

**THE INFLUENCE OF PERCEPTION OF INTERNAL
CONTROL ON FRAUD PREVENTION WITH ANTI-FRAUD
AWARENESS AS A MODERATION VARIABLE**

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Abstract

The occurrence of fraud can have detrimental effects on the integrity, efficiency, and credibility of public institutions. Therefore, it is crucial to thoroughly examine factors that can help mitigate its impact. This study aims to investigate the role of perceptions about internal control in preventing fraud, with anti-fraud awareness as a moderating variable. The research was conducted in the Probolinggo district of East Java, involving 28 regional government organizations. A representative sample of 150 respondents was collected using cluster sampling. Data was collected through an online questionnaire. The data was analyzed using Structural Equation Modeling-Partial Least Squares Path Modeling (SEM-PLS). The findings of the study indicate a significant positive influence of perceptions about internal control on fraud prevention. However, it was observed that anti-fraud awareness did not enhance the impact of perceptions about internal control on fraud prevention. This research is expected to provide valuable insights for stakeholders involved in fraud prevention, including the regional government organizations in Probolinggo Regency and others.

Keywords: Perception of Internal Control, Anti-Fraud Awareness, Fraud Prevention

1. INTRODUCTION

In this digital age, information is readily available to everyone, including information about the performance of local governments. Unfortunately, there have been numerous cases involving local government employees, which is truly disheartening. It's important to note that every government employee is equipped with knowledge about internal control measures to prevent fraud within the organization. One such example of fraud that should serve as a cautionary tale is the case of a Regent in Probolinggo Regency, East Java, who engaged in the buying and selling of positions. These cases can arise due to the authority granted to regional officials to appoint or dismiss employees at the district or regional level, as outlined in Government Regulation of the Republic of Indonesia Number 9 of 2003. Regrettably, some regional officials exploit this authority for personal gain, engaging in fraudulent activities. These cases highlight the need for stronger internal controls in the implementation of regional government performance (Puspita & Ratnadi, 2023).

Instances such as this have the potential to harm the state and multiple stakeholders, including the community, central government, and other relevant parties. As a result, it is imperative to implement measures for fraud prevention. Enhancing internal control systems to be more effective and efficient is one approach that can be taken (Nawawi & Salin 2018; Aluchna & Kuszewski, 2021; Oksaviani & Laksito, 2021). Within

government entities, the central government has established a government internal control system outlined in PP Number 60 of 2008 concerning SPIP. The primary objective is to reduce and deter fraudulent activities within government organizations. Nevertheless, empirical evidence indicates that the execution of internal control mechanisms in government entities remains subpar. This deficiency can be attributed to the diverse interpretations of internal control, leading to varying reactions among staff members. Consequently, the application of internal control measures within the organizational setting differs from one employee to another.

Essentially, the presence of this perception can be elucidated by perception theory, which posits that objects can activate the five human senses, leading to the generation of significant reactions (Walgito, 1994). The involvement of SPIP in governmental institutions lies in its ability to trigger employees' perceptions, leading them to develop fresh insights. These insights, in turn, generate responses that may manifest through verbal communication, behaviors, and other means. It is crucial to delve deeper into these perceptions to gauge the level of employees' comprehension regarding internal control. Without a thorough understanding, the objective of fraud prevention will remain unattainable. Hence, a comprehensive investigation is warranted in this research.

In this study, an additional moderating variable of anti-fraud awareness was included to enhance the research findings. Anti-fraud awareness refers to the recognition of the significance of avoiding dishonesty and thwarting fraudulent behaviors (Zarefar & Arfan, 2017). Such awareness has the potential to significantly decrease instances of fraud within an organization (Nurbaya, 2022). Consequently, raising awareness about anti-fraud measures indirectly contributes to enhancing the effectiveness of fraud prevention initiatives within governmental entities (Nurbaya, 2022). This research aims to explore the significance of internal control perceptions in deterring fraud, while considering anti-fraud awareness as a moderating factor.

2. LITERATURE REVIEW

2.1. Constructivist Theory

Perception theory is a philosophical theory which explains that every individual can interpret the events they experience, especially those events that are sensory related (Démuth, 2013). In perception theory, humans can directly create their interpretations without having to combine them with knowledge or experience. However, the more advanced times become, the more advanced human interpretation becomes. Therefore, a new theory emerged, namely constructivist theory. Constructivist theory is one part of perception theory. In detail, constructivist theory is a theory that explains that to create perceptions, individuals must combine sensory information received from the environment and combine it with previous knowledge or experience (Jamshidi & Pati, 2021). In this theory, individuals can create their perceptions if they already have a cognitive understanding of the stimulus that stimulates them. The most famous constructivity theory is Gregori's theory (1980).

The connection between constructivist theory and this research is that Probolinggo Regency regional government employees will receive a stimulus in the form of the Government Internal Control System (SPIP). Every government employee always has

knowledge regarding the government's internal control system. Because every time a new employee is hired, this knowledge is always conveyed to prevent fraud within the organization. Therefore, when employees receive a SPIP stimulus in the organization, employees will process information from the stimulus to create new knowledge that can be used in the future by considering the knowledge and experience they have previously gained.

2.2. Perceptions About Internal Control

Perceptions about internal control are divided into 2 meanings, including "perception" namely the interpretation that arises from the stimulation of an object (Démuth, 2013). Meanwhile, "internal control" is an effort to supervise an organization to check its thoroughness, accuracy, effectiveness, efficiency in order to achieve certain goals (Hartono & Nugroho, 2022). Perception of internal control means an individual's interpretation due to stimulation related to internal control. In government organizations, every employee is required to fill out the government internal control system (SPIP). The existence of an object in the form of SPIP will create a new, diverse perception among employees. This is called the perception of internal control.

2.3. Fraud Prevention

According to Karyono in Triwahyuni & Prasetyo (2021) fraud prevention is a variety of efforts made to prevent perpetrators who have the potential to commit fraud. This prevention can limit the movement of perpetrators because every activity or action that has a risk of fraud will be monitored in detail. Fraud prevention can be influenced by several factors, such as internal control (Lubis & Budiwitjaksono, 2023), organizational culture (Rustandy et al., 2020), and so on. Other research from Wijayanti & Hanafi (2018) shows that good individual morality can prevent fraud tendencies. Based on fraud prevention indicators, the potential for fraud prevention begins with oneself. What this means is that awareness to prevent fraud is the main factor in preventing fraud. Furthermore, fraud prevention is supported by adequate policies, rules and control systems.

Internal control in government organizations aims to provide adequate confidence in achieving effectiveness and efficiency in achieving state goals (Nurdin et al., 2019). Internal control can prevent fraud if it is implemented properly and correctly (Marciano et al, 2021; Karolina et al., 2022; Nuryanto, 2018). Therefore, employee perceptions of internal control must be improved as well. The better the perception of internal control, the better the actions that should be taken in the organization where they work (Jalil, 2018; Nugraha & Bayunitri, 2020). Therefore, the hypothesis created is as follows:

H1 : Perceptions of internal control have a direct effect on fraud prevention in Probolinggo Regency regional government organizations

2.4. Anti Fraud Awareness

Anti-fraud awareness is an effort made by a person or all parties in an organization to increase awareness regarding the importance of preventing fraud (Lubis & Budiwitjaksono, 2023). A high level of anti-fraud awareness will create organizational success in preventing fraud. Therefore, anti-fraud awareness can prevent fraudulent acts

in an organization (Tuanakotta, 2010). In government organizations, every employee will be given an understanding of the organization's rules and principles. Therefore, every employee is required to obey and implement organizational principles well. This is useful for raising anti-fraud awareness in employees. It is hoped that this anti-fraud awareness can prevent fraud attempts within government organizations, especially in Probolinggo regional government organizations. Apart from that, the perception of internal control can also prevent employee fraud (Kartadjumena, and Indriyati; 2021). Therefore, anti-fraud awareness can indirectly increase fraud prevention efforts which are influenced by perceptions of internal control. Based on this explanation, the hypothesis created is as follows:

H₂ : Anti-fraud awareness can increase the influence of perceptions about internal control on fraud prevention in Probolinggo Regency Regional Government Organizations

3. RESEARCH METHODS

This study uses a quantitative approach. The population of this research is all employees in 28 Probolinggo Regency Regional Government Organizations (OPD). Sampling was carried out using cluster sampling or there were representatives from the organization. Data collection will be carried out using questionnaires or questionnaires which will be distributed online to the sample. Therefore, this research data includes primary data. Research data will be processed using the Structural Equation Modeling-Partial Least Squares Path Modeling (SEM-PLS) statistical tool.

4. RESULTS AND DISCUSSION

4.1. Research Results

4.1.1. Respondent Profile

Based F to 53 years with a predominance of female respondents. Therefore, this research data will produce diverse perspectives. Because this age will determine the respondent's perspective in interpreting each questionnaire item. Apart from that, the profile of respondents based on education is dominated by respondents whose last level of education is S1 or D4. A total of 86 respondents had S1/D4 education. The majority of respondents have worked at their current agency for 1 to 5 years. A total of 71 respondents worked 1-5 years.

4.1.2. Data Processing Results

In the questionnaire results data that has been processed using the SEM-PLS analysis tool, there are two stages of testing, namely testing the outer model (measurement model) and testing the inner model (structural model). There are several tests for the outer model, namely 1) outer loading test, 2) cross loading test, and 3) internal consistency test. Meanwhile, inner model testing is carried out by testing the path coefficient and R square.

A. Outer Loading Testing

The outer loading test will go through a selection or filter stage by eliminating questionnaire items that are invalid or do not have a good contribution in measuring the indicators used. The outer loading value displayed only contains appropriate or appropriate questionnaire items with a value of >0.7 . The following is a display of the filtered outer loading test results shown in the measurement model image:

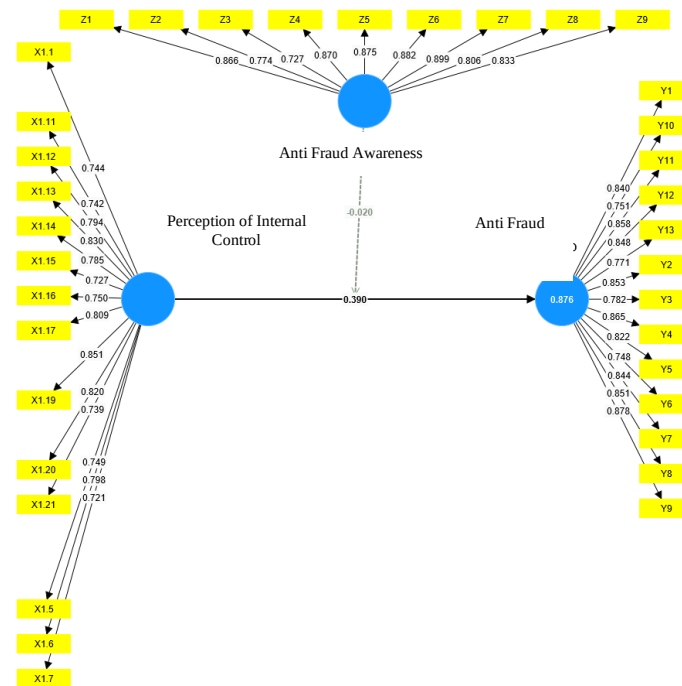


Figure 1. Measurement Model for Outer Loading

B. Cross Loading Testing

Cross loading or discriminant validity testing is considered adequate if the value is 0.5 to 0.6 (Masanu et al., 2023). However, a value >0.7 is considered better and more valid (Solling Hamid & M Anwar, 2019). The following are the results of the cross loading values in this research:

Table 1. Cross Loading Testing

Questionnaire Items	Anti Fraud Awareness	Fraud Prevention	Perception of Internal Control
X1.1	0.613	0.599	0.744
X1.11	0.602	0.641	0.742
X1.12	0.696	0.692	0.794
X1.13	0.699	0.716	0.830
X1.14	0.649	0.676	0.785
X1.15	0.600	0.642	0.727
X1.16	0.679	0.742	0.750
X1.17	0.669	0.736	0.809
X1.19	0.696	0.775	0.851

X1.20	0.710	0.767	0.820
X1.21	0.672	0.701	0.739
X1.5	0.597	0.597	0.749
X1.6	0.671	0.675	0.798
X1.7	0.498	0.546	0.721
Y1	0.793	0.840	0.772
Y10	0.677	0.751	0.615
Y11	0.799	0.858	0.678
Y12	0.764	0.848	0.688
Y13	0.677	0.771	0.690
Y2	0.755	0.853	0.702
Y3	0.723	0.782	0.765
Y4	0.758	0.865	0.792
Y5	0.727	0.822	0.757
Y6	0.684	0.748	0.665
Y7	0.783	0.844	0.780
Y8	0.792	0.851	0.726
Y9	0.809	0.878	0.786
Z1	0.866	0.825	0.697
Z2	0.774	0.655	0.572
Z3	0.727	0.627	0.596
Z4	0.870	0.802	0.740
Z5	0.875	0.803	0.750
Z6	0.882	0.809	0.744
Z7	0.899	0.828	0.764
Z8	0.806	0.722	0.708
Z9	0.833	0.764	0.721

Based on the cross loading or discriminant validity test in table 1, the data results for each research questionnaire item are >0.5. Therefore, this measurement model is quite capable of explaining the constructs or indicators used.

C. Internal Consistency Testing

Internal consistency testing contains tests of the validity and reliability of the measurement model. Reliability testing is shown in the Cronbach's Alpha value. Meanwhile, the Average variance extracted (AVE) value shows the validity of this measurement model. The following are the results of internal consistency testing in this research:

Table 2. Internal Consistency Testing

Questionnaire Items	Cronbach's Alpha	Average Variance Extracted (AVE)	Information
Anti Fraud Awareness	0.947	0.703	Valid and Reliable
Fraud Prevention	0.961	0.681	Valid and Reliable
Perception of Internal Control	0.949	0.603	Valid and Reliable

Based on the results of internal consistency testing, the measurement model is considered valid and reliable. Because the Cronbach's Alpha value is >0.7 , and the AVE value is >0.5 .

D. Path Coefficient Testing

Path coefficient testing aims to predict interactions (cause and effect) between one latent variable and another. This test is considered to have an interaction if the p value is <0.05 . In this research, latent variables include: 1) perception of internal control (X), 2) anti-fraud awareness (Z), and fraud prevention (Y). The following are the results of testing the inner model in this research, especially the path coefficient:

Table 3. Path Coefficient Testing

No	Interaction Between Variables	P values	Information
1	Perception of Internal Control (X) (interaction) Fraud Prevention (Y)	0.000	Significant Influence
2	Anti-Fraud Awareness (Z) (moderating) Perception of Internal Control (X) (interaction) Fraud Prevention (Y)	0.396	Not able to improve (moderate)
3	Anti Fraud Awareness (Z) (interaction) Fraud Prevention (Y)	0.000	Significant Influence

Based on the results of the path coefficient test above, the following is a more detailed explanation, including:

1. In the path coefficient table number 1, the p value is 0.000. This value shows that the p value is <0.05 (hypothesis 1 is accepted). This means that there is a significant interaction or influence on perceptions about internal control on fraud prevention. The higher the level of perception of internal control that a person (employee) has, the higher the fraud prevention in the relevant agency. Vice versa, if the level of perception of internal control that a person (employee) has is low. Then the level of fraud prevention will decrease. This will create the potential for employees to commit fraud in related agencies. The results of this research are similar to previous research conducted by Anindyajati & Yendrawati (2022). Anindyajati & Yendrawati (2022) revealed that perceptions about internal control can prevent fraud. In fact, research by Novitasari & Kusumastuti (2019) explains that increasing employee perceptions about internal control is an effective way to prevent fraud,

especially accounting fraud. Therefore, the perception of employee internal control is an important aspect that needs to be paid attention to by relevant parties in Probolinggo Regency government agencies in order to prevent fraud.

2. The path coefficient table number 2 produces a p value of 0.396. This value shows that the p value is >0.05 (hypothesis 2 is rejected). This means that there is no interaction or anti-fraud awareness is not able to increase the perception of internal control regarding fraud prevention.
3. In the path coefficient table number 3, the p value is 0.000. This value shows that the p value is <0.05 . This means that there is a significant interaction or influence on anti-fraud awareness on fraud prevention.

If the path coefficient results are visualized in the form of a measurement model, it will produce the following model:

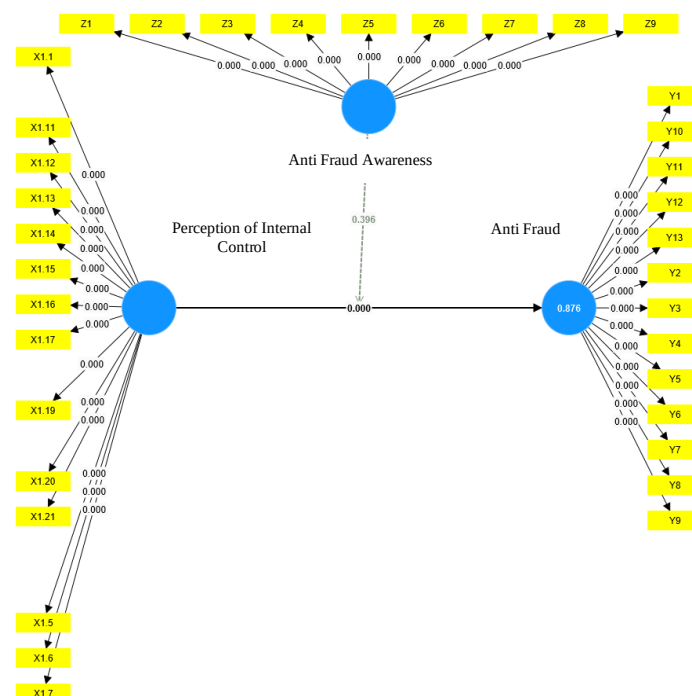


Figure 2. Path Coefficient Model

4.2. Discussion

The significant positive influence of perceptions about internal control on fraud prevention underscores the pivotal role that organizational structures and practices play in mitigating fraudulent activities. This finding was in accordance with previous studies (Anindyajati & Yendrawati, 2022; Novitasari & Kusumastuti, 2019). In particular, the perception of internal control has been found to be a significant factor in preventing fraudulent activities in organizations. By enhancing employees' perceptions of internal control, governmental agencies can fortify their defenses against fraudulent behaviors, thereby safeguarding public resources and upholding administrative integrity.

However, an interesting aspect brought to light by this study is the lack of significant influence that anti-fraud awareness has on moderating the connection between perceptions of internal control and fraud prevention outcomes. Contrary to prior research findings, it has been suggested that anti-fraud awareness is indeed a critical factor in enhancing internal controls and ultimately contributing to successful fraud prevention outcome (Anindya & Adhariani, 2019). Contrary to expectations, whether employees are aware of anti-fraud measures or not does not change the impact of internal control perceptions on fraud prevention. This discovery suggests that although initiatives to raise anti-fraud awareness are undoubtedly important for fostering a culture of vigilance and accountability within organizations, they may not directly enhance the effectiveness of internal control mechanisms in deterring fraudulent activities.

One possible explanation for this phenomenon could be the inherent limitations of awareness-raising endeavors in addressing systemic deficiencies in internal control frameworks. While anti-fraud awareness programs certainly contribute to cultivating a heightened sense of alertness and ethical consciousness among employees, they may not fully address structural weaknesses or procedural loopholes within organizational systems. Therefore, while anti-fraud awareness remains a crucial component of comprehensive fraud prevention strategies, its impact may depend on the underlying strength of internal control mechanisms.

5. CONCLUSION

The influence of perceptions about internal control on fraud prevention in related agencies is significantly positive. This indicates that enhancing perceptions about employee internal control can enhance fraud prevention in government agencies in Probolinggo Regency. However, it should be noted that anti-fraud awareness alone cannot strengthen or weaken the influence of perceptions about internal control on fraud prevention. Regardless of whether employees have high anti-fraud awareness, the impact of perceptions about employee internal control remains unchanged.

The findings of this study can serve as a valuable reference for government agencies in Probolinggo Regency to combat fraud by promoting employees' perceptions of internal control through effective stimuli. It is important to note that this research solely focuses on perceptions of internal control, fraud prevention, and anti-fraud awareness. Therefore, future studies should aim to explore a wider range of variables and research methods. The objective is to enhance the quality of future research in this field. Additionally, it is worth mentioning that this research is limited to controlling questionnaires and may be subject to bias, as it was conducted online through Google Form among employees of Probolinggo Regency government agencies.

REFERENCES

- Aluchna, M., & Kuszewski, T. (2021). *Do financial investors mitigate agency problems? Evidence from an emerging market.*
- Anindya, J. R., & Adhariani, D. (2019). Fraud risk factors and tendency to commit fraud: analysis of employees' perceptions. *International Journal of Ethics and Systems*,

- 35(4), 545–557.
- Anindyajati, R., & Yendrawati, R. (2022). Persepsi karyawan mengenai faktor-faktor yang mempengaruhi pencegahan fraud. *Proceeding of National Conference on Accounting & Finance*, 53–58.
- Démuth, A. (2013). Perception theories. *Kraków: Trnavská Univerzita*, 2549.
- Hartono, A. B., & Nugroho, A. H. D. (2022). Pengaruh pengendalian internal terhadap pencegahan fraud dengan intervening good corporate governance. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(Special Issue 4), 1912–1920.
- Jalil, F. Y. (2018). Internal control, anti-fraud awareness, and prevention of fraud. *Etikonomi*, 17(2), 297–306.
- Jamshidi, S., & Pati, D. (2021). A narrative review of theories of wayfinding within the interior environment. *HERD: Health Environments Research & Design Journal*, 14(1), 290–303.
- Lubis, D. K. M., & Budiwitjaksono, G. S. (2023). Analisis Pengendalian Internal, Kesadaran Anti-Fraud, Dan Pengetahuan Fraud Terhadap Pencegahan Fraud. *Jambura Economic Education Journal*, 5(1), 1–10.
- Masanu, M. A., Sari, N. A., & Ilham, I. (2023). Pengaruh perceived ease of use dan perceived usefulness terhadap attitude of using SIMAK Universitas Kutai Kartanegara. *Kinerja: Jurnal Ekonomi Dan Manajemen*, 20(4), 512–524.
- Nawawi, A., & Salin, A. S. A. P. (2018). Internal control and employees' occupational fraud on expenditure claims. *Journal of Financial Crime*, 25(3), 891–906.
- Novitasari, D., & Kusumastuti, E. D. (2019). Pengaruh Persepsi Karyawan mengenai Keefektifan Pengendalian Internal dan Kesesuaian Kompensasi Finansial serta Non Finansial terhadap Pencegahan Kecurangan Akuntansi. *Prosiding Industrial Research Workshop and National Seminar*, 10(1), 1135–1145.
- Nugraha, R., & Bayunitri, B. I. (2020). The influence of internal control on fraud prevention (Case study at Bank BRI of Cimahi City). *International Journal of Financial, Accounting, and Management*, 2(3), 199–211.
- Nurbaya, S. (2022). Pengaruh kesadaran anti-fraud dalam memoderasi hubungan the fraud triangle terhadap kecurangan (studi pada kantor akuntan publik Kota Makassar Dan Kabupaten Gowa). *Accounting, Accountability, and Organization System (AAOS) Journal*, 4(1), 98–122.
- Nurdin, Y., Tahar, F., & Nurbayani, N. (2019). Pengaruh Sistem Pengendalian Internal Terhadap Pencapaian Good Government Governance Melalui Pencegahan dan Pengungkapan Fraud. *Jurnal Akuntansi Dan Pajak*, 19(02), 116–133.
- Oksaviani, N. A., & Laksito, H. (2021). Pengaruh Rotasi Kantor Akuntan Publik Dan Pengendalian Internal Terhadap Fee Audit Di Indonesia Dan Malaysia (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia dan Bursa Malaysia Tahun 2017-2019). *Diponegoro Journal of Accounting*, 10(4).
- Puspita, N., & Ratnadi, N. M. D. (2023). Kompetensi, Sistem Pengendalian Internal, Locus of Control, dan Pencegahan Fraud Pengelolaan Dana Desa. *E-Jurnal Akuntansi*, 33(2), 346–359.
- Rustandy, T., Sukmadilaga, C., & Irawady, C. (2020). Pencegahan Fraud Melalui Budaya Organisasi, Good Corporate Governance Dan Pengendalian Internal. *Jurnal Pendidikan Akuntansi & Keuangan*, 8(2), 232–247.

- Solling Hamid, R., & M Anwar, S. (2019). *Structural Equation Modeling (SEM) Berbasis Varian*. PT Inkubator Penulis Indonesia.
- Triwahyuni, T., & Prasetyo, A. (2021). Pencegahan Fraud pada Mantri PT Bank Rakyat Indonesia (PERSERO) Tbk Kantor Cabang Gombong: Peran Pengendalian Internal, Kesesuaian Kompensasi, dan Budaya Etis Organisasi. *Accounting and Management Journal*, 5(2), 44–55.
- Tuanakotta, T. M. (2010). Akuntansi forensik dan audit investigatif. *Jakarta: Salemba Empat*, 431.
- Walgito, B. (1994). *Psikologi sosial: Suatu pengantar*. Andi Offset.
- Wijayanti, P., & Hanafi, R. (2018). Pencegahan Fraud di Pemerintah Desa. *Jurnal Akuntansi Multiparadigma*, 9(2), 331–345.
- Zarefar, A., & Arfan, T. (2017). Efektifitas Whistleblowing System Internal. *Jurnal Akuntansi Keuangan Dan Bisnis*, 10(2), 25–33.

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