Determinants of the effectiveness of audit procedures in revealing fraud: An attribution theory approach

by Johan Arifin

Submission date: 10-Apr-2023 12:31PM (UTC+0700)

Submission ID: 2060297808

File name: IJRBS-Determinants_of_the_Effectiveness.pdf (341.65K)

Word count: 7871

Character count: 46456



Research in Business & Social Science

IJRBS VOL 11 NO 6 (2022) ISSN: 2147-4478

Available online at www.ssbfnet.com Journal homepage: https://www.ssbfnet.com/ojs/index.php/ijrbs

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(a) Ph.D., CFrA, CertIPSAS, Head of Accounting Department, Faculty of Business and Economics, Universitas Islam Indonesia

ARTICLE INFO

Article history:

Received 15 July 2022 Received in rev. form 20 August 2022 Accepted 26 August 2022

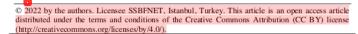
Keywords:

Independence, objectivity, professional skepticism, ability and experience, investigative auditor.

JEL Classification: M 41; M 42

ABSTRACT

Using Attribution Theory, this study aims to examine several predictor variables such as independence, objectivity, professional skepticism, and the ability and experience of investigative auditors that potentially affect the effectiveness of audit procedures in revealing fraud. This research involved a total of 120 auditors consisting of auditors of the Supreme Audit Agency of the Republic of Indonesia (BPK) and auditors of the Indonesian Financial and Development Supervisory Agency (BPKP) representatives of the Special Region of Yogyakarta Indonesia as the research sample. The regression analysis revealed that the professional skepticism, the ability, and the experience of the investigative auditors had a significantly positive effect on the effectiveness of audit procedures in revealing fraud. The results serve as a material consideration for government auditing agencies, such as the BPK and BPKP to increase their effectiveness in implementing audit procedures using various means, such as through sustainable training and education programs as well as by increasing professional skepticism in conducting audits.



Introduction

Corruption is a form of fraud that occurs within the public and private sectors. The Corruption Perceptions Index published by Transparency International released a staggering practice of corruption in Indonesia. Indonesia's Corruption Perceptions Index in 2019 scored 40 out of 100 and ranked 85 out of 180 countries (Antaranews, 2020), thus indicating a 2-point increase from that in 2018. The stunning rank of corruption revealed by the Transparency International agency indicates ineffective efforts to eradicate corruption in Indonesia, despite improvements from previous years.

As one of the attempts to tackle and uncover the practices of fraud in government agencies, the Indonesian government, has, therefore, carried out investigative audits and applied forensic accounting knowledge in fraud detection. Rufus et al. (2015) denoted that the objective of a fraud investigation is to collect evidence of suspected fraud. Forensic accounting is a professional accounting discipline that practices in the fields of fraud examination, corruption and bribery investigation, business valuation, expert witnesses, cybercrime, and litigation support (Crumbley et al., 2015). The attempt to detect fraud in public sector institutions in Indonesia is generally carried out by internal auditors and government external auditors. According to Lidyah (2016), Indonesia has numerous institutions to undertake investigative audit activities, such as the Financial and Development Supervisory Agency (BPKP), the Supreme Audit Agency (BPK), and the Government Internal Supervisory Apparatus (APIP). As a state institution, the Financial Audit Board (BPK) oversees examining the management and accountability of state finances. BPK serves as an external auditor that supervises the government from the outside, while the Financial and Development Supervisory Agency (BPKP) is an institution assigned to check transparency in budget realization reporting and management practices of government organizations. BPKP is also responsible for supervising the realization of the central and regional government budgets and serving as an internal auditor that manages government organizations from within the organization.



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A good audit procedure is indicated using common audit techniques from beginning to end. According to Farooq & Shehata (2018), audit procedures are carried out to obtain sufficient evidence to support the auditor's opinion on the fairness of the financial statements. For this reason, audit techniques, such as confirmation, observation, inspection, question, and answer (inquiry), and others, are needed to obtain audit evidence. To ensure an effective audit process, an investigative auditor must have sufficient attitudes, abilities, and experience in this field. According to Mardijuwono & Subianto (2018), a good auditor is characterized by three attitudes and mindsets: independence, objectiveness, and skepticism. These three attitudes cannot be separated from the work of forensic accountants. However, an independent, objective, and skeptical attitude are far from sufficient in detecting fraud, since an auditor requires good ability and experience in conducting investigations (Chiang, 2016). Furthermore, Tiwari & Debnath (2017) stated that an investigative auditor must have the capability of applying accounting principles, accounting standards, and practical experience in this field derived from sustainable training and professional education.

From several studies that have been conducted, it is hoped that studies on factors that affect the effectiveness of audit procedures in disclosing fraud should not only be from the external auditor's side. A study of various internal factors consisting of certain characteristics and traits that an auditor must possess to obtain the effectiveness of audit procedures in uncovering fraud is very necessary, considering that this is still rarely done in Indonesia (Ramadhan & Arifin, 2019). This is the trigger for this study to be conducted. In addition, this study was conducted because of the demands of the public on improving the quality of government audits in the context of disclosing fraud. Therefore, by knowing the various determinants that potentially affect the effectiveness of audit procedures in disclosing fraud, especially in terms of auditors, it is hoped that the quality of government audit in Indonesia can be improved.

This study used a quantitative approach with the regression analysis method to determine whether potential factors including auditor independence, auditor objectivity, auditor professional skepticism, auditor ability, and auditor experience affect the effectiveness of audit procedures in disclosing fraud, particularly in the Indonesian government audit institution, namely the BPK and BPKP.

This study contributes to the existing literature in several ways. First, it provides insight into various potential factors that affect the effectiveness of audit procedures in disclosing fraud in government audit institutions. Second, it applies the attribution theory since it is rarely applied in forensic accounting studies and revealing fraud. Third, it enhances knowledge on the effectiveness of audit procedures in revealing fraud, which serves as an important area in forensic accounting that remains untouched by the previous academic research, especially in the Indonesian context.

Literature Review

Empirical Review and Hypothesis Development

Many researchers have conducted numerous studies on the issue of audit effectiveness and revealing fraud. From these studies, there have been various basic theories the researchers used to examine potential factors that affect audit effectiveness and disclosure of fraud, including the Fraud Triangle theory (Said et al., 2018); (Abdullahi & Mansor, 2018); and (Hashim et al., 2020), Diamond Fraud theory (Apriliana & Agustina, 2017); (Utami et al., 2019) and (Ozcelik, 2020), Agency theory (Anindya & Adhariani, 2019) and (Mastilak et al., 2018), Legitimacy theory (Gottschalk, 2017); and (Harjoto, 2017), and Attribution theory (Pardo & Alfonso, 2017); (Mumba & Wekesa, 2020); and (Kotb et al., 2020). In this research, attribution theory was used as the basis for determining various potential predictor variables that can affect the effectiveness of audit procedures in disclosing fraud. Attribution theory was selected on the ground that it simultaneously applied two dimensions, the internal dimension (the factors from within the personal attributes of the auditor) and the external dimension (the factors outside the auditor). In addition, the application of attribution theory for revealing fraud in Indonesia has been rarely studied.

Developed by Heider (1958) Attribution Theory describes a person's behavior based on a combination of internal forces, the factors that come from within a person, such as traits, characters, attitudes, abilities, and others, and external forces, namely factors outside a person, such as pressure situations, challenges at work, or certain circumstances that will influence on individual behavior. The theory of attribution explains the factors to contribute to certain behavior conducted by others or by oneself due to internal or external factors that will influence individual behavior.

Meanwhile, Safeer et al. (2021) state that internal forces (personal attributes) and external forces (environmental attributes) jointly determine human behavior. Internal and external attributions have been stated to affect individual performance evaluations, for example in determining how superiors treat their subordinates, as well as influencing individual attitudes and satisfaction with work results. People will behave differently if they feel more about their internal attributes than their external attributes (Chiou et al., 2018). In this study, attribution theory is used because the researcher will conduct an empirical study to determine the factors that influence the effectiveness of audit procedures in disclosing fraud. The personal characteristic of an auditor is one of the determinants of the effectiveness of audit procedures in disclosing fraud.

This study applied attribution theory as a basis for developing a model that explains the factors to affect the effectiveness of audit procedures in disclosing fraud. These factors are derived from the internal and external aspects of a person, including auditor independence, auditor objectivity, auditor professional skepticism, auditor ability, and auditor experience.

The Effectiveness of Audit Procedures in Revealing Fraud

Several steps required to achieve a certain goal are planning, problem formulation, determining implementation steps, and setting the goals. These steps are necessary to ensure an effective way of achieving the goals. Effectiveness is defined as the ability to achieve goals precisely using the right tools to achieve predetermined goals. In this context, the effectiveness of the audit procedures in disclosing fraud is determined based on the extent to which the results of the examination or the audit can describe activities that produce good procedures in investigative audits to reveal fraud (Tang & Karim, 2019). Further, Rezaee & Wang (2019) stated that skills and knowledge about the process of investigating the detected fraud and the ability to apply relevant techniques to uncover fraud are essential for conducting an effective and efficient forensic audit.

The audit procedure begins with the review of initial information, planning the investigative auditing, conducting investigative auditing, reporting, and follow-ups (Kayo, 2013). Before audit processes, the auditor will require preliminary information. In a forensic audit, initial information is generated from the findings of financial audits or general audits, operational audits, performance audits, and public reports on suspected fraud, which are submitted to the authorized agency. Furthermore, according to Tuanakotta (2012) auditors are required to respond to audit findings, allegations, and complaints by taking a close examination through an investigative audit. Investigative audits serve as an important part and the starting point of forensic accounting (Jenkins et al., 2018). An investigative audit commonly is a follow-up activity based on certain findings or information from public sources. An investigative audit that reveals some irregularities considered detrimental to the country's finances or the country's economy will require the auditor to identify the case for further handling.

Hypothesis Formulation

Auditor Independence

Ackers (2016) presented two mandatory elements that ensure auditor independence, namely: (a) Independence of mind, which reflects the state of mind of auditors to permit the performance of an audit without being affected by bias influences and is always based on facts; and (b) independence in appearance. The State Financial Audit Standards of the Republic of Indonesia (SPKN) defines independence as an attitude and action in carrying out audits to be impartial to anyone and not to be influenced by anyone.

Attribution theory denotes how a person contributes to other people's behavior or his behavior due to attitudes, environmental conditions, and others. One of the attitudes referred to in the attribution theory is an independent attitude, or independence in thinking and independence in appearance, by not taking sides with anyone, and without being influenced by anyone to ensure trustworthy and reliable audit results.

Khadafi (2013) revealed that audit quality can be achieved through auditor independence in the audit process. This fact is in line with the research of Cahyono et al. (2015) and the review conducted by Patrick et al. (2017) who concluded a strong relationship between auditor independence and audit quality. Furthermore, the research of Wiguna & Hapsari (2015) and Sanjaya (2017) also revealed that independence had a positive effect on fraud detection. In this line, the following hypothesis is proposed:

H₁: Investigative auditor independence has a positive effect on the effectiveness of the audit procedures in revealing fraud.

Auditor Objectivity

Investigative auditors must be objective in carrying out their profession. Objectivity is achieved by the following behavioral elements (1) being reliable and trustworthy; not playing a dual role as part of a tender committee, or other committees and/or other works related to operational tasks of the object being examined; (2) avoiding working based on the intention of finding fault with others; (3) being able to maintain official requirements and policies and (4) always behaving and making decisions based on logical thinking (Pusdiklatwas BPKP, 2015). In accepting an engagement in an employment relationship, the auditor must be sure that the services requested do not exceed the boundaries of professional practice, which might damage his integrity and objectivity as an auditor (Messier et al., 2014).

In this fashion, attribution theory explains that a person's behavior is determined by a combination of internal and external forces. These external forces may include the pressure situations and circumstances that will have an impact on individual behavior. Such pressures will have an influence on a person's objectivity, but investigative auditors should never place themselves in a situation or be placed in a position where their objectivity can be questioned. Objectivity is achieved by the attitude of constantly using a logical reason and acting fairly without being influenced by pressure from any particular groups vesting the interest in the results of the audit (Mansor et al., 2020). Within this framework, the research of Cahyono et al., (2015) and Astuti et al. (2016) concluded that the objectivity of auditors is indispensable in the implementation of investigative audits to improve the quality of audits, especially in the detection and disclosure of fraud. The following hypothesis is proposed on that account:

H2: The investigative auditor objectivity has a positive effect on the effectiveness of audit procedures in revealing fraud.

Auditor Professional Skepticism

According to Harding & Trotman (2017), auditor professional skepticism refers to an attitude of persistently questioning and critically evaluating audit evidence. Meanwhile, the 2007 State Financial Audit Standards (SPKN), which was subsequently stipulated as BPK

Regulation No.1 of 2017, defines professional skepticism as to the ability of the auditor to avoid considering the concerned party as dishonest, while at the same time maintaining the need to question the honesty of the concerned party. Auditing standards explain professional skepticism as an attitude that includes questioning the mind, being alert to conditions that can indicate possible misstatements due to fraud or errors, and critical assessment of audit evidence (Arens & Elder, 2015).

From the perspective of attribution theory, the factors that come from within a person, such as the constant endeavor to never give up, will incessantly drive people's enthusiasm about doing their job perfectly to improve the quality of their work. Such effort includes an attitude of professional skepticism that does not easily believe something, and always maintains critical questions and evaluation on audit evidence. Thus, an investigative auditor needs to have professional skepticism to obtain a quality audit in his work, especially in relation to revealing fraud.

Research conducted by Glover & Prawitt (2014) revealed the importance of the application of professional skepticism by auditors to improve audit quality. Likewise, research by Wiguna & Hapsari (2015), Prasetyo et al. (2015), and Butar & Perdana (2017) concluded that professional skepticism had a significant effect on fraud detection.

H3: Professional skepticism of investigative auditors has a positive effect on the effectiveness of audit procedures in revealing fraud.

Auditor Ability

According to Tuanakotta (2012), a successful investigative auditor can collect facts from various witnesses in a fair, impartial, valid (based on laws), and accurate, and report complete facts. Investigative auditors require a variety of expertise including (a) accounting practice; (b) auditing skills and (c) investigative skills (Biswas et al., 2013). Along with specialized knowledge of the technique of fraud detection, one needs patience and an analytical mindset. An investigative auditor must look beyond the numbers and understand the substantial issue of the situation. Thus, Siriwardane et al. (2014) required an auditor who will carry out an investigative to have basic knowledge, technical skills, and a positive mental attitude.

The theory of attribution considers ability as one of the potential factors within a person that can affect his behavior. Tiwari & Debnath (2017) stated that the success of forensic auditing is strongly determined by the adequate ability of auditors including the ability to prevent and detect fraud in the organization, carry out forensic audits, and calculate losses due to fraud, trace assets related to fraud, and provide statements of expertise.

Furthermore, research by Kassem (2018) and Hazami-Ammar (2019) revealed that the ability of an investigative auditor affects the effectiveness of investigative audit procedures in proving fraud. From these explanations, the following hypothesis is formulated:

H4: The investigative auditor's ability has a positive effect on the effectiveness of audit procedures in revealing fraud.

Auditor Experience

Kayo (2013) denoted that investigative auditor experience can be obtained through sufficient work experience, both in general audits, operational audits, performance audits, or audits with specific objectives or investigative audits, especially in auditing government organizational units.

The attribution theory implies that a person's experience will provide the support for knowledge application. This theory indicates that an experienced auditor is sufficiently knowledgeable that will help him complete the assignments with the best outcome. The experience of an investigative auditor will provide him with a better ability to conduct a careful, thorough, and broad-minded investigation, especially related to revealing fraud activities.

Yuniarti & Tiara (2015) and Khan et al. (2020) proved that the better the experience of an investigative auditor, the more effective his audit process, especially about disclosure and evidence of fraud. Based on provided information and research, the following hypothesis is proposed:

H₅: The investigative auditor experience has a positive effect on the effectiveness of audit procedures in revealing fraud.

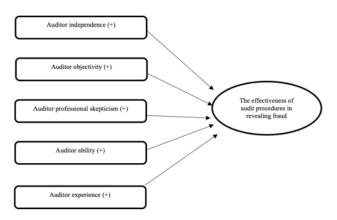


Figure 1: Frame of research; Source: Author

Research and Methodology

Research Design, Types, and Data Collection Methods

Based on a quantitative approach, this research analyzed the primary data obtained from the application of a structured list of questions/statements (questionnaire) distributed to some investigative auditors. The question items on this questionnaire were measured using a Likert scale measurement indicator with a scale of 1 to 5, from strongly disagree to strongly agree.

Population, Sample, and Sampling Technique

The population of this study was all auditors who worked at the BPK and BPKP representatives of Yogyakarta Indonesia, totaling 124 people. This number consisted of 34 BPK auditors and 90 BPKP auditors. The research samples were selected based on the rule of thumb of the sampling technique proposed by Roscoe (1975) who denoted that appropriate research shall use multivariate analysis as multiple regression analysis, using a sample of at least 10 times the number of variables studied. This study employed six variables, five independent variables, and one dependent variable. Based on this rule, this study's minimum required sample size is 6x10 = 60 (sixty) respondents. As explanatory/confirmatory research, this study intends to explain the causal relationship/ influence between the variables by testing the previously formulated hypotheses. The respondents were selected based on non-probability sampling, with the convenience sampling method, which was applied to the subjects available to researchers when data collection was carried out (Bell et al., 2018). Observations were made during April, May, and June 2021.

Results And Discussion

The validity and reliability of the research questionnaire were tested before the regression testing. The validity test was carried out using the SPSS application program version 24. This test indicated that the Pearson moment correlation coefficient for each item or question/statement item with a total variable score of the effectiveness of the implementation of audit procedures in disclosing fraud (Y), investigative auditor independence (X_1) , investigative auditor objectivity (X_2) , investigative auditor professional skepticism (X_3) , investigative auditor ability (X_4) and investigative auditor experience (X_5) are significant with a significance level of 0.01. Thus, it can be concluded that each item indicator of the 57 instruments for the effectiveness of the audit procedures in revealing fraud is valid.

Using the one-shot test in testing the reliability, this study conducted the measurement only once and the results were compared with other questions/statements, or the correlation between the answers to the questions was measured. The reliability test showed that the Cronbach Alpha (α) value in each variable is greater than 0.70, which means that the instrument items for each variable are reliable (Taber, 2018).

Determination Coefficient Test

Table 1: Determination Coefficient Test (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,841ª	0,707	0,681	2,24624

Source: Processed primary data, 2021

The output model summary in Table 1 presents the number of adjusted R^2 (the adjusted determination coefficient) of 0.681. This result implies that 68% of the variation in the variable of the effectiveness of audit procedures in revealing fraud can be explained by the five independent variables, namely independence, objectivity, professional skepticism, and the ability and experience of investigative auditors, while the rest is explained by other variables outside the model.

Results of t Statistical Test (Partial Test)

The data quality test had been carried out before the multiple linear regression test, and resulted in the followings:

Table 2: Results of Multiple Linier Regression Test

Variables	Predicted Sign	Coefficient	P-Value	Description
(Constant)	+	13.366	0.004	
Investigative Auditor Independence	+	-0.397	0.003	Not Supported (UD)*
Investigative Auditor Objectivity	+	-0.285	0.107	Not Supported
Investigative Auditor Professional Skeptism	+	0.543	0.025	Supported
Investigative Auditor Ability	+	0.520	0.006	Supported
Investigative Auditor Experience	+	0.435	0.002	Supported

Legend: (UD)* = Unexpected Directionality

Source: Processed primary data, 2021

The Effect of Investigative Auditor Independence on the Effectiveness of Audit Procedures in Revealing Fraud

Table 2 multiple linear regression results show that the regression coefficient value of the investigative auditor independence variable is -0.397 and the p-value is 0.003. This result reveals that the investigative auditor independence variable has a negative effect on the effectiveness of audit procedures in disclosing fraud at the 5% significance level. In other words, H1 is not supported (the regression coefficient value is opposite to the hypothesis). The level of auditor independence that is too high will have a low impact on the effectiveness of audit procedures in disclosing fraud. These results indicate an anomaly in the field of auditing because auditor independence is a major requirement in the field of auditing, especially in investigative auditing. Independence means a mental attitude that is free from influence, without any control from other parties, and without dependency on others (Mardijuwono & Subianto, 2018). Independence also means honesty of the auditor in considering facts and the objectivity and impartial considerations of the auditor in formulating and expressing his opinion (Jurkiewicz, 2019).

This result may be attributed to various factors in the auditor. Johari et al. (2017) revealed several aspects related to personal disturbances that can interfere with auditor independence, including having blood ties, be it up lineal or down lineal lines up to the second degree with the management of the entity or program or as an employee of the entity being audited, or in a position that could have direct and significant influence over the entity or program being audited.

In addition, it is essential that the auditor raises the public perception to believe that he is truly independent. However, auditors often find it difficult to maintain an independent mental attitude given some circumstances that often interfere with the independent mental attitude, including: (1) maintaining an independent mental attitude discourages clients from using their services; (2) as a person who performs an independent audit, the auditor is paid by his client for his services; (3) as a service provider, auditors often tend to satisfy their clients' desires (Nasution & Östermark, 2019). These matters can interfere with the auditor's independence in performing their duties

Apart from these things, it is highly possible that the auditors of the BPK Representative Office of Central Java Province perform an audit of the same object in each examination period, which will lead to intimacy between the auditor and the object of the audit. The emerging sense of familiarity can disturb the auditor's independence, and thus decreases the audit quality. Another possible cause is the auditor's subjugated feeling for parties with higher authority who will refuse material consideration of the audit report. As a result, the auditors often skip some audit procedures, especially when they are given a short time to carry out the audit process. The results of this study are in line with research conducted by Karamoy & Wokas (2015) and Prasetyo et al. (2015) who concluded that independence did not affect the quality of the investigative audit. This study, however, contradicts the research of Khadafi (2013) who concluded that audit quality can be achieved if the auditors have independence in conducting audits, as well as research by Lamba et al. (2020) and the results of a review conducted by Patrick et al. (2017) that there is a strong relationship between auditor independence and audit quality. Given these different results, it is highly suggested that there will be further research on the same topic using moderating variables and intervening potential variables, to allow a more detailed exploration on the reason why the independent variable in this study does not serve as a predictor variable on the effectiveness of the audit procedures in revealing fraud.

The Effect of the Objectivity of the Investigative Auditor on the Effectiveness of Audit Procedures in Revealing Fraud

The testing result of the second hypothesis (H₂), which states that investigative auditor objectivity has a positive effect on the effectiveness of audit procedures in revealing fraud is also presented in Table 2. The regression coefficient value of the investigative auditor objectivity variable is -0.285 and the p-value is 0.107. Thus, the investigative auditor objectivity variable does not affect the

effectiveness of audit procedures in disclosing fraud at the 5% significance level, or in other words, H2 is not supported. This result is probably because the auditor needs more determination in rejecting the assignment when they have a lineal kinship with the party being audited, which complicates their effort to maintain objectivity in detecting fraud through the audit procedure. In addition to this, another possibility is that auditors are still influenced by the client's interests or pressures in performing their roles and duties, which impede them from achieving the targeted audit quality. This is added by the fact that auditors are paid by clients for their services as service providers. Hence, the auditors are inclined to satisfy the client's wishes and override the principles of objectivity, as an auditor obligation to be fair, impartial, intellectually honest, not prejudiced, and free from conflicts of interest or being under the influence of other parties.

This research is in line with several other studies conducted in Indonesia by Susilo & Widyastuti (2015) and Nainggolan & Abdullah (2016) which concluded that objectivity does not affect audit quality. However, the results of this study contradict the research conducted by Cahyono et al. (2015) and Astuti et al. (2016) which revealed that auditor objectivity had a positive effect on the audit quality. This different result requires further research using appropriate moderating or intervening variables to find new, more detailed knowledge on the reason why objectivity in this study cannot be a predictor of the effectiveness of audit procedures in revealing fraud.

The Effect of Professional Skepticism of Investigative Auditor on the Effectiveness of Audit Procedures in Revealing Fraud

The testing on the third hypothesis (H₃), which states that the professional skepticism of forensic auditors has a positive effect on the effectiveness of audit procedures in disclosing fraud is confirmed in Table 2. The test resulted in the regression coefficient value of the investigative auditor professional skepticism variable of 0.543 and the p-value of 0.025. It can be interpreted that the professional skepticism of investigative auditor variable has a positive and significant effect on the effectiveness of audit procedures in disclosing fraud at the 5% significance level, or in other words, H₃ is supported. This research is in line with the attribution theory developed by Heider (1958) which stated that a person's behavior is determined by internal factors, from within a person, such as efforts that must be carried out continuously. Such effort includes an attitude of professional skepticism by not easily believing the facts in questioning and critically evaluating audit evidence. This result is in line with the research conducted by Glover & Prawitt (2014) which revealed that the application of professional skepticism by auditors is important for audit quality in the hope of helping auditors achieve an optimal balance between effectiveness and efficiency in auditing, as well as research conducted by Wiguna & Hapsari (2015), Prasetyo et al. (2015) and Butar and Perdana (2017) who highlighted that professional skepticism had a significant effect on fraud detection.

The Effect of the Ability of the Investigative Auditor on the Effectiveness of Audit Procedures in Revealing Fraud

The testing on the fourth hypothesis (H₄), which states that the ability of investigative auditors has a positive effect on the effectiveness of audit procedures in disclosing fraud is confirmed in Table 2. The test revealed the regression coefficient value of the investigative auditor ability variable of 0.520 and the p-value of 0.006. This result implies that the variable of investigative auditor ability has a positive and significant effect on the effectiveness of the audit procedures in disclosing fraud at the 5% significance level, or in other words, H₄ is supported. The testing results of this hypothesis are in line with the results revealed by Tuanakotta (2012) that successful investigative auditors can collect facts from various witnesses fairly, impartially, validly (by adhering to legislation), and accurately and they can report these facts accurately and completely. This result also confirms the attribution theory as developed by Heider (1958), who indicated that to produce an effective audit, it is necessary to have the ability to apply the knowledge that is owned in carrying out audit procedures carefully, prudently, intuitively, and objectively. The results of this research support the research of Mulyati et al. (2015) and Harahap and Maria (2020) who concluded that the ability of investigative auditors supports the effective implementation of audit procedures in proving fraud.

The Effect of the Investigative Auditor Experience on the Effectiveness of Audit Procedures in Revealing Fraud

The testing on the fifth hypothesis (H_5) which states that the experience of investigative auditors has a positive effect on the effectiveness of audit procedures in revealing fraud is also presented in Table 2. The table presents the regression coefficient value of the investigative auditor experience variable of 0.435 and the p-value of 0.002. This result implies that the variable of investigative auditor experience has a positive and significant effect on the effectiveness of audit procedures in disclosing fraud at the 5% significance level, or in other words, H_5 is supported. The results of this hypothesis testing are in line with the attribution theory developed by Heider (1958), which stated that the experience of an investigative auditor supports the auditor to apply his knowledge in carrying out audit procedures carefully, prudently, intuitively, and objectively as a way to reveal fraud. This finding is also in line with the research finding conducted by Yuniarti & Tiara (2015) and Lameng & Dwirandra (2018) which revealed that the experience of auditors has a positive effect on the effectiveness of audit procedures in proving fraud.

Conclusion

This paper focuses on the empirical analysis of the correctness of attribution theory in predicting the effectiveness of audit procedures in revealing fraud in the Indonesian government audit institutions, namely the BPK and BPKP. There are five predictor variables derived based on attribution theory including independence, objectivity, professional skepticism, ability, and auditor experience.

From the analysis, the research concludes that the professional skepticism of the investigative auditors, the ability of the investigative auditors, and the experience of the investigative auditors have a significantly positive effect on the effectiveness of the audit procedures in revealing fraud. Thus, the higher the level of professional skepticism of investigative auditors, the higher the level of investigative auditor ability. In addition, the better the investigative auditor experience, the more effective the implementation of investigative audit procedures in the context of disclosing fraud.

Based on these results, it is expected that the Indonesian government audit institutions, especially the BPK and BPKP, make various efforts to improve the quality of their investigative auditors, especially the attributes related to professional skepticism, ability, and experience in carrying out an investigative audit. This attempt can be done by upgrading the auditor's ability through formal education in the form of professional certification, training, and further study. In addition, to enrich the experience of auditors, the government needs to intensify the provision of investigative audit assignments for these auditors with various cases and objects of different government agencies.

Meanwhile, the university as an institution to train professional auditors is expected to develop the curriculum related to auditing and forensic accounting courses to train the students with the materials on auditor's professional skepticism and effective techniques in conducting investigative audits.

Acknowledgement

Author Contributions: Conceptualization, Methodology, Data Collection, Formal Analysis, Writing-Original Draft Preparation, Writing-Review and Editing, by author and author has read and agreed to the published the final version of the manuscript.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not all with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available upon request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The author declares no conflict of interest.

References

- Abdullahi, R., & Mansor, N. (2018). Fraud prevention initiatives in the Nigerian public sector. *Journal of Financial Crime*, 25(2), 527–544. https://doi.org/10.1108/JFC-02-2015-0008.
- Ackers, B. (2016). An exploration of internal audit's corporate social responsibility role insights from South Africa. Social Responsibility Journal, 12(4), 719–739. https://doi.org/10.1108/SRJ-01-2016-0003.
- Anindya, J. R., & Adhariani, D. (2019). Fraud risk factors and tendency to commit fraud: analysis of employees' perceptions. International Journal of Ethics and Systems, 35(4), 545–557. https://doi.org/10.1108/IJOES-03-2019-0057.
- Antaranews. (2020). Indeks Persepsi Korupsi Indonesia 2019 Naik Menjadi 40. https://www.antaranews.com/berita/1261943/indeks-persepsi-korupsi-indonesia-2019-naik-menjadi-40. (Diakses 18 Agustus 2020).
- Apriliana, S., & Agustina, L. (2017). The Analysis of Fraudulent Financial Reporting Determinant through Fraud Pentagon Approach. Jurnal Dinamika Akuntansi, 9(2), 154–165. https://dx.doi.org/10.15294/jda.v9i2.4036.
- Arens, A. A., & Elder, R. J. (2015). Auditing dan Jasa Assurance: Pendekatan Terintegrasi (15th ed.). Jakarta: Erlangga.
- Astuti, A., Darwanis, D., & Saputra, M. (2016). Pengaruh Kompetensi, Objektivitas, Due Professional Care, dan Skeptisisme Auditor terhadap Kualitas Hasil Pemeriksaan. *Jurnal Administrasi Akuntansi: Program Pascasarjana Unsyiah*, 5(2), 1–11.
- Association of Certified Fraud Examiners (ACFE). (2012). Report to the Nation On The Occupational Fraud And Abuse. Texas:

 ACFE.
- Bell, E., Bryman, A., & Harley, B. (2018). Business Research Methods (5th ed.). UK: Oxford University Press.
- Biswas, M., Hiremath, K. G., & Ramaswamy, S. (2013). Forensic Accounting in India Perspective. The 5th International Conference on Financial Criminology (ICFC) 2013, 98–106.
- Butar, S. G. A. B., & Perdana, H. D. (2017). Penerapan Skeptisisme Profesional Auditor Internal Pemerintah dalam Mendeteksi Kecurangan (Studi Kasus pada Auditor Perwakilan BPKP Provinsi Jawa Tengah). Jurnal Ekonomi Dan Bisnis, 20(1), 169–189. https://doi.org/10.24914/jeb.v20i1.1003.
- Cahyono, A. D., Wijaya, A. F., & Domai, T. (2015). Pengaruh Kompetensi, Independensi, Obyektivitas, Kompleksitas Tugas, dan Integritas Auditor terhadap Kualitas Hasil Audit. *Reformasi*, 5(1), 1–12. https://doi.org/10.33366/rfr.v5i1.59.
- Chiang, C. (2016). Conceptualizing the linkage between professional skepticism and auditor independence. Pacific Accounting Review, 28(2), 180–200. https://doi.org/10.1108/PAR-08-2015-0034.
- Chiou, J.-S., Hsiao, C.-C., & Chiu, T.-Y. (2018). The credibility and attribution of online reviews. Online Information Review, 42(5), 630–646. https://doi.org/10.1108/OIR-06-2017-0197.
- Crumbley, L., Heitger, L. E., & Smith, G. S. (2015). Forensic and Investigative Accounting (7th ed.). Chicago: CCH Inc.
- Farooq, O., & Shehata, N. F. (2018). Does external auditing combat corruption? Evidence from private firms. Managerial Auditing Journal, 33(3), 267–287. https://doi.org/10.1108/MAJ-08-2017-1634.
- Glover, S. M., & Prawitt, D. F. (2014). Enhancing Auditor Professional Skepticism: The Professional Skepticism Continuum. Current Issues in Auditing, 8(2), 1–10. https://doi.org/10.2308/ciia-50895.

- Gottschalk, P. (2017). Private police legitimacy: the case of internal investigations by fraud examiners. *Policing: An International Journal*, 40(3), 628–640. https://doi.org/10.1108/PIJPSM-04-2016-0053.
- Harahap, S., & Maria, F. D. (2020). Pengaruh Pengalaman dan Kemampuan Pemeriksa Investigatif terhadap Efektivitas Pelaksanaan Prosedur Audit Investigasi dengan Skeptisme sebagai Variabel Moderasi. Prosiding Seminar Nasional Pakar Ke 3 Tahun 2020, 1–6.
- Harding, N., & Trotman, K. T. (2017). The Effect of Partner Communications of Fraud Likelihood and Skeptical Orientation on Auditors' Professional Skepticism. AUDITING: A Journal of Practice & Theory, 36(2), 111–131. https://doi.org/10.2308/ajpt-51576.
- Harjoto, M. A. (2017). The Impact of Institutional and Technical Social Responsibilities on The Likelihood of Corporate Fraud. Business & Professional Ethics Journal, 36(2), 197–228. https://doi.org/10.5840/bpej20175257.
- Hashim, H. A., Salleh, Z., Shuhaimi, I., & Ismail, N. A. N. (2020). The risk of financial fraud: a management perspective. *Journal of Financial Crime*, 27(4), 1143–1159. https://doi.org/10.1108/JFC-04-2020-0062.
- Hazami-Ammar, S. (2019). Internal auditors' perceptions of the function's ability to investigate fraud. *Journal of Applied Accounting Research*, 20(2), 134–153.
- Heider, F. (1958). The psychology of interpersonal relations. Hoboken: John Wiley & Sons Inc. https://doi.org/10.1037/10628-000.
- Ikatan Akuntan Indonesia (IAI). (2001). Pernyataan Standar Auditing (PSA) No. 70: Pertimbangan Atas Kecurangan Dalam Audit Laporan Keuangan. Jakarta: IAI.
- Ikatan Akuntan Indonesia (IAI). (2004). Standar Profesional Akuntan Publik (SPAP). Jakarta: Salemba Empat.
- Jenkins, J. G., Negangard, E. M., & Oler, M. J. (2018). Getting Comfortable on Audits: Understanding Firms' Usage of Forensic Specialists. Contemporary Accounting Research, 35(4), 1766–1797. https://doi.org/10.1111/1911-3846.12359.
- Johari, R. J., Mohd-Sanusi, Z., & Chong, V. K. (2017). Effects of Auditors' Ethical Orientation and Self-Interest Independence Threat on the Mediating Role of Moral Intensity and Ethical Decision-Making Process. *International Journal of Auditing*, 21(1), 38–58. https://doi.org/10.1111/ijau.12080.
- Jurkiewicz, C. L. (2019). Global Corruption and Ethics Management: Translating Theory into Action. Maryland: Rowman & Littlefield Publishers.
- Karamoy, H., & Wokas, H. R. N. (2015). Pengaruh Independensi dan Profesionalisme, dalam Mendeteksi Fraud pada Auditor Internal Provinsi Sulawesi Utara. Jurnal Riset Akuntansi dan Auditing "Goodwill," 6(2), 22–31. https://doi.org/10.35800/jjs.v6i2.10492.
- Kassem, R. (2018). Exploring external auditors' perceptions of the motivations behind management fraud in Egypt a mixed-methods approach. Managerial Auditing Journal, 33(1), 16–34. https://doi.org/10.1108/MAJ-11-2016-1470.
- Kayo, A. S. (2013). Audit Forensik: Penggunaan dan Kompetensi Auditor dalam Pemberantasan Tindak Pidana Korupsi. Yogyakarta: Graha Ilmu.
- Khadafi, M. (2013). Pengaruh Independensi, Etika dan Standar Audit terhadap Kualitas Audit Inspektorat Aceh. Jurnal Telaah Dan Riset Akuntansi, 6(1), 54–63.
- Khan, N., Rafay, A., & Shakeel, A. (2020). Attributes of Internal Audit and Prevention, Detection and Assessment of Fraud in Pakistan. Lahore Journal of Business, 9(1), 33–58. https://doi.org/10.35536/ljb.2020.v9.i1.a2.
- Kotb, A., Elbardan, H., & Halabi, H. (2020). Mapping of internal audit research: a post-Enron structured literature review. Accounting, Auditing & Accountability Journal, 33(8), 1969–1996. https://doi.org/10.1108/AAAJ-07-2018-3581.
- Lamba, R. A., Seralurin, Y. C., Lamba, A., & Pattiasina, V. (2020). The Effect of Auditor Independence and Ethics on Auditor Professional Scepticism: Its Implications for Audit Quality in Indonesia. *International Journal of Innovation, Creativity, and Change*, 12(8), 383–396.
- Lameng, A. K. Y. A., & Dwirandra, A. A. N. B. (2018). Pengaruh Kemampuan, Pengalaman dan Independensi Auditor pada Efektivitas Pelaksanaan Prosedur Audit Investigatif. E-Jurnal Akuntansi, 22(1), 187–215. https://doi.org/10.24843/EJA.2018.v22.i01.p08.
- Lidyah, R. (2016). Korupsi dan Akuntansi Forensik. I-FINANCE: A Research Journal on Islamic Finance, 2(2), 72–91. https://doi.org/10.19109/ifinance.v2i2.1016.
- Mansor, T. M. T., Ariff, A. M., & Hashim, H. A. (2020). Whistleblowing by auditors: the role of professional commitment and independence commitment. Managerial Auditing Journal, 35(8), 1033–1055. https://doi.org/10.1108/MAJ-11-2019-2484.
- Mardijuwono, A. W., & Subianto, C. (2018). Independence, professionalism, professional skepticism. *Asian Journal of Accounting Research*, 3(1), 61–71. https://doi.org/10.1108/AJAR-06-2018-0009.
- Mastilak, M. C., Matuszewski, L., Miller, F., & Woods, A. (2018). Self-fulfilling Prophecy? An Examination of Exposure to Agency Theory and Unethical Behavior. In *Research on Professional Responsibility and Ethics in Accounting* (pp. 111–152). Bingley: Emerald Publishing Limited. https://doi.org/10.1108/S1574-076520180000021007.
- Messier. Jr, W., Glover, S. M., & Prawitt, D. F. (2014). Auditing & Assurance Services: A Systematic Approach (9th ed.). New York: Irwin McGraw-Hill.
- Mulyati, M., Purnamasari, P., & Gunawan, H. (2015). Pengaruh Kemampuan Auditor Investigatif dan Pengalaman Auditor terhadap Efektivitas Pelaksanaan Prosedur Audit dalam Pembuktian Kecurangan. Prosiding Akuntansi Seminar Penelitian Sivitas Akademika UNISBA, 399–405.

- Mumba, F. N., & Wekesa, M. (2020). Effect of Internal Control on Financial Performance of Star Rated Hotels at the Kenyan Coast. International Journal of Advanced Research and Review, 5(5), 101–122. https://doi: 10.9790/5933-08030492105.
- Nainggolan, E. P., & Abdullah, I. (2016). Pengaruh Akuntabilitas, Objektivitas terhadap Kualitas Audit dengan Etika Auditor sebagai Variabel Moderasi (Study Kasus pada Kantor Akuntan Publik di Kota Medan). Human Falah, 3(1), 93–112.
- Nasution, D., & Östermark, R. (2019). The impact of auditors' awareness of the profession's reputation for independence on auditors' ethical judgment. Social Responsibility Journal, 16(8), 1087–1105. https://doi.org/10.1108/SRJ-05-2018-0117.
- Ozcelik, H. (2020). An Analysis of Fraudulent Financial Reporting Using the Fraud Diamond Theory Perspective: An Empirical Study on the Manufacturing Sector Companies Listed on the Borsa Istanbul. Contemporary Issues in Audit Management and Forensic Accounting, 102, 131–153.
- Pardo, C., & Alfonso, W. (2017). Applying "attribution theory" to determine the factors that lead to the failure of entrepreneurial ventures in Colombia. *Journal of Small Business and Enterprise Development*, 24(3), 562–584. https://doi.org/10.1108/ JSBED-10-2016-0167.
- Patrick, Z., Vitalis, K., & Mdoom, I. (2017). Effect of Auditor Independence on Audit Quality: A Review of Literature. International Journal of Business and Management Invention, 6(3), 51–59.
- Peraturan Badan Pemeriksa Keuangan Republik Indonesia Nomor 01 Tahun 2017, Tentang Standar Pemeriksaan Keuangan Negara. Prasetyo, S., Kamaliah, & Hanif, R. A. (2015). Pengaruh Red Flags, Skeptisme Profesional Auditor, Kompetensi, Independensi, dan Profesionalisme terhadap Kemampuan Auditor dalam Mendeteksi Kecurangan. (Studi Empiris pada Kantor Akuntan Publik di Pekan Baru, Padang, Dan Medan yang Terdaftar di IAPI 2013. *Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau*, 2(1), 1–15.
- Ramadhan, M. S., & Arifin, J. (2019). Efektivitas Probity Audit dalam Mencegah Kecurangan Pengadaan Barang Dan Jasa. *Jurnal Akuntansi Multiparadigma2*, 10(3), 550–568. https://doi.org/10.21776/ub.jamal.2019.10.3.32.
- Rezaee, Z., & Wang, J. (2019). Relevance of big data to forensic accounting practice and education. *Managerial Auditing Journal*, 34(3), 268–288. https://doi.org/10.1108/MAJ-08-2017-1633.
- Roscoe, J. T. (1975). Fundamental research statistics for the behavioral sciences. New York: Holt, Rinehart and Winston, Inc.
- Rufus, R., Miller, L., & Hahn, W. (2015). Forensic Accounting (Global Ed). UK: Pearson.
- Safeer, A. A., He, Y., & Abrar, M. (2021). The influence of brand experience on brand authenticity and brand love: an empirical study from Asian consumers' perspective. Asia Pacific Journal of Marketing and Logistics, 33(5), 1123–1138. https://doi.org/10.1108/APJML-02-2020-0123.
- Said, J., Alam, M. M., Karim, Z. A., & Johari, R. J. (2018). Integrating religiosity into fraud triangle theory: findings on Malaysian police officers. *Journal of Criminological Research*, *Policy*, and *Practice*, 4(2), 111–123. https://doi.org/10.1108/JCRPP-09-2017-0027.
- Sanjaya, A. (2017). Pengaruh Skeptisme Profesional, Independensi, Kompetensi, Pelatihan Auditor, dan Risiko Audit terhadap Tanggung Jawab Auditor dalam Mendeteksi Kecurangan. Jurnal Akuntansi Bisnis, 15(1), 41–55.
- Siriwardane, H. P., Hu, B. K. H., & Low, K. Y. (2014). Skills, Knowledge, and Attitudes Important for Present-Day Auditors. International Journal of Auditing, 18(3), 193–205. https://doi.org/10.1111/ijau.12023.
- Susilo, P. A., & Widyastuti, T. (2015). Integritas, Objektivitas, Profesionalime Auditor dan Kualitas Audit di Kantor Akuntan Publik Jakarta Selatan. *Jurnal Riset Akuntansi & Perpajakan (JRAP)*, 2(01), 65–77. https://doi.org/10.35838/jrap.2015.002.01.6
- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. Research in Science Education, 48(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2.
- Tang, J., & Karim, K. E. (2019). Financial fraud detection and big data analytics implications on auditors' use of fraud brainstorming session. *Managerial Auditing Journal*, 34(3), 324–337.
- Tiwari, R. K., & Debnath, J. (2017). Forensic accounting: a blend of knowledge. *Journal of Financial Regulation and Compliance*, 25(1), 73–85. https://doi.org/10.1108/JFRC-05-2016-0043.
- Tuanakotta, T. M. (2012). Forensic accounting and investigative audit. Jakarta: Salemba Empat.
- Utami, I., Wijono, S., Noviyanti, S., & Mohamed, N. (2019). Fraud Diamond, Machiavellianism and Fraud Intention. *International Journal of Ethics and Systems*, 35(4), 531–544. https://doi: 10.14414/jebav.v22i3.1792.
- Wiguna, F., & Hapsari, D. W. (2015). Pengaruh Skeptisme Profesional dan Independensi Auditor terhadap Pendeteksian Kecurangan (Survei pada Auditor KAP di Malang). *E-Proceeding of Management*, 2(1), 453–461.
- Yuniarti, R. D., & Tiara, E. (2015). Pengaruh Pengalaman dan Profesionalisme Akuntan Forensik terhadap Kualitas Bukti Audit Guna Mengungkap Fraud (Studi pada Akuntan Forensik di Perwakilan Badan Pengawas Keuangan dan Pembangunan Provinsi Jawa Barat). Jurnal Riset Akuntansi Dan Keuangan, 3(1), 617–631.

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