ORIGINAL PAPER

DOI: 10.26794/2587-5671-2023-27-2-152-161
JEL C91, H72, H83

Fraud in Public Budgeting: Evidence from Indonesia

N.W. Rustiarini
Universitas Mahasaraswati Denpasar, Denpasar, Bali, Indonesia

ABSTRACT

Fraudulent behavior of participants in the budgetary process depending on situational and individual factors is studied in this research. The situational factors included obedience pressure and opportunity. The individual factor included Machiavellianism. This study was a laboratory experiment with blended methods. The **subjects** were accounting employees in the public and private sectors of Indonesia. The **results** indicate that the authorities' pressure significantly influenced their subordinates in decision-making. This opportunity is a root cause of fraud. This research also confirmed that individuals with high Machiavellianism have more fraudulent behaviors than those with low Machiavellianism. The sensitivity test found that the proportion of female participants did not affect the primary outcome. Similar to gender analysis, there was no difference in fraudulent behaviors between the accounting employees in the Indonesian public sector and those in the private sector. The Government understand the factors causing the employees' fraudulent behaviors in budgeting. State institution will strive to maintain public trust and resources efficiently and effectively.

Keywords: budgeting; fraud; Indonesia; public sector

For citation: **Rustiarini N.W. Fraud in public budgeting: Evidence from Indonesia. *Finance: Theory and Practice*. 2023;27(2):152-161. DOI: 10.26794/2587-5671-2023-27-2-152-161**

INTRODUCTION

Budgeting in the public sector is a complicated and long-term process [1]. Budgeting is a forum to meet the power of budget actors with different interests. The budget impacts the political bargaining process for legitimization, system maintenance, or organization control. These interactions are susceptible to causing dysfunctional behavior, such as fraud.

Fraud in the budgeting process often occurs in developing countries, including Indonesia. The misuse of the government budget is considered a culture. Budget documents are also immediately revised and changed several times within one budget year. The revised budget process allows the budget actors to commit fraud. In terms of supervision, the executive commonly made collusion with the legislative and even with the budget inspectors [1]. However, several studies examining government budgeting often ignore the processes and roles of the actors involved. Compared to the budgeting studies conducted in western countries, only limited studies have examined fraud in developing countries, particularly Indonesia.

Based on these phenomena, academicians emphasize the importance of research on the budgeting process. Studies on the budget process require a deep understanding of factors influencing the decisions made in budget allocation. Some previous studies revealed that the legislature had more role in the budgeting process [2], while only limited studies analyzed the behavior of executives (bureaucrats). Bureaucrats will involve fraud when perceiving fraud as "normal" and internalized within the organizational and administrative structures [1, 3]. This study combined situational and individual factors to understand the behavior of budget actors. Situational factors will affect an individual's probability of reacting to an event, while an individual's characteristic will affect the reaction quality.

This research aimed to investigate the influence of situational and individual factors on fraudulent behavior in the public budgeting process. Obedience pressure and opportunity are the foundation of the fraud triangle concept. The theoretical frameworks included both Obedience and Routine Activity Theories. Meanwhile, individual factors were viewed by discussing their Machiavellian personality as Dark Triad. Individuals with Machiavellian personalities showed their unique characteristics [4]. Individuals

with Machiavellian personalities will be stronger when interacting with certain situations or environments [5]. Nevertheless, the studies on individuals with Machiavellian personalities in the public (nonprofit) sector still needed to be completed.

The results indicated that both situational and individual factors influenced the behavior of budget actors. In high obedience pressure conditions, fraudulent behavior was more likely experienced by those with higher opportunities than those with lower opportunities. However, in high or low opportunity conditions, the fraudulent behavior of those with high obedience pressure is not different from those with low obedience pressure. In high opportunity conditions, the fraudulent behavior of those receiving high or low pressure was equally high. This result confirmed that individuals tended to focus on opportunities to commit fraud instead of obedience pressure from their superiors. Therefore, opportunity is one main factor increasing an individual to commit fraud, while obedience pressure is only a trigger. This study also supported some previous studies that individuals with high Machiavellianism were more likely to follow their superiors' instructions and take the opportunities to commit fraud.

This study has both theoretical and practical contributions. Theoretically, this study has two contributions to the accounting field: first, to the literature on budget-making by expanding previous results, mainly related to the budget actors' fraudulent behavior in the budgeting process, and second, to the accounting ethics literature by studying individuals with Machiavellian traits to predict the fraudulent behaviors. These individual characteristics interacted with the situational factors influencing the budget actors' behavior. In practical terms, the government should effectively and efficiently minimize these factors to the public resources.

The following section discusses the literature review, hypothesis formulation, research method, and discussion. The last section presented the research conclusions.

LITERATURE REVIEW AND HYPOTHESIS

Obedience Pressure and Fraudulent Possibility

Obedience pressure is one predictor of fraudulent behaviors. The obedience theory explains that an individual influences others' behavior through authority to control subordinates. The superiors collaborated to commit fraud for the organization's interests. Thus, honest or law-abiding individuals commit fraud when pressured by other individuals with authorities [6]. In the public budgeting process, the intervention of superiors to their subordinates, usually occurs in top-down budgeting. A public sector organization with a structure and hierarchy of power confirmed that those with legal power should obey the orders. Initially, the fraud might be temporary, yes, acceptable, and expected. Thus, fraudulent behaviors were considered "normal" [1]. The obedience pressure has become an initial mechanism of an organization's fraudulent behavior. This fact supported the previous studies mentioning that budget misreporting occurred more often in authoritative budgeting [7]. Thus, the research hypotheses were formulated as follows:

H1: Fraud possibility is higher when an individual is given higher than low pressure.

Opportunity and Fraudulent Possibility

Opportunity refers to an organization's situation, which allows a fraud to happen. Routine Activity Theory states that fraud happens due to the conditions potentially used by the actors to commit fraud [8]. According to budgeting theory, a budget results from a routine, patterned, and interdependent budgeting process. Budgeting activity has a stable cyclic pattern subject to a strict time limit. The potential actors use these conditions to commit fraud. Therefore, the environment is essential to influence an individual's behavior [1].

The government budget, which lacks control over the program plans in public budgeting, enabled the budget actors to mark up the budget. These situations became worse since the government did not clearly describe the programs. Thus, it took a lot of work to estimate the budget [9] appropriately. The frequently revised budget has been one-factor enabling individuals to commit fraud. Through supervision, there needed to be an integrated inspection of the program plans and realizations, program evaluation, and budget evaluation in the following year. External supervision has been usually a post-financial audit, while internal supervision was an audit only before

post-audit or when a fraud case occurred. The punishment given to the convicted had no deterrent effect. Thus, the formulated hypothesis is:

H2: Fraud possibility is higher when an individual has a high than low opportunity.

Machiavellianism and Fraudulent Possibility

Machiavellianism is classified into two categories, high and low Machiavellianism. An individual with high Machiavellianism has goal-oriented characteristics [10]. Various goals encouraging individuals to participate in fraudulent activities include bonuses, salary increases, promotions, etc. These traits increased after interacting situational factors, e.g., pressure from an organization's superior. High Machiavellianism has pressure and follows the superior's instruction under pressure conditions. An individual's desire to get higher status was under the control of others, causing them to believe that manipulation was one most appropriate mechanisms to achieve the goal [4, 5]. Therefore, high Machiavellianism was more willing to involve fraud.

H3: Fraud probability is higher in individuals with high Machiavellianism than those with low Machiavellianism.

An individual with high Machiavellianism would obey the superiors' pressure to do the budgetary slack. They had more positive attitudes towards budgeting activities to get significant resources. They would be unethical if they gained personally benefit from such actions [10]. The main reason was considering the budgeting process, which provided something to their intention. This condition was in contrast to those with low Machiavellianism. They would not change their behavior in such situations even though they were pressured [11]. Thus, the formulated hypothesis is:

H4: Machiavellianism moderates obedience pressure and fraud probability.

Routine activity theory emphasizes that rational individuals, including those with high Machiavellianism, will be interested in profit opportunities. Those individuals will show friendly and cooperative behaviors as manipulative actions or strategies to utilize the situations or others to achieve their personal goals [5]. Individuals with high prefer to work with others when earning more money. They will take the opportunities to maximize their benefits, mostly when the committed fraud is least probably known. They also tended to look for new opportunities to improve their positions. Individuals will be more interested in fraud when situational factors facilitate their behaviors [10]. Thus, the formulated hypothesis is:

H5: Machiavellianism moderates opportunity and fraud probability.

METHODOLOGY

Research Subjects

A total of 96 subjects participated in this research. The subjects were of the accounting employees in Indonesia's public and private sectors. Subjects were voluntary participants attending the training events to prepare their working plans and budgets. Before collecting the data, the subjects filled out the informed consent as evidence of approval for these experimental actions. The participants were also offered to have the door prizes drawn after completing the task [12]. Seventeen men (17.71%) and 79 women (82.2%) participated in this experiment. Most participants had 5–10 years of working experience (57.30%) and worked in the private sector (60.41%).

Research Design

This research was considered a laboratory experiment with a 2×2×2 mixed design. The experimental matrix consisted of eight groups. Four groups had subjects with high Machiavellianism, while the others had low Machiavellianism. The subjects were randomized into groups to ensure that the group subject conditions were equivalent. Each subject received two high/low obedience pressure treatments and high/low opportunity. The subjects under high obedience pressure and high opportunity became the experimental group members, while those with low obedience pressure and low opportunity were the control group members. The number of participants in Groups 1 and 4 was equal, with each consisting of 17 people. Meanwhile, the number of participants in Groups 2 and 3 were also equal, with each consisting of 15 people. Furthermore, the number of participants in groups 5, 6, 7, and 8 were equal, with each consisting of

Table 1

Experiment Matrix

Obedience Pressure	High Machiavellianism		Low Machiavellianism	
	Opportunity		Opportunity	
	High	Low	High	Low
High	Group 1 *N* = 17	Group 2 *N* = 15	Group 5 *N* = 32	Group 6 *N* = 32
Low	Group 3 *N* = 15	Group 4 *N* = 17	Group 7 *N* = 32	Group 8 *N* = 32

Source: Designed by the researchers.

32 people. This figure indicates that the number of participants with high Machiavellianism was lower than those with low Machiavellianism. The experimental design matrix is shown in *Table 1*.

Participants read a short scene during the experiments and assumed that the researchers were also in the scenario situations. The advantage of using a short, simple, and easy scenario was clearly describing and focusing on the tasks and questions related to the given cases. The case scenarios referred to the previous instruments [1, 13] and were modified according to Indonesia's actual conditions' public budgeting process. Interviews were conducted with several budgeting practitioners in the Development Planning Agency at Sub-National Level to make relevant scenarios.

Operational Definition and Measurement of Variables

The dependent variable was fraudulent behavior. The participants were given scenarios illustrating the budgeting process. The subjects acted as the budget actors drafting the working and budget planning and preparing a budget for the upcoming year. One of the working plans outlined in the working and budget planning was a cattle development program estimated at IDR 100,000,000 (around US$ 7.150). At the meeting on budget revision, this program obtained additional funds relevant to one of the regional government's flagship programs. The subjects of colleagues in the procurement department conducted a re-survey and estimated an additional fund of IDR 50,000,000. Therefore, the subjects had to revise the budget to IDR 150,000,000. The Head of the Regional Working Unit asked the subjects to mark up the prices in this condition. If the participants had to obey the superior's instructions to mark up the budget, the participants were considered inclined to commit fraud, and vice versa. The participants' responses were measured on a seven-point scale, with the tendency from strongly disagree to agree.

The independent variables were obedience, pressure, opportunity, and Machiavellianism. The obedience pressure conditions consisted of two schemes: high and low. This study operationalized the superior figures through role-playing using "Heads of Regional Work", instructing each participant to mark the budget. This method showed that the instruction was not a part of the planned experiment, yet the incoming instruction would benefit the parties involved in public budgeting. In a high obedience pressure scenario, the superiors provided direct instructions to mark the budget. Due to the low obedience pressure scenario, the superiors did not force the participants to mark up the prices, yet entirely gave the participants authority without any sanction.

The second independent variable was an opportunity. This information was presented in high and low opportunities. A high opportunity scenario was illustrated as a conducive working environment to fraud — organizations did not have to describe the budget clearly. There was no integrated budget supervision or decisive action against non-compliant budget execution. The low opportunity scenario was illustrated with a working environment contrasting with high opportunity conditions.

The third independent variable was Machiavellianism, a personality that tended to be selfish, manipulative, and aggressive.

Machiavellianism was measured with the Mach IV Scale, as outlined in 20 statement items [14]. The participants' responses were measured with a seven-point scale, 1 = "Strongly Disagree" to 7 = "Strongly Agree". The Machiavellianism score was calculated by accumulating the participants' scores, then added with a constant value of 20. The individuals were called having high Machiavellianism when the Mach score was above 100 and having low Machiavellianism when the Mach score was below 100. 100 is Mach's neutral score. The questionnaire has passed the validity and reliability tests. The validity test results showed that the Pearson Correlation value ranged between 0.311–0.674 > 0.03. Meanwhile, the reliability test results showed that the Cronbach Alpha value was 0.782 ⩾ 0.70.

Procedures

The participants answered the questionnaires manually during the experiments. The experiments consisted of two sessions. In the first session, four groups of participants worked with two types of modules. Those four groups returned to work on the other two modules in the next session, separated from the first. One experimental session lasted for 30 minutes. The experimental procedures were as follows:

1. The participants entered the room and were asked to complete a Machiavellian questionnaire. The committee calculated the Machiavellian scores and grouped them into high and low Machiavellianism.

2. The participants were randomized with lottery numbers into eight groups based on the Machiavellian scores during the event. The participants then sat according to the number to facilitate the experimenters in distributing the modules-the first information related to the participant's working environment. The superiors asked the participants to assume being in the situation described in the scenario.

3. Next, the presenter introduced the Heads of Regional Work as the superiors to the participants. The presenter asked the participants to follow the instructions from the Heads of Regional Work.

4. In the module containing a high obedience pressure scenario, the superiors asked the participants to mark the budget and mention the values used. The superiors also stated firmly that they would give sanction (mutation) if the participants did not follow the instructions. Meanwhile, in a low obedience pressure scenario, the superiors instructed the same information without any pressure. The superiors used their full authority to the subordinates to use reasonable values. The superiors also asked the participants to adjust their actions to the opportunities provided in the related institutions.

5. The participants were then asked to determine one answer to complete the manipulation-check questions. The superiors asked the participants to collect the modules after completing the questions. The second session was similar to the first one.

The participants were debriefed and told that the activities would be beneficial for the participants after completing all sessions. The debriefing aimed to help the participants return to the situations and emotions experienced before the pre-manipulation conditions.

RESULTS AND DISCUSSION

Manipulation Check

The participants will pass the manipulation check if they correctly answer two of three questions. At the beginning of the experiment, 105 participants were involved. Only 96 participants (91.43%) were entitled to participate in further tests.

Group Descriptive Statistics

Table 2 shows the average values and deviation standard of dependent variables and the number of participants in eight groups.

Hypotheses Testing Results

Hypothesis 1a predicts that fraudulent behavior is lower in high obedience pressure of individuals with low opportunity than those with high opportunity. Hypothesis 1b predicts that fraudulent behavior is higher in low obedience pressure of individuals with high opportunity than those with low opportunity. *Table 3* shows that fraudulent behavior was higher in high obedience pressure of individuals with high opportunity than those with low opportunity (t = –6.27, p = 0.00). Similarly, in low obedience pressure, individuals with high opportunity had

Table 2

Dependent Variable Descriptive Statistics

Obedience Pressure	High Machiavellianism		Low Machiavellianism	
	Opportunity		Opportunity	
	High	Low	High	Low
High	Group 1 Mean: 5.24 SD: 0.75	Group 2 Mean: 3.2 SD: 1.52	Group 5 Mean: 3.71 SD: 1.33	Group 6 Mean: 2.19 SD: 1.15
Low	Group 3 Mean: 4.13 SD: 1.81	Group 4 Mean: 2.76 SD: 1.3	Group 7 Mean: 3.37 SD: 1.86	Group 8 Mean: 1.97 SD: 0.99

Source: Calculation result.

Table 3

Results of the Fraudulent Behaviour Difference Test (Obedience Pressure and Opportunity)

Hypothesis	Group	Treatment	Mean	*t* value	Sig (2-tailed)
Condition: High obedience pressure					
1a	Group 2, 6 – Group 1, 5	Low opportunity High opportunity	2.51 4.24	–6.27	0.00
Condition: Low obedience pressure					
1b	Group 3, 7 – Group 4, 8	High opportunity Low opportunity	3.62 2.24	4.31	0.00
Condition: High Opportunity					
2a	Group 3, 7 – Group 1, 5	Low obedience pressure-High obedience pressure	3.62 4.24	–1.88	0.06
Condition: Low opportunity					
2b	Group 2, 6 – Group 4, 8	High obedience pressure-Low obedience pressure	2.51 2.24	1.03	0.30

Source: Calculation result.

higher fraudulent behavior than those with low opportunity (t = 4.31, p = 0.00). The results supported hypotheses 1a and 1b.

Hypothesis 2a predicts that in high opportunity, fraudulent behavior is lower in individuals with low obedience pressure than in individuals with high obedience pressure. Hypothesis 2b predicts that in low opportunity, fraudulent behavior is higher in individuals with high obedience pressure than in individuals with low obedience pressure. The results in *Table 3* also show that the fraudulent behavior of individuals with high obedience pressure in high opportunity was not different from individuals with low obedience pressure (t = –1.88, p = 0.06). The results were similar in low opportunity (t = 1.03, p = 0.30). Fraudulent behavior in high and low pressure was equally high in high opportunity. Although this empirical evidence did not support hypotheses 2a and 2b, these facts confirmed that opportunity was one key element in fraudulent behaviors.

Hypothesis 3a predicts that fraudulent behavior is lower in high obedience pressure of individuals with low Machiavellianism than those with high Machiavellianism. Hypothesis 3b states that fraudulent behavior is higher in individuals with high Machiavellianism than those with low Machiavellianism

Table 4

Results of Fraudulent Behaviour Difference Test (Machiavellianism)

Hypothesis	Group	Treatment	Mean	*t* value	Sig (2-tailed)
Condition: High Obedience Pressure					
3a	Group 5, 6 – Group 1, 2	Low Machiavellianism High Machiavellianism	2.95 4.28	–4.13	0.00
Condition: Low Obedience Pressure					
3b	Group 3, 4 – Group 7, 8	High Machiavellianism Low Machiavellianism	2.67 3.41	2.05	0.04
Condition: High Opportunity					
3c	Group 5, 7 – Group 1, 3	Low Machiavellianism High Machiavellianism	3.55 4.72	–3.47	0.00
Condition: Low Opportunity					
3d	Group 2, 4 – Group 6, 8	High Machiavellianism Low Machiavellianism	2.97 2.08	3.16	0.00

Source: Calculation result.

in low obedience pressure. *Table 4* shows that the results supported hypothesis 3a (t = –4.13, p = 0.00) and hypothesis 3b (t = 2.05, p = 0.04).

Hypothesis H3c predicts that in high opportunity, fraudulent behavior is lower in individuals with low Machiavellianism than those with high Machiavellianism. The H3d hypothesis states that fraudulent behavior is higher in individuals with high Machiavellianism than those with low Machiavellianism in low opportunity. The results supported hypothesis 3c (t = –3.47, p = 0.00) and hypothesis 3d (t = 3.16, p = 0.00) presented in *Table 4*.

DISCUSSION

The test results on hypotheses 1a and 1b revealed that in high obedience pressure and high opportunity, individuals with high opportunity had higher fraudulent behavior than those with low opportunity. This result indicated that a top-down governmental budgeting process enables superiors to instruct subordinates to mark up the budget for various objectives, such as obtaining personal benefits, maintaining budget allocations for the upcoming year, or accommodating other activities related to budget politics [9]. The form of public sector organizations maintaining the structure and hierarchy of power confirmed to obey the instructions. Some reasons making it difficult for a subordinate to disobey the instructions included: 1) no courage to disobey the authorities even in extreme cases, 2) thinking that the related individual was only an agent, so the responsibilities were handed to those having the authority, 3) having an obligation to return the favor, such as receiving payment or wage, so that the related individual had to obey the orders [6]. In public sector organizations, obedience is based on the institution's social norms and authorities' behavior [15]. In this case, the existence of a "tone at the top" can encourage or prevent the occurrence of unethical behavior. These research results were consistent with the previous studies that misreporting of budgets occurred more often in authoritative budgeting [7].

In high opportunity, the test results of hypotheses 2a and 2b showed that the fraudulent behavior of individuals with high obedience pressure was not different from those with low obedience pressure, similarly in low opportunity. In high opportunity, the fraudulent behavior of individuals in both high and low pressure is equally high. These facts confirmed that opportunity was the critical element of fraudulent behavior. Individuals with high opportunity tended to commit fraud even though they did not get high pressure from their superiors. A high opportunity

Table 5

ANCOVA Analysis

Source	Sum of Square	df	Mean Square	F	Sig
Corrected model	192.540	9	20.282	10.769	0.000
Intercept	73.234	1	73.234	38.885	0.000
Obedience pressure	11.727	1	11.727	6.226	0.013
Opportunity	106.957	1	106.957	56.790	0.000
Machiavellian trait	43.106	1	43.106	22.999	0.000
Gender	3.419	1	3.419	1.816	0.180
Institution	2.027	1	2.027	1.076	0.301
Error	342.772	182	1.883		
Total	2438.000	192			
Corrected Total	525.313	191			

Source: Calculation result.

was a chance to attract potential actors to commit fraud. Opportunity is the primary condition, while high pressure is only a trigger intensifying fraudulent behavior. In low opportunity, the individuals felt they were hindered from committing fraud if the possibility of being detected was high enough or had solid legal sanctions. Individuals preferred to disobey their superiors even if given high pressure. Thus, in high or low opportunity, the fraudulent behavior of individuals in high or low obedience pressure showed no differences [1]. These conditions supported the Routine Activity Theory, stating that the occurrence of a crime depends on opportunity.

The test results of hypotheses 3a, 3b, 3c, and 3d showed that fraudulent behavior was higher in individuals with high Machiavellianism than those with low Machiavellianism, both in high obedience pressure and high opportunity. Machiavellianism was perceived to have manipulative properties to achieve the desired goals [10]. The superiors more easily persuaded individuals with high Machiavellianism to act in unethical ways as long as they knew the personal benefits gained from these actions [16]. These results were consistent with their opportunistic and calculative nature in decision-making. Conversely, individuals with low Machiavellianism will keep their behaviors the same following these conditions even if their superiors give into intense pressure. These findings were consistent with the Machiavellian literature mentioning that organizational context influences individuals' Machiavellianism. Individuals with high Machiavellianism will take the opportunity to work with others to earn more money or maximize their profits [16]. Individuals can quickly put their morality aside to violate norms. Most experts in this field agree that one of the most distinctive features of Machiavellian traits is the desire to fulfill extrinsic motivations, such as achievement, financial success, status, rewards, or prizes [17].

A SENSITIVITY TEST

This research also conducted a sensitivity test using ANCOVA with gender as a covariate to examine if gender affected the results. Table 5 showed that gender had a probability value lower than 0.05. The proportion imbalance of female participants (82.29%) did not affect the primary outcomes of this research. Both male and female subjects committed fraud, especially obedience pressure and opportunity. Similar to gender analysis, this research found no difference in fraudulent behavior between accounting employees in both public and private sectors. *Table 5* shows a significance value of lower than 0.05. This result indicated that although both institutions had various organizational structural forms, their employees' attitudes and

behaviors were not significantly different. Both tended to commit fraud when under high obedience pressure and high opportunity.

CONCLUSION

The budget actors' behaviors are one essential problem in the public budgeting process. This research showed that situational and individual factors influenced by the employees' involvement in the fraud. The results also had theoretical implications in which opportunity was one central element of the Fraud Triangle presented in each fraud, while pressure was one trigger for committing fraud. This finding confirmed that some fraudsters did not need the pressure to commit fraud but opportunity, which is a high probability of taking action with a low risk of being caught. Thus, Obedience Theory was only relevant to explain fraudulent behavior if individuals were in a permissive organizational environment against fraudulent activities. The crucial findings showed that opportunity was considered the "root cause" of fraud. Machiavellianism also had an essential role in the fraud. Individuals with high Machiavellianism were more susceptible to fraudulent behaviors than those with low Machiavellianism. These findings also indicated that Machiavellianism interacted with the situational factors intensifying the individuals' fraudulent behaviors.

The practical implication of this study is that the government will understand the factors causing the employees' fraudulent behaviors in budgeting. The government may impede the widespread fraud cases by strengthening organizational governance. These results also indicated that the budget act personality was an organizational consideration in preparing the budgeting staff. In public sector organizations, individuals with high Machiavellianism were less committed to prioritizing other people's interests. Those should fill the position of budget compilers with low Machiavellianism. The related organizations will effectively and efficiently maintain public trust and use resources.

This research has some limitations. First, the research on fraudulent behaviors could not be separated from social desirability bias, such as a person's tendency to answer questions in such a way as to make him look positively by following the norms in society. Many studies on fraudulent behaviors asked the participants to do things in certain situations. The challenge of this method was due to the participant's accuracy in providing information or answers to the related conditions faced. Although some participants were given honest answers, the participants commonly responded to the cases in such a way as to make them appear to have a socially acceptable character in the related community. The researchers tried to anticipate these by convincing the participants that their answers in these experiments were confidential. Further research is recommended to conduct the social desirability tests using the Marlowe-Crowne Social Desirability Scales. This questionnaire has ten statement items to determine whether participants answered honestly or tried to "look good". Second, this experiment only involved individual decisions, while the budgeting processes involved many parties (groups). Although it was expected that each budget compiler had high integrity and professionalism in performing their work, it was undeniable that individual interactions in groups could affect an individual's behavior. Next, the researchers can study the differences in fraudulent behaviors made by the individual and group contexts. The decision-making in groups will undoubtedly produce different behaviors.

REFERENCES

1. Rustiarini N.W., Sutrisno S., Nurkholis N., Andayani W. Fraud triangle in public procurement: Evidence from Indonesia. *Journal of Financial Crime*. 2019;26(4):951–968. DOI: 10.1108/JFC-11–2018–0121
2. Raudla R. Politicians' use of performance information in the budget process. *Public Money & Management*. 2022;42(3):144–151. DOI: 10.1080/09540962.2021.1989779
3. Maulidi A. Storytelling of bureaucratic white-collar crimes in Indonesia: Is it a matter of reciprocal norm? *Journal of Financial Crime*. 2020;27(2):573–586. DOI: 10.1108/JFC-07–2019–0087
4. Harrison A., Summers J., Mennecke B. The effects of the dark triad on unethical behavior. *Journal of Business Ethics*. 2018;153(1):53–77. DOI: 10.1007/s10551–016–3368–3

5. Mutschmann M., Hasso T., Pelster M. Dark triad managerial personality and financial reporting manipulation. *Journal of Business Ethics*. 2022;181(3):763–788. DOI: 10.1007/s10551–021–04959–1
6. Rustiarini N.W., Yuesti A., Gama A.W.S. Public accounting profession and fraud detection responsibility. *Journal of Financial Crime*. 2021;28(2):613–627. DOI: 10.1108/JFC-07–2020–0140
7. Gallani S., Krishnan R., Marinich E., Shields M.D. Budgeting, psychological contracts, and budgetary misreporting. *Management Science*. 2019;65(6):2924–2945. DOI: 10.1287/mnsc.2018.3067
8. Luo X.R., Li H., Hu Q., Xu H. Why individual employees commit malicious computer abuse: A routine activity theory perspective. *Journal of the Association for Information Systems*. 2020;21(6):5–25. DOI: 10.17705/1jais.00646
9. Rustiarini N.W., Sutrisno T., Nurkholis N., Andayani W. Why people commit public procurement fraud? The fraud diamond view. *Journal of Public Procurement*. 2019;19(4):345–362. DOI: 10.1108/JOPP-02–2019–0012
10. Triantoro H.D., Utami I., Joseph C. Whistleblowing system, Machiavellian personality, fraud intention: An experimental study. *Journal of Financial Crime*. 2020;27(1):202–216. DOI: 10.1108/JFC-01–2019–0003
11. Utami I., Wijono S., Noviyanti S., Mohamed N. Fraud diamond, Machiavellianism, and fraud intention. *International Journal of Ethics and Systems*. 2019;35(4):531–544. DOI: 10.1108/IJOES-02–2019–0042
12. Madein A., Sholihin M. The impact of social and environmental information on managers' decisions: Experimental evidence from Indonesia. *Asian Review of Accounting*. 2015;23(2):156–169. DOI: 10.1108/ARA-11–2013–0074
13. Puspasari N., Suwardi E. The effect of individual morality and internal control on the propensity to commit fraud: Evidence from local governments. *Journal of Indonesian Economy and Business*. 2016;31(2):208–219. DOI: 10.22146/jieb.15291
14. Murphy P.R. Attitude, Machiavellianism, and the rationalization of misreporting. *Accounting, Organizations and Society*. 2012;37(4):242–259. DOI: 10.1016/j.aos.2012.04.002
15. Sapta I.K.S., Rustiarini N.W., Kusuma I.G.A.E.T., Astakoni I.M.P. Spiritual leadership and organizational commitment: The mediation role of workplace spirituality. *Cogent Business & Management*. 2021;8(1):1–16. DOI: 10.1080/23311975.2021.1966865
16. Christie R., Geis F.L., eds. Studies in Machiavellianism. New York, NY: Academic Press; 1970. 415 p.
17. Carré J.R., Jones D.N., Mueller S.M. Perceiving opportunities for legal and illegal profit: Machiavellianism and the Dark Triad. *Personality and Individual Differences*. 2020;162:109942. DOI: 10.1016/j.paid.2020.109942

ABOUT THE AUTHOR

Ni Wayan Rustiarini — Assoc. Prof., Lecturer, Accounting Department, Universitas Mahasaraswati Denpasar, Bali, Indonesia
https://orcid.org/0000-0001-7403-8042
rusti_arini@unmas.ac.id

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was submitted on 28.02.2022; revised on 14.03.2022 and accepted for publication on 27.01.2023.
The author read and approved the final version of the manuscript.