ARTÍCULOS
UTOPÍA Y PRAXIS LATINOAMERICANA. AÑO: 24, nº EXTRA 5, 2019, pp. 252-267
REVISTA INTERNACIONAL DE FILOSOFÍA Y TEORÍA SOCIAL
CESA-FCES-UNIVERSIDAD DEL ZULIA. MARACAIBO-VENEZUELA.
ISSN 1315-5216 / ISSN-e: 2477-9555

The level of fraud detection affected by auditor competency using digital forensic support

El nivel de detección de fraude afectado por la competencia del auditor utilizando el soporte forense digital

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ABSTRACT

The authority of the BPK RI is to perform the Audit of Financial Statements. An investigation audit is conducted to reveal strong indications of fraud that have resulted in state losses and/or criminal elements. Given the increasing use of digital equipment to conceal the fraud, digital forensic support in detecting fraud is increasingly needed at this time. This study is based on the phenomenon of investigation audit quality, which is still not following the expectations of the stakeholders. This study aims to analyze how the competence of auditors and digital forensic support can increase the detection of fraud.

Keywords: Analyze, Audit of Financial Statements, BPK RI, Fraud.

RESUMEN

La autoridad de BPK RI es realizar la Auditoría de Estados Financieros. Se realiza una auditoría de investigación para revelar fuertes indicios de fraude que han resultado en pérdidas estatales y / o elementos criminales. Dado el uso cada vez mayor de equipos digitales para ocultar el fraude, en este momento se necesita cada vez más apoyo forense digital para detectar el fraude. Este estudio se basa en el fenómeno de la calidad de la auditoría de investigación, que todavía no sigue las expectativas de los interesados. Este estudio tiene como objetivo analizar cómo la competencia de los auditores y el soporte forense digital puede aumentar la detección de fraude.

Palabras clave: Análisis, Auditoría de Estados Financieros, BPK RI

Recibido: 01-10-2019 ● Aceptado: 05-11-2019

1. INTRODUCTION

The Supreme Audit Board of the Republic of Indonesia, from now on, referred to as BPK, has the task of performing checks on management and responsibilities regarding state finances as mandated in Law No. 15 of 2004. The mandate of the law is sufficient to explain that BPK has burdensome duties and responsibilities to implement his constitutional duty as an institution authorized to audit the management and responsibility of state finances. The authority of BPK is to perform an Audit of Financial Reports, Performance Audits, and Audits with Specific Objectives, including to perform an Investigation Audit. An auditor can conduct an investigation audit to reveal indications of state/regional losses and/or criminal elements. An investigation audit is conducted to reveal strong indications of fraud, which results in losses suffered by the parties involved in the form of an institution or individual. The results of an investigative audit can be used to disclose a case in court.

If the audit results can find indications of state losses and/or criminal elements, BPK immediately reports the matter to the competent authority following the provisions of the legislation (Law No. 15 of 2014). The report is used as the basis for Law Enforcement Officials to perform inquiry or investigation. An investigative audit is reactive, i.e., an audit conducted after the discovery of an initial indication of a deviation. Thus, an investigative audit can originate from the results of a financial report, performance, or audit with specific objectives performed by BPK, where the audit has been able to reveal indications or allegations of irregularities that contain elements of fraud in state financial governance. Besides, BPK can also conduct an investigative audit at the request of other authorized institutions such as the Corruption Eradication Commission, Police, Judiciary, and the House of People's Representatives.

Based on BPK's Summary of Audit Results of Semester II of 2017 up to December 31, 2017, BPK has completed and issued 16 Audit Reports (AR) investigation with an indication of state/territorial losses amounting to IDR 5.18 trillion with details in Table 1. The proportion of investigation audit results based on the BPK initiative and the requests of other authorized institutions are presented in Figure 1.

Table 1. Investigation Audit Results as of December 31, 2017

No.	Request	Quantity	Indication of Loss (IDR Million)
1	BPK's Initiative	3	66,708.67
2	Police	6	269,299.59
3	Judiciary	1	2,970.10
4	**C**orruption **E**radication **C**ommission	3	305,487.23
5	The **H**ouse of **P**eople's **R**epresentative	3	4,544,792.00
	Total	**16**	**5,189,257.59**

Source: The BPK's IHPS Semester II, 2017

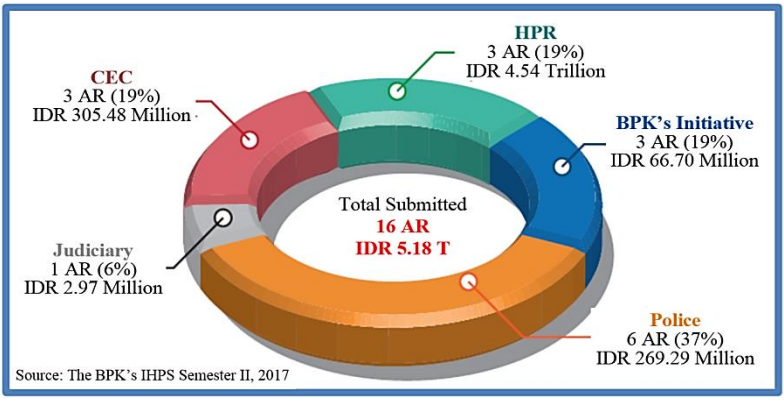

Figure 1. The Proportion of Investigation Audit Results as of December 31, 2017

Disclosure of fraud on the management and accountability of state finances has been proven to be performed by BPK through investigation audits. However, in the implementation of the quality of investigation audit is still often a debate in the eyes of the public or other stakeholders. This is presumably because of the quality of the investigation audit is still not following the expectations of the stakeholders. Various reasons for the low quality of investigation audits include auditor competency that is still low. Investigation audits have not been supported by digital forensic equipment to detect fraud quickly and accurately so that the impact on the quality of investigation audits becomes a phenomenon in the community and stakeholders, as explained below.

Misbakhun (2011), questioning the competency of BPK auditors regarding BPK forensic audit, was considered by many as a failure. However, failure is considered a natural thing. Because BPK employs auditors who are not competent in their fields, BPK auditor's competency continues to be questioned. The same thing was also conveyed by the Regent of Rembang Regency, Salim (2010), that BPK was not based on prior confirmation to the Rembang Regent to find out the truth of the actual data. The phenomenon related to auditor competency is also a concern of stakeholders, as stated by the House of People's Representatives member Supratikno (2011), that the competencies and specifications of the auditors requested are certified, people. Otherwise, it will float later. The findings that are cursory are the same as the previous findings. Forensics is for the benefit of the court. The same thing was conveyed by the President of the Netherlands Court of Audit, Stuiveling (2009), Algemene Rekenkamer (ARK) requested that the BPK of Republic of Indonesia increase the ability of its audit investigations to reduce the potential for corruption in the management of state finances.

Auditor competence is one of the factors that affected the level of fraud detection. Akbar et al. (2016) stated that an auditor to support audit performance must have a competency that can be obtained and improved through two factors, namely experience and education. According to Rai (2008), auditor competency is a qualification needed by auditors to perform audits correctly. To obtain these competencies, education, and training for auditors is needed, known as continuing professional education. There are several components of auditor competence, namely, personal quality, general knowledge, and special skills.

Meanwhile, the level of detecting fraud is also an integral part of the competence of auditors. According to Boritz et al. (2008), the auditor's ability to make accurate assessments of fraud risk is essential in audit assignments. This shows a close relationship between the competencies possessed by an auditor and the level of ability to detect fraud that occurs in an audit assignment.

Sukmadilaga et al. (2015) stated that financial statements could present quality in government financial management, but the disclosure level of Indonesia's government financial statements is still low. For this

reason, a forensic audit is needed to see whether the quality of government financial statements is truly transparent and accountable.

Supriadi et al. (2019) stated the success of the e-audit system implementation affected by auditor competency. Digital forensic support is one of the implementations of the e-audit systems at BPK. Nowadays, digital forensic support in detecting fraud is increasingly needed, given the increasing use of digital equipment to hide the fraud. Digital forensics is one of the factors that can affect the level of fraud detection. This is consistent with the opinion of Pearson & Singleton (2008) that the application of digital forensic techniques can support protecting, detecting, and mitigating fraud or fraud in a more creative way besides accounting science skills.

Fraud is all the methods designed by someone or a group of people who are used to benefit others in dishonest ways. Wells (2013), stated that these methods result in losses to others. Meanwhile, the ability to detect fraud, according to Bolton & Hand (2002), states that the level of fraud detection is any attempt to identify fraudulent transactions carried out as soon as possible after a fraud has occurred.

Based on the phenomena that occur in the community of interests, the gap theory, and arguments explained in the research background. The research problems are formulated as follows:

1. How much effect does auditor competency have on the level of fraud detection?
2. How much effect does digital forensic support have on the level of fraud detection?

In research, of course, there must be a theory that is used as the basis for applying the concepts of variables and indicators. In this section, each review will be explained for the three research variables, namely: Auditor Competency, Digital Forensic Support, and The Level of Fraud Detection.

1) Auditor Competency Variable

Auditor Competency is the ability to demonstrate the knowledge, expertise and skills of each individual that is performed continuously to achieve the audit objectives (Lee & Stone: 1995; Dubois et al.: 2004; Ulrich et al.: 2006; Ulrich et al.: 2007; Pflugrath et al.: 2007; Armstrong & Taylor: 2014).

Based on the opinions of several experts and previous researchers (Han et al.: 2006; Abdolmohammadi et al.: 2012; Armstrong & Taylor: 2014; Nurhayati & Mulyani: 2015; Garavan et al.: 2016), the Auditor Competency can be measured through the individual's ability to understand the audit entity's processes and capabilities, special expertise, and develop knowledge. Thus the measurement of auditor competency variable uses several dimensions and indicators, namely: 1) Knowledge of Business Process Entities (entity operational processes, entity management processes, entity support processes); 2) Special Skills (investigative auditor certification and digital forensic expertise); and 3) Ability (renewal of ability independently and being able to learn problems quickly).

2) Digital Forensic Support Variable

Digital forensic support is defined as a method that is scientifically proven and proven against the protection, collection, validation, identification, analysis, interpretation, documentation, and presentation of digital evidence originating from digital sources with the aim of reconstructing criminal offenses that can be used as evidence in the court (Reith et al.: 2002; Carrier & Spafford: 2004; Ieong: 2006).

Based on the opinions of several experts and previous researchers (Reith et al.: 2002; Peterson & Shenoi: 2011; Agarwal et al.: 2011), the digital forensic support can be measured through matters relating to the acquisition, testing, analysis and presentation of electronic evidence of all digital equipment including evidence stored in computer equipment, digital audio, cellular telephone, facsimile machine digital, and others. Thus the measurement of digital forensic support variable uses several dimensions and indicators, namely: 1) Digital Evidence Acquisition (digital evidence search, digital evidence recognition, digital evidence collection, and documentation); 2) Testing of Digital Evidence (real digital evidence, digital data filtering; digital data

validation); 3) Analysis and Presentation of Digital Evidence (analyzing hidden data, determining the significance of digital data obtained, and reconstructing digital data obtained).

3) The Level of Fraud Detection Variable

The level of fraud detection is the ability to detect fraud as quickly as possible the fraud occurs that is done by a person or group of people (Bolton & Hand: 2002; Kou et al.: 2004; Aral et al.: 2013).

Based on the opinions of several experts and previous researchers (O'gara: 2004; Tickner: 2010; Subramanian: 2014), then fraud can be categorized as a form of corruption, fraudulent financial reporting, and fraud committed by internal management. Fraud can also occur due to fulfilling one's lifestyle needs, individual behavior in the work environment, and the pattern of performance of the business and financial data of the organization. Thus the measurement of the level of fraud detection variable uses several dimensions and indicators, namely: 1) Investigative Audit Procedure (collecting and tracing audit evidence; examining and analyzing with digital forensics; 2) Detection of Fraud Indications (detecting indications of fraud in management/employees and detecting fraudulent financial reporting); 3) Other Detection Information (digging information based on Whistleblowing Systems and Surveillance).

2. METHODS

According to Sekaran & Bougie (2013), the hypothesis is a logically conjectured relationship between two or more variables expressed in the form of a testable statement. In accordance with the above understanding, the hypothesis is a logically suspected relationship between two or more variables in the formulation of propositions that can be tested empirically.

1) Hypothesis 1: The Effect of Auditor Competency on the Level of Fraud Detection

According to Boritz et al. (2008), the ability of an auditor to make an accurate assessment of management fraud risk is crucial to the initial assessment of risk in an audit engagement. Then Burnaby et al. (2011) stated that sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization. Furthermore, and Dickins & Reisch (2012), stated that consideration of fraud in a Financial Statement Audit requires auditors to increase their professional skepticism, and risk assessment standards have helped auditors more closely link the risk of material misstatement to specific audit procedures.

From the explanations and opinions of several previous researchers, it can be concluded that auditor competency is one of the factors that affected the level of fraud detection (Boritz et al.: 2008; Burnaby et al.: 2011; Dickins & Reisch: 2012).

2) Hypothesis 2: The Effect of Digital Forensic Support on the Level of Fraud Detection

According to Mohay (2005), be it for the purposes of law enforcement, national infrastructure protection, fraud detection or internal regulatory procedures, it is clear that progress in digital forensics at the coal face depends upon the development of computer forensic tools. Then Pearson & Singleton (2008), stated that the audit practitioner world has become aware of the need and usefulness of using IT in audits, especially for the purpose of fraud detection. Furthermore, Casey (2011), states that forensic computer auditor must continually update their skills effectively to support investigators, attorneys, and corporate security professionals in digital investigations.

From the explanations and opinions of several previous researchers, it can be concluded that digital forensic support positively affects the level of fraud detection, which will result in the quality of the investigation audit (Mohay: 2005; Pearson & Singleton: 2008; Casey: 2011).

The object in this study is the effect of auditor competency and digital forensic support on the level of fraud detection. This study uses descriptive and causal-explanatory methods by testing hypotheses. Based on the research time horizon, included in the category of cross-sectional studies, namely research performed over a period of time, data is collected only once, perhaps in a period of several days or weeks or months, to answer research questions (Sekaran & Bougie: 2013). The data used are primary data collected through

instruments (questionnaires) and secondary data obtained from the journal or previous research reports that are used as theories, concepts used to build models of thinking frameworks, and research hypotheses and deepen analysis in explaining the conclusions of the research results.

The unit of analysis in this study is BPK, while the observation unit is BPK's representative office and head office with the auditor as the target population. The sample frame is an auditor who has experience conducting investigative audits, both those who have certification of Certified Fraud Auditor/Certified Forensic Auditor (CFrA/CFA) and those who have not. Thus, the sample size set in this study was 150 auditors, consisting of 60 respondents from the Representative Office and 90 respondents from the Head Office.

This study can be regarded as survey research because the measurement process used to collect information using a questionnaire with Likert scale. The questionnaire was distributed by visiting the respondent directly and via e-mail. In this study, descriptive statistics were used by compiling a frequency distribution table to determine the level of value (average score) of the research variable. The categorization of the respondent's answer scores is arranged based on the maximum score range and the minimum score divided by the number of desired categories. The guidelines for categorizing the research variable scores are presented in Table 2.

Average Index	1.00 – 1.80	1.81 – 2.60	2.61 – 3.40	3.41 – 4.20	4.21 – 5.00
Category	Not Good	Not Fair	Fair	Good	Very Good

Table 2. The Guidelines For Categorizing The Research Variable Scores

This study uses quantitative methods with probability statistics which are statistical techniques used to analyze sample data, and the results will be applied to the population through testing the significance level of sample data on population parameters through the t-statistics on the confidence interval of 95% and the risk of error at α = 5%.

The research hypothesis will be tested using the Structural Equation Modeling (SEM) method approach with the help of Lisrel statistical software. In this study, the construct or latent variable cannot be measured directly using observed variables or indicators. So that it must be lowered first in the form of dimensions, then can it be reflected through the indicators according to the theory used. Indicators used to measure latent variables must be tested for the validity and reliability of the instrument. The test uses the concept of Confirmatory Factor Analysis (CFA). According to Wijanto (2015), a variable is said to have good validity for constructs or latent variables if the value of the t-factor is higher than the critical value ($t_{value} \geq 1.96$) and the standard factor loading ≥ 0.70. Meanwhile, Hair et al. (2014) stated that the value of factor loading ≥ 0.50 is very significant, and the indicator can be declared valid.

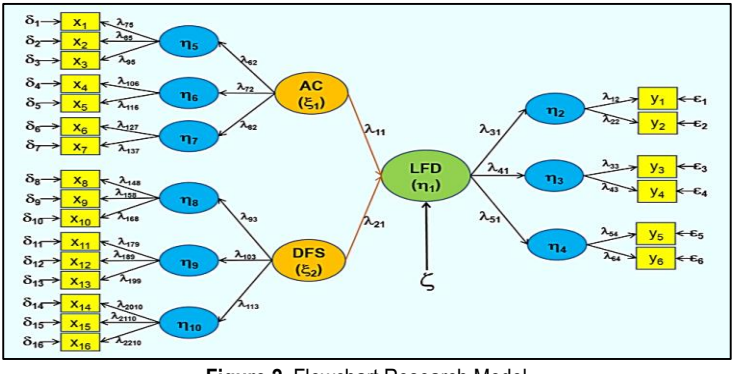

Figure 2. Flowchart Research Model

In SEM reliability testing uses a composite reliability measure and variant extracted measure. A construct that has good reliability is if the value of Construct Reliability (CR) ≥ 0.70 and the value of Variance Extracted (VE) ≥ 0.50. Next is the preparation of a flowchart, which aims to examine the effect of independent variables (exogenous) on the dependent variables (endogenous), as shown in Figure 2. Based on Figure 2, then the structural model in this study are formulated mathematically, as follows:

$$\eta_1 = \gamma_{11}\xi_1 + \gamma_{21}\xi_2 + \zeta$$

Description: ξ_1 = auditor competency variable; ξ_2 = digital forensic support variable; η1= the level of fraud detection variable; γ = path coefficient between exogenous latent variables; and ζ = measurement error of endogenous latent variables

The stages of data analysis in this study were developed using the concept of SEM. Furthermore, only the over-identified model that meets the requirements for analysis is based on the following degree of freedom formula requirements:

$$df = ½ (p+q)(p+q+1) – t > 0$$

Description: p = number of observed exogenous variables; q = number of endogenous observed variables; and t = number of parameters to be estimated

The model in this study has a value of p = 16, q = 6, t = 56, with a value of df = ½ (16+6) (16+6+1) - 56 = ½ (22)(23) - 56 = 253 – 56 = 197 > 0, then this research model is identified to over-identified so that it can be continued into the parameter estimation stage. The author chose to use the Maximum Likelihood (ML) method to estimate the parameters of this research model. The next step is to evaluate the Goodness of Fit (GoF) between the data and the research model. After the model is fitted with the data, the hypotheses built into the research model can be tested.

3. RESULTS

1. Descriptive Statistics Analysis

Based on the answers of 150 respondents, the descriptive statistical analysis provided data on average scores and categorization of answers for each variable, as presented in Table 3. The variables have a total score and average categorized as “good and very good”. For the average score of the research, the variable is 4.24, so that in general, all research variables included in the category of very good.

No.	Variable	Σ Score	Mean	Categorization
1	Auditor Competency (AC)	4,503.50	4.29	Very Good
2	Digital Forensic Support (DFS)	5,835.00	4.32	Very Good
3	The Level of Fraud Detection (LFD)	3,711.00	4.12	Good
	Total	**14,049.50**	**4.24**	**Very Good**

Source: Data Processing Results (2019)

Table 3. Analysis of Research Variabel Scores

2. Confirmatory Factor Analysis (CFA)

Suitability of the measurement model was tested using confirmatory factor analysis to find out the unidimensional of the indicators that explained a factor or variable formed. The following are described confirmatory factor analysis in each research variable.

3. Auditor Competency (AC) Variable

This exogenous variable is measured by 3 dimensions consisting of 7 indicators. The results of CFA testing with the second-order model for AC Variable are shown in Figure 3. Based on Figure 3, there is one indicator that has not to factor loading > 0.5, which is X3, so that it must be reduced from the model. Furthermore, the results of re-specification in Figure 4 show that all indicators already have factor loading > 0.5 so that it can be concluded that each indicator is valid as a measure of AC Variable. In addition, P-value = 0.14727 > 0.05 and RMSEA value = 0.060 < 0.08. To detail, the value of factor loading can be seen in Table 4.

Based on Table 4, the results of the first-order test on the dimensions of KBPE, SS, and Abi, all the indicators have factor loading > 0.5 so that all indicators are valid in measuring each dimension. For the CR value, there are still close to 0.7 and all values of VE > 0.5 so that it is reliable. This shows that the indicators have consistency in measuring each dimension.

In the results of the second-order test on AC Variable, all dimensions have factor loading > 0.5 so that all dimensions are valid in measuring AC Variable. Thus, the factor loading of SS Dimension has the highest value, making it the strongest in reflecting AC Variable while the Abi Dimension has the lowest value so that the dimension is the weakest in reflecting AC Variable. For the value of CR is 0.928 > 0.7 and the value of VE is 0.812 > 0.5 so it is reliable. This shows that the three dimensions have consistency in measuring AC Variable.

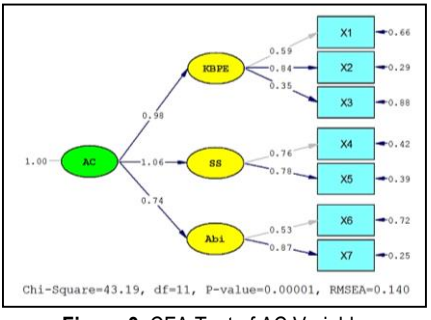

Figure 3. CFA Test of AC Variable (*Standardized*)

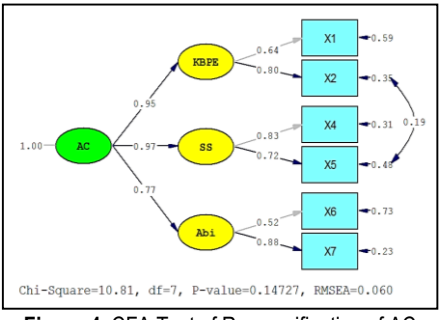

Figure 4. CFA Test of Re-specification of AC Variable (*Standardized*)

Latent Variable	Indicator	λ	λ²	ε	CR	VE	Information
			First Order				
KBPE	X1	0.64	0.41	0.59	0.69	0.52	Reliable
	X2	0.80	0.64	0.36			
SS	X4	0.83	0.69	0.31	0.75	0.60	Reliable
	X5	0.72	0.52	0.48			
Abi	X6	0.52	0.27	0.73	0.67	0.52	Reliable
	X7	0.88	0.77	0.23			
			Second Order				
AC	KBPE	0.95	0.90	0.10	0.93	0.81	Reliable
	SS	0.97	0.94	0.06			
	Abi	0.77	0.59	0.41			

Source: Data Processing Results (2019)

Table 4. Validity and Reliability Test Results of Re-specification of AC Variable

4. Digital Forensic Support (DFS) Variable

This exogenous variable is measured by 3 dimensions consisting of 9 indicators. The results of CFA testing with the second-order model for DFS Variable are shown in Figure 5. Based on Figure 5, there is an indicator that has a value of factor loading above 1, namely TDE Dimension. Furthermore, the results of re-specifications in Figure 6 show that all indicators already have factor loading > 0.5, so it can be concluded that each indicator is valid to be a DSF Variable measuring instrument. In addition, the P-value = 0.09560 > 0.05 and the value of RMSEA = 0.051 < 0.08. For details of the value of dilihat can be seen in Table 5.

Based on Table 5, the results of the first-order test on the dimensions of DEA, TDE, and APDE all the indicators have factor loading > 0.5 so that all indicators are valid in measuring each dimension. For all values of CR > 0.7 and VE > 0.5 so that it is reliable. This shows that the indicators have consistency in measuring each dimension.

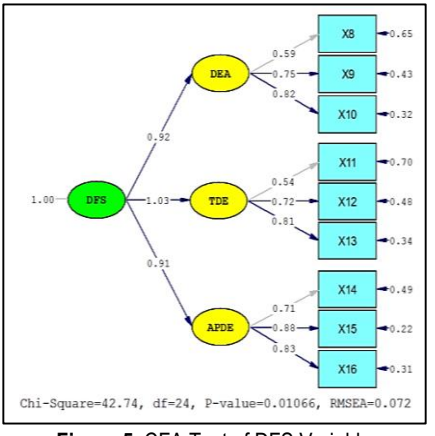

Figure 5. CFA Test of DFS Variable (*Standardized*)

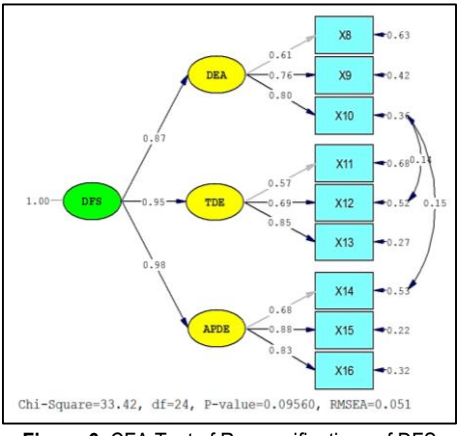

Figure 6. CFA Test of Re-specifications of DFS Variable (*Standardized*)

Latent Variable	Indicator	λ	λ²	ε	CR	VE	Information
			First Order				
DEA	X8	0.61	0.37	0.63	0.77	0.53	Reliable
	X9	0.76	0.58	0.42			
	X10	0.80	0.64	0.36			
TDE	X11	0.57	0.32	0.68	0.75	0.51	Reliable
	X12	0.69	0.48	0.52			
	X13	0.85	0.72	0.28			
APDE	X14	0.68	0.46	0.54	0.84	0.64	Reliable
	X15	0.88	0.77	0.23			
	X16	0.83	0.69	0.31			
			Second Order				
DFS	DEA	0.87	0.76	0.24	0.95	0.87	Reliable
	TDE	0.95	0.90	0.10			
	APDE	0.98	0.96	0.04			

Source: Data Processing Results (2019)

Table 5. Validity and Reliability Test Results of Re-specification of DFS Variable

In the results of the second-order test on DFS Variable, all dimensions have factor loading > 0.5 so that all dimensions are valid in measuring DFS Variable. Thus, the factor loading of APDE Dimension has the highest value, making it the strongest in reflecting DFS Variable while the DEA Dimension has the lowest value so that the dimension is the weakest in reflecting DFS Variable. Thus, the value of CR is 0.95 > 0.7 and the value of VE is 0.87 > 0.5 so it is reliable. This shows that three dimensions have consistency in measuring DFS Variable.

5. The Level of Fraud Detection (LFD) Variable

This endogenous variable is measured by 3 dimensions consisting of 6 indicators. The results of CFA testing with the second-order model for LFD Variable are shown in Figure 7. Based on Figure 7, there are indicators that have a value of factor loading above 1, namely IAP Dimension and DFI Dimension. Furthermore, the results of re-specification in Figure 8 show that all indicators already have factor loading > 0.5 so it can be concluded that each indicator is valid as a measure of LFD Variable. In addition, P-value = 0.15872 > 0.05 and RMSEA value = 0.057 < 0.08. To detail the value of factor loading can be seen in Table 6.

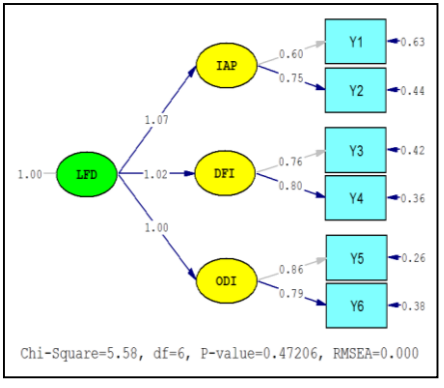

Figure 7. CFA Test of LFD Variable (*Standardized*)

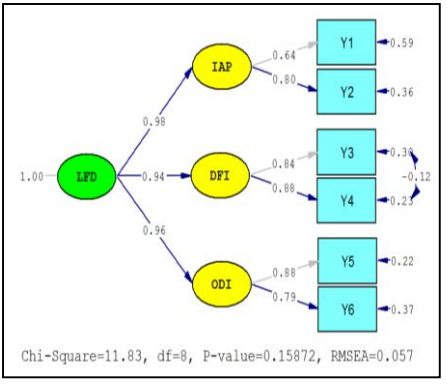

Figure 8. CFA Test of Re-specification of LFD Variable (*Standardized*)

Based on Table 6, the results of the first-order test on the dimensions of IAP, DFI, and ODI all the indicators have factor loading > 0.5 so that all indicators are valid in measuring each dimension. For the CR value, there are still close to 0.7 and all values of VE > 0.5 so that it is reliable. This shows that the indicators have consistency in measuring each dimension.

In the results of the second-order test on LFD Variable, all dimensions have factor loading > 0.5 so that all dimensions are valid in measuring LFD Variable. Thus, the factor loading of IAP Dimension has the highest value, making it the strongest in reflecting LFD Variable while the DFI Dimension has the lowest value so that the dimension is the weakest in reflecting LFD Variable. Thus, the value of CR is 0.92 > 0.7 and the value of VE is 0.92 > 0.5 so it is reliable. This shows that three dimensions have consistency in measuring LFD Variable.

Latent Variable	Indicator	λ	λ²	ε	CR	VE	Information
First Order							
IAP	Y1	0.64	0.41	0.59	0.67	0.53	Reliable
	Y2	0.80	0.64	0.36			
DFI	Y3	0.84	0.71	0.29	0.85	0.74	Reliable
	Y4	0.88	0.77	0.23			
ODI	Y5	0.88	0.77	0.23	0.82	0.70	Reliable
	Y6	0.79	0.62	0.38			
Second Order							
LFD	IAP	0.98	0.96	0.04	0.97	0.92	Reliable
	DFI	0.94	0.88	0.12			
	ODI	0.96	0.92	0.08			

Source: Data Processing Results (2019)

Table 6. Validity and Reliability Test Results of Re-specification of LFD Variable

6. Test Result of Full Structural Model

In this section, the evaluation results of the fit model and parameter values are estimated from the structural equation model. The empirical model generated from the theoretical model in this study requires full model testing. After confirmatory factor analysis for each latent variable, then carried out the full structural model estimation as shown in Figure 9.

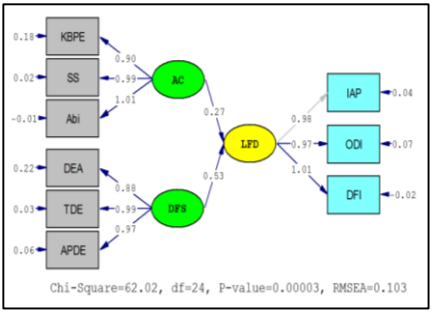

Figure 9. Full Structural Model (*Standardized*)

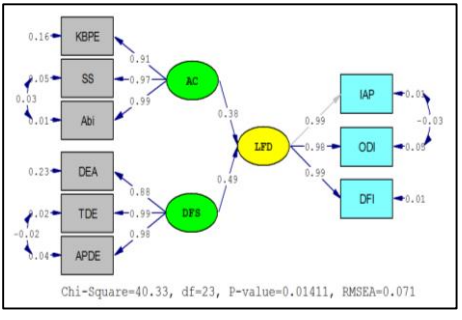

Figure 10. Re-specifications of Full Structural Model (*Standardized*)

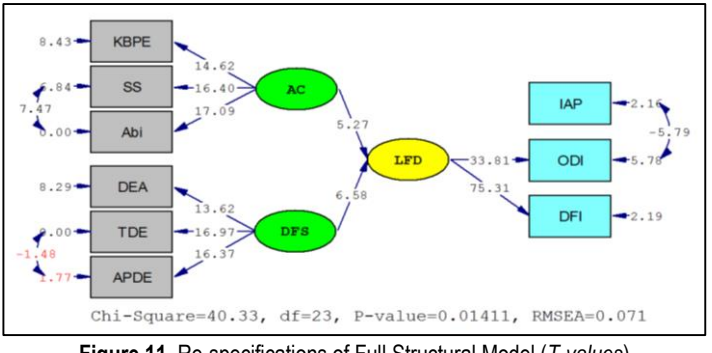

Figure 11. Re-specifications of Full Structural Model (*T-values*)

Based on Figure 9 there are still indicators that have a value of factor loading above 1, namely Dimensions of Abi and ODI. For this reason, it is necessary to re-specification the Full Structural Model, as shown in Figure 10. Furthermore, the results of the Lisrel based on the re-specifications of the Full Structural Model produce the structural equations are mathematical:

$$\mathbf{LFD = 0.38\ AC + 0.49\ DFS + 0.37}$$

Furthermore, to test the full model of SEM is done with 2 types of conformity model testing and model hypothesis testing. Full SEM testing models are used to see the fairness of the model or suitability model. Evaluation of good suitability of structural equation models by comparing the values of recommended fit indices as presented in Table 7.

No.	*Goodness of Fit*	*Target Value*	*Value*	*Description*
1	*Chi-square (P-value)*	*expected small (≥ 0.05)*	40.33 (0.01411)	Small (Not Fit)
2	RMSEA	≤ 0.08	0.071	Fit
3	NFI	≥ 0.90	0.99	Fit
4	NNFI	≥ 0.90	0.99	Fit
5	CFI	≥ 0.90	0.99	Fit
6	IFI	≥ 0.90	0.99	Fit
7	RFI	≥ 0.90	0.98	Fit
8	SRMR	≤ 0.05	0.014	Fit
9	GFI	≥ 0.90	0.94	Fit
10	AGFI	≥ 0.90	0.89	Marginal Fit

Source: Data Processing Results (2019)

Table 7. Evaluation of Indexes Fit of Re-specifications Full Structural Model

Based on Table 7, it can be seen the results of testing the suitability of the overall model almost all GoF indexes have met the fit criteria except P-value so that can be continued at the next analysis stage to test the research hypotheses while the summary of the results of the structural model estimation of the relationship between latent variables through the path coefficient test is presented in Table 8 as the Lisrel results shown in Figure 11.

Relationship	*Path Coefficient*	*T-value*	*R-square (Simultan)*
AC → LFD	0.38	5.27	0.63
DFS → LFD	0.49	6.58	

Source: Data Processing Results (2019)

Table 8. Results of Path Coefficient Estimates and Statistical Tests

Through the results in Table 8, it can be seen, the variables AC and DFS have an effect of 63% on LFD Variable. The remaining 37% is determined by other variables besides both independent variables. Judging from the path coefficient, the most dominant variable affecting LFD is DFS with a path value of 0.49, then AC with a path value of 0.38.

4. Hypotheses Testing

The hypothesis is tested by t-test statistics provided that H_0 is rejected if $t_{value} > 1.96$ or $-t_{value} < -1.96$ for α = 0.05 in the 95% confidence interval with the results in Table 8.

1) Hypothesis 1: The Effect of Auditor Competency on the Level of Fraud Detection

$H_0 : \gamma_{11} = 0$	Auditor Competency does not affect the Level of Fraud Detection
$H_1 : \gamma_{11}$ □□0	Auditor Competency has an effect on the Level of Fraud Detection
Lisrel Result	$t_{value} = 5.27$ then **H_0 Rejected and H_1 Accepted**

This result provides empirical evidence that Auditor Competency has a significant positive effect on the Level of Fraud Detection. The results of this study are in line with previous studies, that Auditor Competency positively affects the Level of Fraud Detection (Boritz et al.: 2008; Burnaby et al. 2011; Dickins & Reisch: 2012).

2) Hypothesis 2: The Effect of Digital Forensic Support on the Level of Fraud Detection

$H_0 : \gamma_{21} = 0$	Digital Forensic Support does not affect the Level of Fraud Detection
$H_1 : \gamma_{21}$ □□0	Digital Forensic Support affects the Level of Fraud Detection
Lisrel Result	$t_{value} = 6.58$ then **H_0 Rejected and H_1 Accepted**

This result provides empirical evidence that Digital Forensic Support has a significant positive effect on the Level of Fraud Detection. The results of this study are in line with previous studies that Digital Forensic Support positively affects the Level of Fraud Detection (Mohay: 2005; Pearson & Singleton: 2008; Casey: 2011).

4. CONCLUSION

Based on the phenomenon, problem formulation, hypotheses, and the results of research conducted on BPK's auditors, conclusions can be drawn as follows:

1) Auditor competency directly has a positive effect on the level of fraud detection; thus, the higher the Auditor Competency can increase the Level of Fraud Detection. The effect is in the form of how much the auditor has special expertise in the field of digital forensics and the ability to examine and analyze the evidence of fraud obtained by digital forensic techniques;
2) Direct digital forensic directly has a positive effect on the level of fraud detection, so the higher the Digital Forensic Support can increase the Level of Fraud Detection. The effect is due to the auditor's ability to determine the significance of fraud data obtained and the ability to examine and analyze the evidence of fraud obtained by digital forensic techniques.

This study recommends to investigative auditors to increase their knowledge and understanding of business processes about the entity to be audited; improve quality and capability through periodic certification of expertise; carry out renewal of their capabilities independently; increase knowledge in order to be more effective and efficient in conducting search, collection, documentation and recognition of digital evidence; improve early detection of fraud by digging information through whistleblowing systems and surveillance; and detecting fraudulent financial reporting through audit of the entity's financial reporting.

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