a case study of internal audit in a state-owned enterprise. <https://doi.org/10.1108/JEFAS-07-2021-0113>

- Pratt, J., and Stice, J. D. (1994). The Effects of Client Characteristics on Auditor Litigation Risk Judgments, Required Audit Evidence, and Recommended Audit Fees. *The Accounting Review*, 69(4), 639–656. <http://www.jstor.org/stable/248435>
- Prianthara, I. B. T., Setini, M., and Munidewi, I. A. B. (2022). Effect of auditor experience, independence, professional skepticism, ability to detect fraud on capital spirituality audit results quality as moderating. *International Journal of Intellectual Property Management*, 1(1), 1. <https://doi.org/10.1504/ijipm.2022.10047651>
- Putra, G. S. A., and Dwirandra, A. A. N. B. (2019). The Effect of Auditor Experience, Type of Personality and Fraud Auditing Training on Auditors Ability in Fraud Detecting with Professional Skepticism as a Mediation Variable. *International Research Journal of Management, IT and Social Sciences*, 6(2), 31–43.
- Rahim, S., Ahmad, H., Widya, A., Wahyuni, N., and Junaidi, J. (2023). Auditors' Experience in Financial Statement Fraud Detection: The Role of Professional Scepticism and Idealism. *Management and Accounting Review*, 22(3), 201–222. <https://doi.org/10.24191/mar.v22i03-08>
- Rahmawati and Usman, H. (2014). Pengaruh Beban Kerja Dan Pengalaman Auditor dalam Mendeteksi Kecurangan. *Jurnal Akuntansi Dan Investasi*, 15(1), 68–76.
- Rashid, M., Khan, N. U., Riaz, U., and Burton, B. (2023). Auditors' perspectives on financial fraud in Pakistan – audacity and the need for legitimacy. *Journal of Accounting in Emerging Economies*, 13(1), 167–194. <https://doi.org/10.1108/JAEE-04-2021-0135>
- Rezaee, Z. (2002). *Financial Statement Fraud: Prevention and Detection*. https://books.google.co.id/books?id=864wkkSHaqQC&dq=Rezaee,+Z.,+and+Richard+Riley.+2009.+Financial+Statement+Fraud:+Prevention+and+Detection&lr=&hl=id&source=gbs_navlinks_s
- Rustiarini, N. W., Yuesti, A., and Gama, A. W. S. (2020). Public accounting profession and fraud detection responsibility. *Journal of Financial Crime*, 28(2), 613–627. <https://doi.org/10.1108/JFC-07-2020-0140>
- Said, L. L., and Munandar, A. (2018). the Influence of Auditor'S Professional Skepticism and Competence on Fraud Detection: the Role of Time Budget Pressure. *Jurnal Akuntansi Dan Keuangan Indonesia*, 15(1), 104–120. <https://doi.org/10.21002/jaki.2018.06>
- Sarikhani, M., and Ebrahimi, F. (2022). Whistleblowing by accountants: an integration of the fraud pentagon and the extended theory of planned behavior. *Meditari Accountancy Research*, 30(6), 1740–1763. <https://doi.org/10.1108/MEDAR-10-2020-1047>
- Satopää, V., Albrecht, J., Irwin, D., and Raghavan, B. (2011). Finding a “kneedle” in a haystack: Detecting knee points in system behavior. *Proceedings - International Conference on Distributed Computing Systems*, 166–171. <https://doi.org/10.1109/ICDCSW.2011.20>
- Siriwardane, H. P. (2020). Skills, Knowledge and Attitudes Important for Present Day Auditors. *ResearchOnline@JCU*.
- Sulistiyowati, L., and Supriyati, S. (2016). The effect of experience, competence, independence, and professionalism of auditors on fraud detection. *The Indonesian Accounting Review*, 5(1), 95–110. <https://doi.org/10.14414/tiar.v5i1.494>
- Suryandari, N. N. A., and Yuesti, A. (2017). Professional Scepticism and Auditors Ability To Detect Fraud Based on Workload and Characteristics of Auditors. *Scientific Research Journal (SCIRJ)*, V(Ix), 109. www.scirj.org
- Ta, T. T., Doan, T. N., Pham, D. C., and Tran, H. N. (2022). Factors affecting the professional skepticism of independent auditors in Viet Nam. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2059043>
- Tiron-Tudor, A., and Deliu, D. (2022). Reflections on the human-algorithm complex duality perspectives in the auditing process. In *Qualitative Research in Accounting and Management (Vol. 19, Issue 3)*. <https://doi.org/10.1108/QRAM-04-2021-0059>
- Tsai, K. C., Chou, T. H., Kittikowit, S., Hongsuchon, T., Lin, Y. C., and Chen, S. C. (2022). Extending Theory of Planned Behavior to Understand Service-Oriented Organizational Citizen Behavior. *Frontiers in Psychology*, 13(April). <https://doi.org/10.3389/fpsyg.2022.839688>
- Tuan Mansor, T. M., Ariff, A. M., Hashim, H. A., and Ngah, A. H. (2022). Whistleblowing intentions among external auditors: an application of the moderated multicongent model of the theory of planned behaviour. *Meditari Accountancy Research*, 30(5), 1309–1333. <https://doi.org/10.1108/MEDAR-07-2020-0948>
- Van Poppel, H., Da Pozzo, L., Albrecht, W., Matveev, V., Bono, A., Borkowski, A., Colombel, M., Klotz, L., Skinner, E., Keane, T., Marreaud, S., Collette, S., and Sylvester, R. (2011). A prospective, randomised EORTC intergroup phase 3 study comparing the oncologic outcome of elective nephron-sparing surgery and radical nephrectomy for low-stage renal cell carcinoma. *European Urology*, 59(4), 543–552. <https://doi.org/10.1016/j.eururo.2010.12.013>
- Vanasco, R. R. (1998). Fraud auditing. *Managerial Auditing Journal*, 13(1), 4–71. <https://doi.org/10.1108/02686909810198724>
- Wahidahwati, W., and Asyik, N. F. (2022). Cogent Business & Management Determinants of Auditors Ability in Fraud Detection Determinants of Auditors Ability in Fraud Detection. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2130165>
- Westermann, K. D., Bedard, J. C., and Earley, C. E. (2015). Learning the “Craft” of Auditing: A Dynamic View of Auditors' On-the-Job Learning. *Contemporary Accounting Research*, 32(3), 864–896. <https://doi.org/10.1111/1911-3846.12107>
- Wicaksono, A., and Suryandari, D. (2021). Accounting Analysis Journal The Analysis of Fraudulent Financial Reports Through Fraud Hexagon on Public Mining Companies. *Accounting Analysis Journal*, 10(3), 220–228. <https://doi.org/10.15294/aa.v10i3.54999>
- Yaqoub, M., Hamad, S., Alhamadi, H., Elklish, W. W., Abdalla, Y. A., and Hussain, A. (2023). Understanding Accounting Fraud Motivation, Protection Procedures, and Firms' Performance: External Auditors' Perspective. *Corporate Governance and Organizational Behavior Review*, 7(3), 19–26. <https://doi.org/10.22495/cgobrv7i3p2>

- Ye, B., Jiang, J., Liu, J., Zheng, Y., and Zhou, N. (2021). Research on quantitative assessment of climate change risk at an urban scale: Review of recent progress and outlook of future direction. *Renewable and Sustainable Energy Reviews*, 135, 110415. <https://doi.org/10.1016/j.rser.2020.110415>
- Yulianti, Y., Zarkasyi, M. W., Suharman, H., and Soemantri, R. (2024). Effects of professional commitment, commitment to ethics, internal locus of control and emotional intelligence on the ability to detect fraud through reduced audit quality behaviors. *Journal of Islamic Accounting and Business Research*, 15(3), 385–401. <https://doi.org/10.1108/JIABR-02-2021-0076>
- Zengin, Y. (2020). *Int J Auditing - 2021 - Zengin-Karaibrahimoglu - Audit committee strength and auditors risk assessments The moderating.pdf*. *International Journal of Auditing*.