FRAUD ANALYSIS IN THE MANAGEMENT OF VILLAGE FUNDS FROM THE PERSPECTIVE OF THE HEXAGON THEORY

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Abstract
This study aimed to analyze the effect of stimulus, capability, collusion, opportunity, rationalization and arrogance on fraud. This research was conducted in the Sumenep district. The number of samples in this study was 93 respondents, determined using the Slovin formula. Data collection was carried out through a questionnaire. The data analysis technique used in this study is multiple linear regression. Based on the results of the analysis, it can be seen that stimulus has a positive effect on fraud, capability hurts fraud, collusion has a positive impact on fraud, opportunity has a positive effect on fraud, rationalization has a positive impact on fraud, and arrogance has a positive effect on fraud.

Keywords: Stimulus; capability; collusion; opportunity; rationalization; arrogance; fraud.

1. INTRODUCTION
The size of the Village Fund budget received and managed by the Village Government must concern various parties to jointly supervise and manage it by applicable laws and regulations. This needs to be done because of the rampant corruption in village funds in Indonesia from 2015-2019. In 2015 village fund corruption reached 22 cases and increased to 96 points in 2018 (Novelino, 2019). The village head and village officials, as many as 214 people, were the perpetrators of village fund corruption, with a total state financial loss of IDR 107.7 billion (Novelino, 2019). Corruption in village funds impacts not optimal public services (Singit, 2013).

2019 according to the Indonesia Corruption Watch (ICW), corruption cases in the village budget sector were the highest cases handled by law enforcement officials compared to other industries. Of the 271 corruption cases that occurred, there were 46 cases in the village budget sector resulted in state losses of IDR 32.3 billion (Ramadhan, 2020). The phenomenon of village fund budget corruption that continues to emerge must be taken seriously by the government. APBDes that are corrupted and misused will negatively influence hopes of increasing community welfare and village development. Corruption is one part of the fraud.

Corruption practices occur in almost every region in Indonesia, ranging from small to very complex cases. An allegation of corruption in village funds in the Sumenep district was carried out by the village head of Errabu, Bluto sub-district (Reni, 2020). The village head of Errabu was reported for alleged misappropriation of raskin (rice assistance to the poor), village funds, and village fund allocations. From this case, the state loss is estimated at around Rp. 2 billion.

In Indonesia, fraud cases in the public sector are higher than in the private sector. Many instances of fraud have occurred in public organizations, namely government organizations (Kiswanto & Maulana, 2019). Weak governance in government is one of the causes of financial fraud, such as corruption (Nur Apandi & Pradista, 2014). Currently, one of the concerns is the village fund program. The budget for village funds is so large that it reaches billions of rupiah, intended for the welfare of the village community and for village development. This needs to be considered because it has the potential for fraud.
Various ways that can be done to detect fraud in Indonesia include using the hexagon theory. The hexagon fraud theory was first put forward by Vousinas (2019). This theory results from the development of the previous theory, namely the pentagon theory (S.C.O.R.E), which consists of Stimulus, Capability, Opportunity, Rationalization, and Ego. Then updated by adding the Collusion component. This theory argues that collusion can accidentally become a developer of fraud within organizations (Vousinas, 2019).


Vousinas (2019), in his empirical research, has not determined an exact measure of the collusion factor in fraud prevention. Thus, it opens the possibility of several measurements that can be developed in further research and still requires a broader review related to the Collusion factor. Research on factors that can influence fraud is still interesting because several previous studies have shown inconsistent results on the collusion component. Coupled with fraud cases in Indonesia throughout 2020, 46 points were in the village administration sector. With that in mind, the researcher is interested in researching the effect of fraud factors, including Stimulus Capability, Collusion, Opportunity, Rationalization, and arrogance, on fraud tendencies, using The Fraud Hexagon’s Theory Perspective. This study aims to explore and review the triggers for acts of fraud from the perspective of hexagon theory.

The theory developed by Vousinas (2019) comes from the Pentagon fraud theory, which consists of Stimulus, Capability, Opportunity, Rationalization, and Ego (S.C.O.R.E). Furthermore, Vousinas updated and adapted the idea from existing fraud cases by adding collision. This theory argues that accidental collaboration can also be one of the reasons for the emergence of fraud within an organization. Fraud perpetrators use their abilities to take advantage of other people's positions and take advantage of victims (Vousinas, 2019).

The problem that often arises when an employee decides on fraudulent behavior is pressure from the individual, the organization, and external parties. The existence of these pressures encourages an employee to make efforts to meet needs beyond his ability (Alberthc, 2012). These efforts can come from pressure (Wolfe & Hermanson, 2004). Having superior authority will increase the reporting of acts (Murphy et al., 2013). Irphani's research (2017) states that pressure positively affects fraud, which means that the greater the pressure on officials or employees, both the pressure from the individual himself, the work environment, and outside the individual, the higher the tendency to fraud. In addition, Sofyani & Pramita (2015) also found that conditions, where there is pressure to commit fraud tend to make someone act to manipulate reports. Based on this description, the hypothesis is formulated as follows.

H1: Stimulus positive effect on fraud.

Capability is the ability of employees to develop their organization and control social situations that can benefit them (Zimbelman et al., 2014). Knowledge is considered an essential element when someone commits fraud; someone may have pressure, opportunity, and rationalization. However, if the perpetrator does not have the ability, it will be difficult for him to commit fraud (Tjahjono et al., 2013).
Competence, as measured by the ability, knowledge, and attitude level, can influence the fraud that occurs (Edison et al., 2016). An accounting employee needs to have good accounting skills so that it will be an opportunity for deviations from financial statements by interested parties (Adnyani et al., 2014). Based on the description above, the hypothesis is formulated as follows.

**H2:** capability has a negative effect on fraud.

The term collusion is taken from the Latin collusion, which means secret agreement or conspiracy to commit unethical acts (Sihombing, 2019). The corrupt act may be in the form of a crime, or it may not. Because based on this theory, collusion can be proxied as an evil or unethical behavior.

CIMA or the Chartered Institute Of Management Accountants (2002) argues that companies with low ethical standards have a high risk of accounting fraud. Likewise, Wilopo (2006) stated that various accounting frauds committed by Enron, WorldCom, Xerox, and others in the USA were caused by unethical behavior by company management. Multiple studies and presentations of facts, such as those by Beaulieu & Reinstein (2010), show that unethical behavior in abusing authority and power, position, and company resources encourages management to commit accounting fraud. Based on the description above, the hypothesis is formulated as follows.

**H3:** Collusion has a positive effect on fraud.

Opportunities cause actors to freely carry out their actions driven by weak internal controls, indiscipline, weaknesses in accessing information, and apathy (Montgomery et al., 2002). The most prominent thing is in terms of internal control. Internal control that is not good will allow people to commit fraud.

Kamarudin & Ismail (2014) stated that opportunity proxied by the number of independent audit committee members has a positive and significant effect on fraudulent financial reporting. This is because the independent audit committee members are members from outside the company who have little knowledge of the company's business, and most likely, they have similar responsibilities in other companies. Thus causing ineffective supervision, which provides an opportunity to commit fraud. Supported by Septriani and Handayani's research (2018), inadequate monitoring positively affects fraudulent financial reporting. Another study also argues that if there is one person or a small group that dominates management in a company without compensation oversight, ineffective oversight of the board of commissioners, directors, and audit committees over the financial reporting process, then opens up opportunities for committing fraud (Tiffani, 2009). Based on the description above, the hypothesis is formulated as follows.

**H4:** Opportunity positive effect on fraud

Rationalization is the most challenging part to measure in fraud (Skousen et al., 2011). Rationalization is a lifestyle in a society that does not follow unifying principles; indirectly, rationalization provides a way to justify actions not by existing circumstances (Spillane, 2013). Molida (2011) states that fraud perpetrators seek rational justification to explain their actions. Research by Marliani & Jogi (2015) says that rationalization positively affects fraud. In addition, in Zulkarnai's study (2013), Wulandari & Zaky (2014) found that rationalization, as measured by organizational ethical culture, influences fraud in government.

The low organizational culture that is applied in an organization can result in a person having a great desire to commit fraud because the role of corporate culture is vital, namely as a determinant of which directions may be carried out and which may not be carried out, how to manage and allocate organizational resources and as a tool for deal with problems and
opportunities from the internal and external environment. This means the higher the rationalization, the higher the level of fraudulent behavior. Based on the description above, the hypothesis is formulated as follows.

H5: Rationalization has a positive effect on fraud.

Arrogance is a behavior of superiority and rights or greed for criminals who believe that company policies and procedures are not applied to them (Horwath, 2011). Interactions between individuals who have a specific position can affect a person's attitude in an organization. The village head, as the leader of the village government, plays a role in planning, managing, organizing, and determining the direction and goals of the organization. Thus, it is hoped that it can increase the work motivation of village officials and bring village administration to achieve accountability in managing village funds (Pramudita, 2013).

Arrogance can trigger financial statement fraud by using and exploiting their authority. Any internal control system cannot limit the actions and behavior of a CEO (Chief Executive Officer) because of their power (Siddiq et al., 2017). The results of previous research conducted by Sumbayak (2017) also found that arrogance, proxied by leadership style, influences the occurrence of fraud in government; the better the role played by the village head, the less fraud occurs in the village office. Based on the description above, the hypothesis is formulated as follows.

H6: Arrogance's positive effect on fraud

2. RESEARCH METHOD

This research is a type of quantitative research. The data in this study were obtained by distributing questionnaires via Google form to village officials. Giving a score to each statement from village officials in this study used a Likert scale which has a score of 1 to 5. The meaning of the numbers in each answer choice is: SS means Strongly Agree (Score 5), S means Agree (Score 4), N means Neutral (Score 3), TS means Disagree (Score 2), STS means Strongly Disagree (Score 1). For statements that are negative in each instrument, the opposite applies.

The population in this study are all village officials and village heads in the Sumenep district. Based on Sumenep Regent Regulation No. 8 of 2020 concerning village apparatus article 2 paragraph 1, village officials in each village have a quota of 3 people, plus the village heads in each town so that it becomes 4 people, while the number of villages in the district Sumenep as many as 330 villages. So that the total population in this study was 1320 people. The technique used to determine the sample in this study was the convenience random sampling technique because filling out the questionnaire was chosen by chance if the target respondent met. Due to the large number of research objects, the Slovin formula was used to measure the sample size. The sample size studied is as follows:

\[ n = \frac{N}{1 + (N \times e^2)} \]

Information:
- \( n \) = Number of Samples
- \( N \) = Total Population.
- \( e \) = The desired critical value (error limit) is 10%

From the formula above, the following numbers are obtained:

\[ n = 1.320 / (1 + (1.320 \times 10\%)) \]
\[ n = 1.320 / (1 + (1.320 \times 0.01)) \]
\[ n = 92.9 \text{ people} \]
\[ n = 93 \text{ (rounded)} \]
The instrument to collect data in this study is a questionnaire. The development of the questions in the questionnaire used the question model in previous research, but the researcher made adjustments according to the research object. This questionnaire is designed to measure the variables of fraud, stimulus, capability, collusion, opportunity, rationalization, and arrogance according to the specified research model.

Testing the validity of this study used the Pearson correlation coefficient, namely by calculating the correlation between the scores of each question item and the total score. If the significance value is <0.05, the thing is said to be valid (α=5%) (Hair et al., 2010). The validity test results for each question item show a significance value of 0.000 <0.05. So it can be concluded that all question items are declared valid. Reliability is a way of testing how consistent the concept of the measuring instrument is. Reliability can show the reliability of measurement (Juliansyah, 2014). A construct is said to be reliable if it gives Cronbach's Alpha > 0.6 (Eisingerich & Rubera, 2010). It is known that the Cronbach's Alpha value of the stimulus variable is 0.905> 0.600, the capability is 0.967> 0.600, collusion is 0.964> 0.600, the opportunity is 0.944> 0.600, rationalization is 0.950> 0.600, arrogance is 0.978> 0.600, and fraud is 0.946> 0.600. So from the test results, it can be concluded that all variables are declared reliable.

In this study, the normality test used the One-Sample Kolmogorov-Smirnov test, with the results showing that the assumed significance value was 0.148>0.05, which means that the data is normally distributed. Then based on multicollinearity testing, it is known that the stimulus, capability, collusion, opportunity, rationalization, and arrogance variables have VIF values <10. So it can be concluded that these results show no multicollinearity. The results of the heteroscedasticity test showed a sig. stimulus variable 0.594>0.05, capability 0.800>0.05, collusion 0.121>0.05, opportunity 0.384>0.05, rationalization 0.787>0.05 and arrogance 0.958>0.05. So it can be concluded that there is no heteroscedasticity.

Testing the hypothesis in this study uses multiple linear regression analysis due to more than one independent variable. Multiple linear regression analysis was performed to examine the causal relationship between the independent and dependent variables. To prove the hypothesis, researchers used the F-test and t-test. The equation used in this study is as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon \]

Information:
- \( Y \): Fraud
- \( \alpha \): Constant
- \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 \): Regression coefficient
- \( X_1 \): Stimulus
- \( X_2 \): Capability
- \( X_3 \): Collusion
- \( X_4 \): Opportunity
- \( X_5 \): Rationalization
- \( X_6 \): Arrogance
- \( \varepsilon \): Another influencing variable

3. RESULTS AND DISCUSSION
3.1 Frequency distribution

Based on the results of the frequency distribution, fraud the majority of village officials in Sumenep Regency are in the high category. This is because village officials consider that in
carrying out their work, they have recorded fictitious costs (transportation or other needs). One stimulus (pressure) the majority of village officials are in the high category. This happens because there is pressure from the family to meet their needs and there is a feeling of deficiency with what they get while working. The capability of village officials in the Sumenep Regency is mainly in the high category. This is because village officials can build positive working relationships with all employees.

The collusion of village officials in the Sumenep district is mostly in the high category. This happens because, in the agency where they work, it is normal to use the office's internet network excessively for personal gain. For opportunity, the majority are in a low category. This is indicated by adequate supporting tools for various transactions and the presentation of financial statements, such as hardware provided by the village government. The rationalization of the majority of village officials is in a low category. This is because they feel comfortable with the current state of the organization. Whereas arrogance, the majority of village officials are in the high class. This is because they think that their superiors do not give freedom to their subordinates to determine for themselves the method or technique of carrying out a good job.

3.2 Multiple linear regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>t count</th>
<th>Say</th>
<th>Is</th>
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<tbody>
<tr>
<td>Stimulus</td>
<td>0.228</td>
<td>2.538</td>
<td>0.013</td>
<td>Significant</td>
</tr>
<tr>
<td>Capability</td>
<td>-0.166</td>
<td>2.031</td>
<td>0.045</td>
<td>Significant</td>
</tr>
<tr>
<td>Collusion</td>
<td>0.249</td>
<td>2.513</td>
<td>0.014</td>
<td>Significant</td>
</tr>
<tr>
<td>Opportunity</td>
<td>0.153</td>
<td>1.993</td>
<td>0.049</td>
<td>Significant</td>
</tr>
<tr>
<td>Rationalization</td>
<td>0.190</td>
<td>2.334</td>
<td>0.022</td>
<td>Significant</td>
</tr>
<tr>
<td>Arrogance</td>
<td>0.281</td>
<td>2.796</td>
<td>0.006</td>
<td>Significant</td>
</tr>
<tr>
<td>Constant</td>
<td>8.991</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F count</td>
<td>15.128</td>
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</tr>
<tr>
<td>Source: Processed data, 2023</td>
<td></td>
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</tr>
</tbody>
</table>

Table 1 shows that the variables stimulus, collusion, opportunity, rationalization, and arrogance positively affect fraud. Meanwhile, capability has a negative effect on fraud.

Based on the results of data analysis in Table 2, it is known that the R square value of 0.513 or 51.3% is the contribution of stimulus, capability, collusion, opportunity, rationalization, and arrogance to fraud. This means that fraud that occurred in the management of village funds by village officials in the Sumenep district was caused by a simultaneous stimulus, capability, collusion, opportunity, rationalization, and arrogance of 51.3%. While the remaining 48.7% is a fraud factor caused by other variables not examined or outside this study.

<table>
<thead>
<tr>
<th>Del</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.717d</td>
<td>0.513</td>
<td>0.480</td>
<td>4.857</td>
</tr>
</tbody>
</table>

a. Predictors: (constant), Arrogance (6), Opportunity (4), Rationalization (5), Capability (2), Stimulus (1), collusion (3)

Source: Processed data, 2023
3.3 Discussion

The results of the first hypothesis test prove that the stimulus positively impacts fraud. According to Albrecht et al. (2012), the greater the pressure someone feels, the greater the possibility of fraud. Village officials in the Sumenep district consider pressure from the family to meet their needs and a lack of what they earn while working as the most significant factors that encourage village officials to commit fraud against managing village funds. Another factor that also causes village officials to decide to behave fraudulently is because they have a significant enough debt, so there is pressure to pay it off even by cheating. External parties, such as orders from superiors and pressure from colleagues, are other things that also influence village officials to commit fraudulent financial reports.

Schuchter & Levi's Research (2013); Faradiza (2019); Said et al. (2018); Pamungkas and Utomo (2018); Rustiarini et al. (2019); Omukaga (2019); Zuberi and Mzenzi (2019); Apriani (2020) states that the higher a person feels pressure, the more likely it is for fraud to occur. The results of this study support the hexagon theory and several previous studies that someone with high pressure will enable him to commit fraud, even though he does not want to do it, but with stress or anxiety from various factors, fraud will be an alternative choice.

The results of the second hypothesis test prove that capability harms fraud. The excellent ability possessed by village officials will not lead to fraud. Adnyani et al. (2014) stated that if an accounting employee does not have good accounting skills, it will be an opportunity for the parties concerned to carry out financial reporting deviations. Good ability in a person will not be easily used or intervened by certain parties who want an act of fraud.

Village officials in the Sumenep district see that the possibility of fraud can be minimized by building positive working relationships between all village officials and with the knowledge possessed by village officials so that this can close the case of fraud in village fund management. Research by Basiruddin & Amin (2014) and Desviana et al., (2020) argues that a person's adequate ability can prevent fraud so that fraud can be reduced. This capability is significant for village officials; with this ability, it is hoped that it can prevent fraud so that acts of fraud in village funds can be reduced. The results of this study support the hexagon theory and previous research, which means that the higher the capability possessed by village officials, the less likely it is for fraud to occur.

The results of the third hypothesis test prove that collusion positively impacts fraud. Not a few acts of fraud and crime occur due to collaboration (Vousinas, 2019). Village officials in the Sumenep district feel that in the agency where they work, it is customary to use the office’s internet network excessively for personal gain. This shows unethical behavior from village officials, where unethical behavior is used as a proxy for the collusion variable. Unethical behavior can be divided into several forms, including abuse of authority, power, position, and human resources, which can encourage management to commit fraud. These findings align with the hexagon theory, which reveals that the higher the kilos of village officials, the more likely fraud will occur.

Wilopo (2006) stated that various accounting frauds committed by Enron, WorldCom, Xerox, and others in the USA were caused by unethical behavior by company management. Sandra and Hartina (2017) and Huefner (2010) reveal that high collusion in administration can enable fraud to occur because they collaborate with other parties to carry out fraudulent acts. This factor is the most difficult to detect because they protect each other from one party to another.
The results of the fourth hypothesis test prove that opportunity positively impacts fraud. Conditions that can encourage someone to commit fraud are the absence of good controls, so they feel there is an opportunity to commit fraud without being detected (Mulya et al., 2019). Village officials in the Sumenep district assess that providing adequate supporting tools for various transactions and presenting financial reports, such as hardware, can close the opportunity for someone to commit fraud against village funds. This can happen because of the sound internal control system applied to the village government. These findings support the hexagon theory, which states that the higher the opportunity that village officials have, the greater the incidence of fraud.

The results of this study are in line with several studies conducted by Huefner (2010); Faradiza (2019), Said et al. (2018); Rustiarini et al. (2019); Omukaga (2019); Apriani (2020) which shows that the more opportunities you get, the greater the possibility of fraud. The slightest opportunity can be a loophole for someone to commit fraud. So with that in mind, the village government may not give the most minor loophole for fraud to occur by building a clear organizational structure, conducting an analysis of various risks, safeguarding its assets, and reviewing and following up on any unusual findings. According to Tjahjono (2013), opportunities can occur because of two things, namely (1) people who have in-depth knowledge about organizational weaknesses and existing systems will find it easier to commit fraud and (2) less effective controls because they can still provide opportunities for employees to commit fraud.

The results of the fifth hypothesis test prove that rationalization has a positive impact on fraud. According to Shelton (2014), rationalization is how a person with his own mind justifies the crimes he has committed. The village officials in the Sumenep district considered that they felt comfortable with the organization’s current state; this was why there was no rationalization of village officials. In addition, innovating and taking risks, paying attention to every detail of work, being oriented towards results, individuals, and teams, and being active in carrying out the tasks assigned to him are other factors that can prevent rationalization from occurring in the village government. This can happen if the organizational culture is applied correctly.

Several studies were conducted by Aini et al. (2017); Said et al. (2018); Rustiarini et al. (2019); Omukaga (2019); and Apriani (2020), which shows that there is a positive influence from the rationalization variable on the fraud variable. This study’s results align with the theory and several studies which reveal that the higher the rationalization that occurs, the greater the incidence of fraud.

The results of the sixth hypothesis test prove that Arrogance has a positive impact on fraud. Village officials in Sumenep Regency considered that superiors did not give freedom to subordinates to determine for themselves the method or technique of carrying out good work, meaning that village officials felt that there was an act of Arrogance in the village government. That is the highest factor so the Arrogance of village officials can occur. Superiors who do not provide sufficiently clear instructions, do not consult with subordinates, and do not involve aids in decision-making are other factors that cause Arrogance to occur in the village government environment. This can be seen from the leadership style of village officials in Sumenep Regency. These findings align with the hexagon theory, where the higher the Arrogance of village officials, the greater the incidence of fraud.

According to Bawekes et al. (2018), Arrogance is the attitude of someone who feels that there is no internal control or company wisdom that does not apply to him, and he believes that he
is not bound by these things, so he does not believe that he has committed fraud. This research is in line with Burke's study (2006); Toscano et al. (2018); Rahman (2019); Zuberi and Mzenzi (2019), whose results show that there is a positive effect of Arrogance on fraud. Someone feels neglected, arrogant, and selfish in carrying out their fraudulent actions, giving rise to high self-confidence that the person will not be caught committing fraud and will not be penalized (Aprilia, 2017).

4. CONCLUSION

Based on the research results, it can be concluded that stimulus, collusion, opportunity, rationalization, and arrogance positively affect fraud that occurs in managing village funds in the Sumenep Regency. Meanwhile, capacity has a negative effect on fraud that occurs in the management of village funds in the Sumenep Regency. This study also found that village officials who are competent and supported by adequate tools for various transactions and presentation of financial reports, such as hardware, can close the opportunity for fraud in the village government in the Sumenep district. The results from this study and the hexagon theory used can support research and provide an understanding of the influence of stimulus, capability, collusion, opportunity, rationalization, and arrogance on village fund fraud in the Sumenep district. This research can provide empirical evidence and confirm the hexagon theory of managing village funds. The limitation of this study was that it involved the village head in filling out the questionnaire. This is a consideration regarding the objectivity of the answers given to the arrogance variable as measured by leadership style because the village head evaluates himself. This research also has limitations related to the distribution of questionnaires via the Google form, which allows village officials with the same position to fill out the questionnaire so that it can impact various points of view. This is not following the target respondents, who should include all village officials, namely the village head, village secretary, village treasurer, and technical implementers.

REFERENCES


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