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Fraudulent behavior in state financial management: A testing aspects of the fraud hexagon and individual morality

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Abstract

The study aimed to investigate and analyze the influence of fraud hexagon aspects (stimulus, capability, collusion, opportunity, rationalization, and ego) and individual morality on fraudulent behavior among budget user officials in Regional Apparatus Organizations in Indonesia. This study used a quantitative survey approach, collecting data from 315 respondents using a structured questionnaire. The data were analyzed using Structural Equation Modeling with Partial Least Squares (SEM-PLS).The findings reveal that aspects of the fraud hexagon, such as stimulus/pressure, capability, collusion, and rationalization affect on fraudulent behavior, while aspects of opportunity and ego do not affect on fraudulent behavior. Individual morality does not affect fraudulent behavior. This study has implications for the development of fraud theory by highlighting the importance of developing individual morality in relation to fraudulent behavior. Practical implications for the government in designing and implementing strategies for fraud prevention.

Keywords: Fraud hexagon, Fraudulent behavior, Individual morality.

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1. Introduction

Fraud is often in the public conversation and becomes criminal behavior [1]. This is because fraud can cause losses to individuals, other employees, and also the organization [2]. The impact is individual loss of trust, loss of reputation, and legal consequences, while organizationally, it can lead to financial losses, loss of assets, and investor distrust [3, 4]. The Association of Certified Fraud Examiners (ACFE), in 2022, analyzed 20,000 fraud cases. The number of cases consists of (a) Asset misappropriation schemes, the most common fraud scheme, accounting for 86% of cases and causing financial losses of USD 100,000 per case. (b) Financial reporting fraud schemes amounted to 9% of cases and caused financial losses of USD 593,000 per case. (c) Corruption schemes amounted to 5% of cases and caused financial losses of USD 150,000 [5]. The results of mapping cases based on actors or perpetrators who commit fraud in Indonesia show that the State Civil Apparatus profession is the most actors in committing fraud, namely: there were 272 cases in 2020, 342 cases in 2021, and 223 cases in 2022 [6].

This researcher is to investigate the influence of aspects of the fraud hexagon and individual morality on fraud behavior among budget user officials at Regional Apparatus Organizations in Indonesia. Budget users are officials who hold the power to use the regional budget, in this case the Head of the Regional Apparatus Organization is responsible for using the budget in each organization they lead, so they are prone to fraud.

The fraud hexagon theory explains that six factors cause a person to commit white-collar crime: stimulus, capability, collusion, opportunity, rationalization, and ego [7]. The results of an empirical study show that aspects of stimulus, opportunity, rationalization, capability, ego and collusion are factors that encourage someone to commit fraud [8]. Stimulus, capability, collusion, opportunity, rationalization, and ego affect fraud [9]. However, several other studies have shown that not all aspects of the fraud hexagon affect fraud behavior. Financial stability (internal pressure) and external pressure have a positive effect on financial reporting fraud, but ineffective supervision (opportunity), auditor turnover (rationalization), director turnover (capability), arrogance, and collusion do not affect financial reporting fraud [10]. Stimulus impacts the possibility of financial reporting fraud, while capability, collusion, opportunity, rationalization, and ego have no impact on financial reporting fraud [4].

In connection with the diverse findings related to the fraud hexagon on fraud behavior, researchers need to observe other factors that can cause fraud behavior. Another factor influencing fraud is individual morality. Individual morality determines whether a person is motivated to commit or not commit fraud. Moral development theory explains that there are three stages of moral reasoning: pre-conventional, conventional, and post-conventional [11]. Moral development is the process that guides moral decisions [12]. The higher the moral development of the individual, the more the individual tries to avoid unethical behavior and so as not to harm many parties. [13]. Conversely, the lower the morality, the more unethical behavior (such as fraud behavior) increases. Low morale encourages fraud and can ultimately damage and even destroy the organization. Low morality tends to commit fraud [14].

Law of the Republic of Indonesia Number 28 of 1999 explains that "Clean State Administrators are State Administrators who adhere to the general principles of state administration and are free from corrupt practices, collusion and nepotism, and other despicable acts". Thus, the state apparatus should provide the best service for the community and will not commit acts that can harm the community. However, several cases have indicated that there are still unscrupulous state apparatuses that commit fraud such as corruption. Corruption is one type of fraud behavior, and other types are asset misuse fraud behavior and financial reporting fraud [5]. A behavior or event (such as fraud behavior) occurs due to various factors. Therefore, it is necessary to study and analyze the factors that cause the State Civil Apparatus to commit fraud,

with the following research questions: (a) Do the fraud hexagon aspects (namely; stimulus/pressure, capability, collusion, opportunity, rationalization and ego) influence fraud behavior?. (b) Does individual morality influence fraud behavior?

The steps to solve the research problem are: (a) Designing a quantitative research approach using a survey method. (b) Collecting data using a questionnaire technique to the respondents. (c) Verifying, analyzing, and describing the data to answer the research problem. (d) Testing the hypothesis and interpreting the research results to explain in depth the relationship between variables based on data analysis. (e) Drawing research conclusions.

2. Literature Review

2.1. Attribution Theory

Attribution theory is a social psychology theory developed by Heider [15] that explains behavior's causes [16]. Attribution theory studies a person's tendency to seek information on why other people do things. Attribution theory consists of internal attribution, where a person will behave due to internal traits, personality or attitudes, while external attribution is driven by situations or circumstances [17]. Aspects of the fraud hexagon (stimulus, capability, ego) and individual morality are internal attributions, and aspects of the fraud hexagon (collusion, opportunity, rationalization) are external factors that lead to fraudulent behavior.

2.2. Fraud Hexagon Theory

The latest development of fraud theory is the fraud hexagon, which is a development of previous fraud theories. The development of the fraud hexagon theory does not eliminate any of the elements that exist in the Crowe Horwath Pentagon fraud, namely pressure, opportunity, rationalization, capability, and ego, instead of adding the collusion factor as a new factor that causes fraud [18]. Collusion plays a role in determining the factors that lead to fraud. This fraud hexagon theory is also called the SCCORE model, an acronym for the six factors that cause someone to commit white-collar crimes [7].

White-collar crimes can include corruption, financial crimes [19], financial fraud [20] and asset misuse [21]. Stimulus/pressure, capability, collusion, opportunity, rationalization, and ego affect fraud [22]. The fraud hexagon model can be illustrated in the following Figure 1.

Figure 1.
Vousinas [7].

Stimulus is the pressure to commit fraud and has financial and non-financial properties [7]. Stimulus or pressure always leads to unethical behavior, and every fraudster faces several types of pressure to commit unethical behavior [23]. Every fraudster always faces pressure, and some of that pressure involves financial needs. However, there are also non-financial pressures in the form of frustration with work that can motivate fraud [24]. Thus, the following hypothesis can be formulated.

H_1: Stimulus effects on fraudulent behavior.

Capability as an ability, competence, capacity, skills, ethics, values, and attitudes, distinguishing characteristics, qualities, and attributes that individuals have mobilized to carry out tasks [25]. A person's position or function in an organization can provide the ability to create or explore an opportunity to commit fraud where it is not owned by others [26]. Opportunity opens the door to fraud, and pressure and rationalization pull people towards fraud, but the person must have the ability to understand the opportunities that open up and take advantage of them to get through [27-29]. Many acts of fraud would not occur without the ability of the perpetrator to carry them out [22]. Thus, the research hypothesis can be formulated as follows.

H_2: Capability effects on fraudulent behavior.

Collusion refers to an agreement to commit an act of fraud between two or more people, with one party bringing an action against the other for some criminal purpose, such as an act of fraud [30]. Collusion refers to an agreement to commit an act of fraud between two or more people, with one party bringing an action against the other for some criminal purpose, such as an act of fraud [7]. Every criminal act cannot occur without the help of others [31]. Thus, the following hypothesis can be formulated.

H_3: Collusion affects on fraudulent behavior.

Opportunity results from a situation that can lead to fraud [32]. One not only decides to commit fraud but chooses when and where to do it Ikechi and Anthony [31]. Fraudulent activities are triggered by opportunities[29]. Therefore, the hypothesis can be formulated as follows.

H_4: Opportunity affects on fraudulent behavior

Rationalization is a mindset that seeks justification before committing fraud [33]. One of the conditions when fraud occurs, those involved can rationalize their fraud actions. Some individuals have an attitude, character, or set of ethical values that allow them to consciously and deliberately commit dishonest acts [34]. Therefore, the hypothesis can be formulated as follows.

H_5: Rationalization affects on fraudulent behavior.

Ego or arrogance is an attitude of superiority combined with greed and the belief that internal controls do not apply to that person [18, 35]. Another aspect of motivation that may apply to some or all types of fraud is ego [7]. People who always maintain their status may be involved in fraud [36]. Therefore, the hypothesis can be formulated as follows.

H_6: Ego affects on fraudulent behavior.

2.3. Moral Development Theory

Moral development theory is used to explain aspects of individual morality that influence fraudlent behavior. In relation to attribution theory, individual morality is an internal factor that causes fraud behavior [11]. Morality can be a difficulty or obstacle for individuals in committing an act of fraud because there are moral values that create inner conflicts about the negative impact of the fraud. When there is a desire to commit fraud, but someone has high moral values, the fraud will be controlled.

Moral development theory explains that morals develop through three levels, namely: (a) pre-conventional level, where individuals will perform an action because they are afraid of existing laws/regulations, (b) conventional level, where individuals will base their actions on the approval of their friends and family and also on the norms that apply in society, and (c) post-conventional level, where individuals base their actions on the interests of others and on universal laws [37-40]. The higher an individual's level of moral reasoning, the more likely individual is to do the 'right thing'. The higher the individual's moral level, the more the individual tries to avoid unethical behavior to avoid harming many parties [13]. Individual morality significantly reduces accounting fraud [41]. Therefore, the hypothesis can be formulated as follows.

H_7: Individual morality affects on fraudulent behavior.

3. Methodology

3.1. Research Design

The research approach is quantitative research with a survey method [42, 43]. This study analyzes the causes of fraud behavior in the scope of local government by conducting a survey on the State Civil Apparatus, namely budget user officials at the Regional Apparatus Organization in the regency/city, South Sulawesi Province.

The data collection method used was mail and electronic (Google Forms) questionnaires sent to respondents. The development of the questionnaire was based on previous research indicators and was pre-tested to measure the validity and reliability of the questionnaire statements. Several techniques were applied to increase the response to the questionnaire: (a) designing questionnaire statements/questions that are relatively short and easy to understand so as not to saturate respondents, (b) sending a cover letter or calling in advance to respondents or respondents' relations to confirm willingness to fill out the questionnaire, (c) providing a return envelope (questionnaires by mail) [43]. The questionnaires distributed to respondents were 358 questionnaires, and the respondents who returned completely to be processed and analyzed were 315, or the response rate was 88%. The minimum sample size required in SEM-PLS analysis based on the criterion of at least 10 times the number of structural arrows (paths) to endogenous constructs [44, 45]. The number of paths in the model in this study is 7 structural paths. Therefore, the number of samples that can be analyzed is at least 10 x 7 = 70 samples. However, in this study, the number of respondents obtained was 315 people, so the number of samples exceeded the minimum sample limit set and was representative and suitable for analysis using SEM-PLS.

Data analysis using Structural Equation Modeling - Partial Least Squares (SEM-PLS). The advantages of using SEM-PLS are; (a) SEM-PLS is able to test complex research models simultaneously and many variables and many indicators, (b) SEM-PLS can be used for small sample sizes, (c) SEM-PLS can measure formative and reflective indicators [44, 45]. The analysis model can be seen in the following Figure 2.

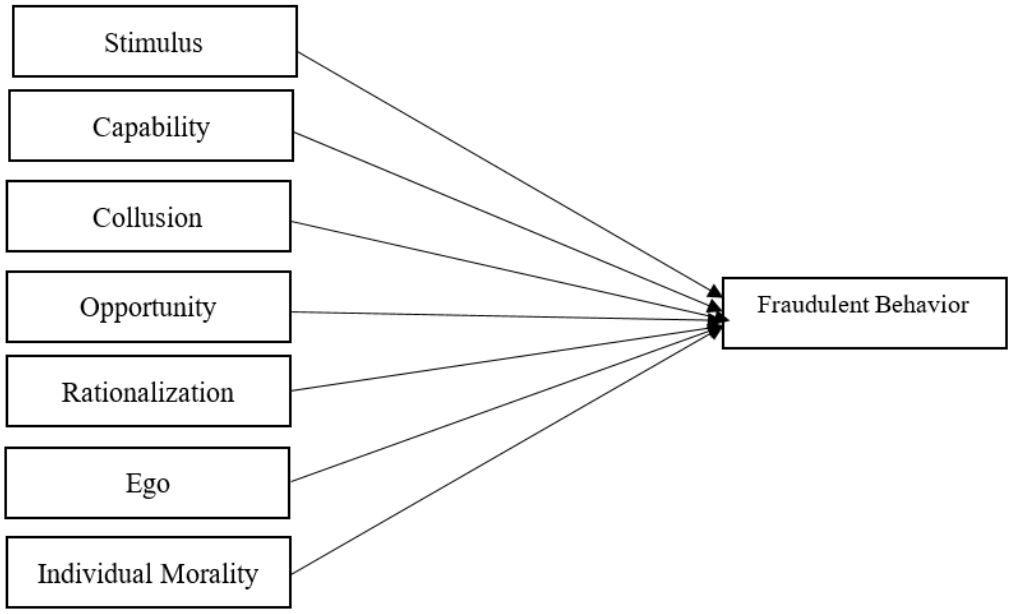

Figure 2.
Research Model.

3.2. Research Variables and Measurements

The variables tested are aspects of the fraud hexagon (stimulus/pressure, capability, collusion, opportunity, rationalization, and ego), individual morality as exogenous variables, and fraudulent behavior as endogenous variables. Variable measurements can be seen in the following Table 1:

Table 1.
Variable Measurements.

No.	Variable	Indicators	References
1	Stimulus (STM)	a) Low income, b) Excessive financial needs, c) Family pressure with a high lifestyle, d) Encouragement from superiors/co-workers, e) Job pressure.	Dani, et al. [46]
2	Capability (CAP)	a) Ability to exceed others, b) Ability to influence others, c) Position, d) Ability to master the situation, e) Ability to solve problems.	Dani, et al. [46]
3	Cellulation (COL)	a) Group influence perspective, b) Social selection perspective, c) Instrumental perspective, d) Social change perspective.	Vousinas [7]
4	Opportunity (OPP)	a) Characteristics that are vulnerable to fraud, b) Ineffective management, c) Complex and unstable organizational structure, d) Inadequate internal control.	Dani, et al. [46]
5	Rationalization (RAZ)	a) Only borrowing and will return it back, b) No party is harmed, c) For a positive purpose, d) Deserves more.	Dani, et al. [46]
6	Ego (EGO)	a) An attitude of always being better than others. b) Not caring about people's negative views of themselves, c) Not caring about the decline/loss of self-esteem, d) Not caring about the situation.	Dani, et al. [46]
7	Individual Morality (MOR)	a) Pre-conventional level, b) Conventional level, c) Post-conventional level	Wahyudi, et al. [40]
8	Fraudulent Behavior (FRA)	a) Recording inappropriate/fictitious income/expenditure, b) Conducting bribery, c) Committing gratuities, d) Stealing office cash, e) using office assets for personal purposes.	Association of Certified Fraud Examiners [5] and Dani, et al. [46]

The methodological design of this study differs from previous studies, where the previous study, namely the study on the fraud hexagon Vousinas [7] used a qualitative design with a literature review method, while this study uses a quantitative design with a survey method. Several previous studies used a quantitative approach using data analysis methods with regression techniques, while this study uses the Structural Equation Modeling - Partial Least Squares (SEM-PLS) data analysis technique.

3.3. Pilot Test

Before conducting research, researchers first conducted a pilot test to measure the validity and reliability of the research instrument. The pilot test was conducted on 35 budget user officials at the Regional Apparatus Organization in South Sulawesi province, and it was carried out randomly. The number of questionnaires distributed to respondents was 35 respondents, and all 35 questionnaires were collected and processed. Test the validity by analyzing the convergent value, namely measuring the loading factor for each construct. Loading factor above 0.70 is highly recommended. The analysis results show the value of all indicators in each construct obtaining an indicator loading value > 0.70 to be considered valid as a measure of its construct. The results of the outer loading factor pilot test for 35 samples can be presented in the following Table 2.

Table 2.
Outer Loading Factor (Pilot Test 35 sample)

Question Items	Convergent Validity (Validity ≥ 0,7)							
	STM	CAP	COL	OPP	RAZ	EGO	MOR	FRA
1	0.791	0.830	0.956	0.782	0.960	0.918	0.807	0.820
2	0.884	0.905	0.940	0.889	0.802	0.911	0.853	0.859
3	0.812	0.795	0.962	0.893	0.947	0.909	0.934	0.925
4	0.785	0.905	0.779	0.815	0.900	0.842	-	0.847
5	0.821	0.933	-	-	-	-	-	0.947

Source: Data processed in 2024 using Smart PLS application.

Then, reliability will be tested by analyzing the composite reliability value. A high composite reliability value indicates good consistency of each indicator in the latent variable to measure the variable. The criteria for the composite reliability value> 0.7 indicate that the variable has good internal consistency. The composite reliability test results show that all

constructs get a value> 0.7, so it is said to have good internal consistency. The complete composite reliability value is presented in Table 3.

Table 3.
Composite Reliability Test (Pilot Test 35 sample).

	Variable							
	STM	**CAP**	**COL**	**OPP**	**RAZ**	**EGO**	**MOR**	**FRA**
Composite Reliability (≥ 0.7)	0.92	0.94	0.96	0.93	0.94	0.94	0.94	0.96

Source: Data processed in 2024 using Smart PLS application.

4. Results and Discussion

4.1. Respondent Profile

The composition of the distribution of questionnaires in the organization is mostly in the form of Agency with as many as 194 (62%). The characteristics of respondents based on the level of education are mostly Master's degree (S2), namely 221 (70%), and based on the gender dominated by males, namely 258 (82%). The characteristics of the 315 respondents can be explained in the following Table 4.

Table 4.
Respondent Characteristics.

Items	**Description**	**Total**	**Percentage**
Organization Types	Secretariat	17	5%
	Board	58	18%
	Inspectorate	4	1%
	Agency	194	62%
	Office	33	11%
	District	9	3%
Education Level	S1 (Bachelor)	87	28%
	S2 (Master)	221	70%
	S3 (Doctor)	7	2%
Gender	Male	258	82%
	Female	57	18%

4.2. Test of Outer Model PLS Algorithm (Evaluation of Measurement Model)

The outer model is a model that specifies the relationship between latent variables and their indicators. Outer model is interpreted more toward the validity test and reliability test. Test the validity by analyzing the convergent value, namely measuring the loading factor for each construct. Loading factor above 0.70 is highly recommended. The analysis results show that the value of all indicators in each construct obtained an indicator loading value> 0.70, so that it can be said to be valid as a measure of its construct. The complete PLS Algorithm model and loading factors (indicator values) are presented in the following Table5:

Table 5.
Validity Test (Convergent Validity).

Indicators	**Convergent Validity (Validity ≥ 0,7)**							
	STM	**CAP**	**COL**	**OPP**	**RAZ**	**EGO**	**MOR**	**FRA**
1	0.850	0.773	0.832	0.878	0.865	0.784	0.891	0.834
2	0.794	0.886	0.848	0.777	0.855	0.864	0.899	0.820
3	0.794	0.840	0.856	0.848	0.858	0.817	0.894	0.835
4	0.801	0.829	0.844	0.915	0.859	0.857		0.849
5	0.871	0.889						0.868

Source: Data processed in 2024 using Smart PLS application.

The reliability test was conducted through the analysis of composite reliability value, which was strengthened by Cronbach's alpha value. High composite reliability and Cronbach's alpha values indicate good consistency of each indicator in the latent variable to measure the variable. The criteria for the composite reliability value and Cronbach's alpha> 0.7 indicate that the variable has good internal consistency. The test results show that the composite reliability and Cronbach's alpha for the analyzed constructs obtained a value> 0.7, so it is said to have good internal consistency. The complete composite reliability and Cronbach's Alpha values are presented in the following Table 6:

Table 6.
Reliability Test (Composite Reliability and Cronbach's Alpha values)

Variable	Composite Reliability (≥ 0.7)	Cronbach's Alpha (≥ 0.7)
Stimulus (STM)	0.913	0.880
Capability (CAP)	0.925	0.899
Collusion (COL)	0.909	0.867
Opportunity (OPP)	0.916	0.877
Rationalization (RAZ)	0.919	0.882
Ego (EGO)	0.899	0.850
Individual Morality (MOR)	0.923	0.875
Fraudulent Behavior (FRA)	0.924	0.897

Source: Data processed in 2024 using Smart PLS application.

4.3. Test of Inner Model (Evaluation of Structural Model)

The structural model is tested by looking at the R^2 (R Square Adjusted) value, which is a goodness of fit test. The fraudulent behavior construct obtained a value of 0.886, which can be interpreted that the variation in fraudulent behavior can be explained by the constructs of Stimulus, Capability, Collusion, Opportunity, Rationalization, Ego, and Individual Morality by 89% (0.886 x 100%), while the remaining 11% (100% - 89%) is explained by other variables that are not observed. The goodness of the fit value can be seen in the following Table 7.

Table 7.
R-Square value.

	R Square	R Square Adjusted
Fraudulent Behavior	0.889	0.886

Source: Data processed in 2024 using Smart PLS application.

In addition to Adjusted R Square, the test of Goodness of Fit can also be measured by the value of **SRMR** (*Standardized Root Mean square Residual)* and **NFI** (Normed Fit Index). A model is said to be fit if the SRMR ≤ 0,08 and the value of NFI ≤ 0.97 [45]. The goodness of fit test results show an SRMR value of 0.055 ≤ 0.08 and an NFI value of 0.793 ≤ 0.97. Thus, the fit test shows a fit model, it can be concluded that the model used in this study can be used as a basis for analyzing this research problem. The goodness of fit value of the structural equation model of this study is illustrated in Table 8.

Table 8.
The test of SRMR and NFI.

Construct	SRMR	NFI	Description
Model	0.055	0.793	Good Fit

Source: Data processed in 2024 using Smart PLS application.

4.4. Path Coefficient Measurement

Measurement of path coefficients to determine the significance of the influence between endogenous constructs on exogenous variables and hypothesis testing. The path coefficient value is measured in the range -1 to +1. The relationship between the two constructs is stronger if it approaches a value of +1, and weaker near -1, and hypothesis testing with a significance level of 5% if the t-statistic value> 1.96 and p value <0.05 then the null hypothesis (H0) is rejected [44]. The t-statistic value of the effect coefficient of the latent construct is obtained from PLS Bootstrapping. The results of the analysis can be seen in the following Table 9.

Table 9.
Path Coefficient.

Direct Effect Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	p Values	Hypothesis Testing Decision
STM -> FRA	0.234	0.221	0.109	2.143	0.033	H1 Accepted
CAP -> FRA	0.353	0.043	0.081	5.655	0.000	H2 Accepted
COL -> FRA	0.379	0.379	0.056	6.744	0.000	H3 Accepted
OPP-> FRA	0.140	0.132	0.085	1.642	0.101	H4 Rejected
RAZ -> FRA	0.520	0.639	0.096	7.186	0.002	H5 Accepted
EGO -> FRA	0.120	0.121	0.116	1.034	0.302	H6 Rejected
MOR -> FRA	0.155	0.148	0.056	-2.786	3.206	H7 Rejected

Source: Data processed in 2024 using Smart PLS application.

The interpretation results of the significance test of the fraud hexagon and individual morality aspects of fraud behavior (see Table 9) can be explained that the significance test of the effect of stimulus, capability, collusion, rationalization, and individual morality on fraudulent behavior has a t-statistic value greater than (>) 1.96 and a p-value

smaller (<) 0.05 so that the hypotheses (H1, H2, H3, and H5) are accepted. These results state that stimulus, capability, collusion and rationalization have a significant effect on fraudulent behavior. While the significance test of the effect of opportunity, ego, and individual morality on fraud behavior has a t-statistic value smaller (<) 1.96 and a p-value greater (>) 0.05 so that the hypotheses (H4, H6, and H7) are rejected. These results state that opportunity, ego, and individual morality have no effect on fraudulent behavior.

5. Discussion

5.1. The Effect of Fraud Hexagon Aspects on Fraudulent Behavior

5.1.1. The Effect of Stimulus on Fraudulent Behavior

The results of the first hypothesis test (H1) show the statistical t-value of the effect of stimulus/pressure on fraudulent behavior of 2.143> 1.96 and p-values 0.033 <0.05. These results state that stimulus/pressure has a significant effect on fraudulent behavior. When someone feels pressured because of financial problems such as income/salary that cannot meet their needs and non-financial pressure in the form of family or supervisor/co-worker pressure and frustration because of work, this can motivate them to commit fraud. The fraud committed is a way to overcome the pressure felt. These results strengthen the fraud hexagon theory, which states that stimulus/pressure is one of the factors that cause financial crime [7]. The results also support research which states that stimulus/pressure is one of the factors that influence fraud [36, 46, 47].

5.1.2. The Effect of Capability on Fraudulent Behavior

The results of the second hypothesis test (H2) show that the statistical t-value of the effect of capability on fraudulent behavior is 5.655> 1.96 and p-values 0.000 <0.05. These results state that capability has a significant effect on fraudulent behavior. Fraud perpetrators have the ability to potentially commit fraud because they have abilities related to fraud over others, are able to influence people, have strategic positions in the organization, they can master the situation in dealing with fraud cases, and can solve problems related to fraud cases. The results of this study strengthen the fraud hexagon theory which states that capability is a factor that can lead to financial crime [7]. In addition, the results of this study support previous research which found that capability is one of the factors that influence fraud [46, 47].

5.1.3. The Effect of Collusion on Fraudulent Behavior

The results of the third hypothesis test (H3) show that the statistical t-value of the effect of collusion on fraudulent behavior is 6.744> 1.96 and p-values 0.000 <0.05. These results state that collusion has a significant effect on fraudulent behavior. Fraud perpetrators usually look for friends together to commit their actions because they think that fraud is easier, less risky, and covers each other's actions. Government officials who commit fraud are generally not single or done alone, but the case is always related to other parties. These results reinforce the fraud hexagon theory which states that collusion factors play an important role in determining the factors that lead to financial crime [7]. In addition, the results of this study also supports research which states that collusion is a factor that encourages someone to commit fraud [8].

5.1.4. The Effect of Opportunity on Fraudulent Behavior

The results of the fourth hypothesis test (H4) show that the statistical t-value of the effect of opportunity on fraudulent behavior is 1.642 < 1.96 and p-values 0.101> 0.05. These results state that opportunity has no effect on fraudulent behavior. This shows that government management with supervision and control functions is adequate, as measured by the existence of effective and inherent supervision of government management both carried out by the Government Internal Supervisory Apparatus in stages and carried out by the Supreme Audit Agency and Non-Governmental Organizations as external government supervisors. Therefore, this can reduce the space for movement and close the gaps in the opportunities for unscrupulous government officials to commit fraud. This study strengthens the results of research which states that opportunity has no effect on fraud. The results of this study differ from the fraud hexagon theory which states that opportunity is a factor that can encourage financial crime [10, 14].

5.1.5. The Effect of Rationalization on Fraudulent Behavior

The results of the fifth hypothesis test (H5) show the statistical t-value of the effect of rationalization on fraudulent behavior of 7.186> 1.96 and p-values 0.002 <0.05. These results state that rationalization has a significant effect on fraudulent behavior. Someone who always justifies fraud has the potential to commit fraud. Fraud perpetrators see themselves as honest people and not as perpetrators of fraud and by providing various reasons so that the fraud they commit can be accepted by other parties [7]. Using cash or organizational assets for personal purposes on the grounds of borrowing, using state assets is not a problem because no party is harmed. This is a form of statement justifying fraudsters when committing fraud. The results of this study strengthen the fraud hexagon theory, which states that rationalization is a factor that can encourage financial crime [7]. In addition, it supports research which states that rationalization has an effect on fraud [46, 48, 49].

5.1.6. The Effect of Ego on Fraudulent Behavior

The results of the sixth hypothesis test (H6) show the statistical t-value of the effect of ego on fraudulent behavior of 1.034 < 1.96 and p-values 0.302> 0.05. These results state that ego has no effect on fraudulent behavior. This result shows that the ego attitude does not always make individuals commit fraud. Every individual has a 'conscience' or in psychological theory called the 'superego' which always makes humans feel guilty when doing things that go against their conscience. Psychonalysis theory developed by Freud [50] asserts that human behavior is motivated by three forces in the

soul or subconscious, namely; id, ego, and superego [51, 52]. The superego/ conscience describes the internalized conscience that is passed down from parents or cultural figures and influences, and it feels that what is done is against accepted values. The superego reminds and controls the id and ego that fraud should not be committed because it is wrong. The results of this study corroborate the findings which states that ego has no effect on fraud [4, 10]. Selfish individuals are generally concerned about their public image, because the act of fraud can tarnish the image that the individual wants to create in the eyes of the public [36]. The results of this study are certainly different from the fraud hexagon theory which states that the ego aspect is proven to play an important role in encouraging a person to commit financial crime [7].

5.2. The Effect of Individual Morality on Fraudulent Behavior

The results of the seventh hypothesis test (H7) show that the statistical t value of the effect of individual morality on fraudulent behavior is -2.786 < 1.96 and p-values 3.206> 0.05. These results state that individual morality has no effect on fraudulent behavior. Therefore, the seventh hypothesis (H7) is rejected. These results indicate that there is no difference between individuals who have a high moral level and those who have a low moral level in fraud behavior. Many unscrupulous officials who used to look like good people (post-conventional moral level), but due to certain conditions (such as not being strong against pressure) ended up committing fraud, on the other hand, many also have a low moral level (pre-conventional) that has the potential to commit fraud but due to certain conditions (such as fear of being punished or feeling embarrassed that their good name is tarnished) finally did not commit fraud. This means that fraud behavior occurs not because of the development of a person's moral level but certain conditions that require them to commit or not commit fraud.

The results of this study strengthen the research which shows that there is no correlation between moral development and fraud behavior [53]. This result is different from the theory of moral development which explains that morals develop through three levels, namely: pre-conventional level, conventional level and post-conventional level [11, 38, 39]. The higher the moral level of the individual, the more the individual tries to avoid unethical behavior and so as not to harm many parties [13]. Low morale encourages fraud and can ultimately damage and even destroy the organization [54]. Low morality tendency to commit fraud [14]. Individual morality is a good attitude and behavior owned by someone who does not ask for compensation or selflessness [55]. Individual morality is the overall principles and values regarding the good or awareness of an employee to be responsible to an entity, the value of honesty and ethics, complying with any rules that occur within the entity [40]. Thus, the development of individual morality plays an important role in fraudulent behavior in the government environment. The government needs to strengthen the morals of each apparatus through regular integrity and anti-corruption character training so that fraud behavior can be prevented.

6. Conclusion

Some fraud cases that have occurred indicate that there are still unscrupulous state apparatus committing fraud. Therefore, it is necessary to study and analyze the factors that cause the State Civil Apparatus to commit fraud. This researcher investigates the effect of fraud hexagon and individual morality on fraudulent behavior. The results showed that aspects of the fraud hexagon such as stimulus/pressure, capability, collusion, rationalization affect fraudulent behavior, while aspects of opportunity and ego have no effect on fraudulent behavior. Individual morality has no effect on fraudulent behavior.

6.1. Implication

This study has implications for the development of fraud theory by highlighting the importance of developing individual morality in relation to fraudulent behavior. Practical implications for the government in designing and implementing strategies for fraud prevention.

6.2. Limitations and Future Research Sugestions

Limitations of this study: (a) Using a cross-section design and research focus on a specific population, namely on local governments. (b) The results of this study indicate that several aspects of the fraud hexagon and individual morality have no effect on fraudulent behavior.

6.3. Recommendations for Future Research

Recommendations for future research: (a) Develop research using a longitudinal design to establish causal relationships and develop research models in other public sector organizations. (b) Explore potential moderator or mediating factors to test the relationship between the fraud hexagon and fraudulent behavior. This is an effort to develop fraud theory.

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