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Article in *International Journal of Monetary Economics and Finance* · January 2023

DOI: 10.1504/IJMEF.2023.131905

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The impact of forensic auditing techniques on non-government organisations' fraud risk management in South Africa using a proactive approach

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Abstract: Using the quantitative research method, this study empirically investigated the relationship between forensic auditing and fraud risk management, focusing on financial statement fraud among 30 large non-governmental organisations in the eThekweni region. Data was gathered from 87 participants, knowledgeable individuals in the field of forensic auditing and fraud risk management and used for data analysis. Structural equation modelling (SEM) and conventional thematic analysis were used to analyse data. The results may significantly guide NGOs and their funders, auditors, regulators, professional bodies, and academia on the use of proactive forensic audit techniques to proactively prevent, detect and respond to fraud risks in NGO's context.

Keywords: fraud risk management; proactive forensic auditing techniques; financial statement fraud; non-government organisations.

Reference to this paper should be made as follows: Mvunabandi, J.D., Nomlala, B. and Patrick, H. (2023) 'The impact of forensic auditing techniques on non-government organisations' fraud risk management in South Africa using a proactive approach', *Int. J. Monetary Economics and Finance*, Vol. 16, Nos. 3/4, pp.272–281.

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This paper is a revised and expanded version of a paper entitled 'The impact of forensic auditing techniques on non-government organizations' fraud risk management in South Africa using a proactive approach' presented at *SIBR 2022 Tokyo Conference*, 6 January, 2022.

1 Background of the study and research gap

Fraud risk management techniques can be broadly categorised into proactive preventive, detective and responsive fraud risk management practices. NGOs in South Africa and elsewhere are, however, criticised by the public for poor fraud risk management (Felix et al., 2017). The Association of Certified Forensic Examiners (ACFE), an international organisation dedicated to fighting fraud and white-collar crime, estimated that \$61 billion was lost to fraud in NPOs in 2016 (ACFE, 2016). The growth of fraudulent activities among NGOs in South Africa and elsewhere indicates that there is a strong need exists for research approaches that enable auditors and forensic investigators to proactively detect, prevent and respond to the risks of fraud. For example, it recently came to light that the KwaZulu-Natal Blind and Deaf Society, one of the largest and most-respected NGOs in the eThekweni region, had lost R12 million, siphoned off from the organisation's bank accounts by an officer who had sole access to its online banking. For example, it recently came to light that the KwaZulu-Natal Blind and Deaf Society, one of the largest and most-respected NGOs in the eThekweni region, had lost R12 million, siphoned off from the organisation's bank accounts by an officer who had sole access to its online banking. Bredenkamp (2015) and Dzomira (2015) highlighted the need to clearly identify the drivers of FRM factors and noted that these factors should be classified according to the context. However, the FRM practices used by the accounting and auditing profession have been influenced by extensive research on for-profit entities and state-owned entities (SOEs) without linking them to forensic auditing techniques

(Bredenkamp, 2015; Abdinasir, 2017). None of these is linked to the key fraud risk factors among NGOs, which undermine the effectiveness of their FRM practices. Hence, there was a need to undertake research to investigate the drivers of FRM factors (the best-fitting FRM models) that are crucial in the NGO context. If empirically and theoretically rigorous research is not conducted, then fraud risk management within NGOs sector may suffer. This paper, therefore, aims to fill up this research gap by performing an empirical and theoretical review which extends the debate on the drivers of FRM to provide insight into the fraud risk management framework. This paper thus empirically investigated the role of forensic audits in enhancing FRM among selected NGOs in South Africa, focusing on the Durban central business district (CBD) where many of the largest NGOs are located. Following from the above, the specific objectives of this paper is first to determine the key factors that influence fraud risk management practices among NGOs in South Africa and to test whether proactive forensic audit techniques significantly reduce financial statement fraud among NGOs in South Africa or not. Against this backdrop, this paper is expected to answer the following questions: What are the key factors that influence fraud risk management practices among NGOs in South Africa? and How can proactive forensic audit techniques significantly reduce financial statement fraud among NGOs in South Africa?

This paper was driven by well-known theories relating to fraud detection, prevention, and response. These include the Fraud Management Life Cycle (FMLCT), New Fraud Triangle Theory (NFTT), Fraud Diamond Theory (FDT), Fraud Box Key Model (FBKM), Theory of Concealment, MICE theory, Crowe's Fraud Pentagon Theory, and the Fraud Deterrence Theory, Machiavellian theory, Ethical egoism theory. This study adopted the NFTT; the FDT; the FBKM Theory; the Fraud Concealment Theory, the holistic model theory, the FRM Life Cycle Theory and the Fraud Deterrence Theory (Friscilla and Nugroho, 2020; Rindayanti and Budiarto, 2017; Setyaki et al., 2022). However, the theory that will guide this paper is the new fraud combination theory to predict the existence of fraudulent financial reports because many researchers soundly criticised the fraud triangle for its ineffectiveness in deterring, preventing, investigating and detecting FSF. The aim is to broaden auditors' knowledge of fraud and how it occurs and to enable forensic auditors to identify, detect, deter, prevent, and investigate financial statement fraud and respond appropriately to fraud risks. The new theory posits that financial statement fraud is based on six factors: fraud opportunity; pressure; the fraudster's capability; personal integrity and lack of conscience; rationalisation of risk vs. rewards; and weak corporate governance (no matter how accessible the opportunity may be, or how strong the pressure, and regardless of the rationalisation and ability and capacity of the perpetrator). Strong, effective corporate governance will ensure that the fraudster's intentions amount to nothing. Thus, corporate governance is suggested as the lock that protects NGOs from all the factors that cause financial statement fraud. Therefore, the New Fraud Combination Theory will enable forensic auditors to consider all the factors that contribute to the occurrence of financial statement fraud in order to assess fraud risks, identify red flags for fraud, and detect financial statement fraud. It is consistent with Tonye's (2018) observation that a forensic auditor should think like a fraudster in order to combat fraud.

Existing literature review on fraud shows that there are many theories used for fraud prevention, fraud detection and fraud response. Prevention is always better than cure, and fraud prevention and deterrence are less costly than fraud detection (Hemraj, 2004; Omar and Bakar, 2012). Sanusi (2015), argues that fraud prevention begins with the

identification of weak internal controls, policies, and systems and the enforcement of sound controls that reduce opportunities for fraud.

Peltier-Rivest and Lanoue (2015) observe that fraud detection mechanisms and strategies aim to effectively, efficiently, and promptly identify fraud that has bypassed preventive measures in order for the entity to take corrective action. Krambia Kapardis and Papastergiou (2016) state that organisations should establish a sound and effective fraud response strategy (investigative measures, and sanctions). Biegelman and Bartow (2012) suggest that internal fraud investigators, the internal auditor, the audit committee, and forensic auditors are effective, responsive strategies. A review of the recent literature on NGOs and FRM reveals a significant research gap on fraud risks in this sector (Andrés-Alonso et al., 2016; Kang'ethe and Manomano, 2014; Domański, 2016; Felix et al., 2017; Kim, 2017; Kummer, 2015; Parsons and Roberts, 2017; Tschakert et al., 2016). Furthermore, there is a paucity of research on the factors that significantly influence FRM among NGOs (Mehta and Bhavani, 2017; Okoye et al., 2019). Studies highlight the need for the use of forensic auditing techniques to detect, investigate, and respond to the risk of fraud and to avoid consequences such as liquidation. Fortvingler and Szivós (2016) and Mock (2017) propose that existing FRM tools and practices and theories in relation to for-profit entities should be applied to NGOs. This study aims to fill in the existing gap by studying forensic auditing as a powerful tool to enhance NGOs' fraud risk management in the eThekweni region. Forensic auditing in enhancing fraud reduction among NGOs is the focal point of this research study. Anchored on the main FRM factors, it includes applying proactive forensic auditing techniques by NGOs as a tool to prevent, detect, and respond to the risks of financial statement fraud and to move the research forward towards the development of a robust NGOs FRM model. It is also crucial for forensic auditors to ensure that fraud risks are eradicated or at least reduced in the NGO sector.

1.1 Research methodology

This paper adopted a quantitative research design and strategy for gathering data. The population of this study is 87 staff (Internal auditors, forensic auditors, Managers, Accountants and bookkeepers, audit committees, Finance officers, Chief Operations officers, Chief Executive Officers, and Directors) from 30 chosen NGOs. Data was gathered using an online questionnaire where a Likert scale of 1 to 5 (Where 1 = Not at all, 2 = Small Extent, 3 = Moderate Extent; 4 = Large Extent, 5 = Very Large Extent) is used as a basis for analysis and semi-structured interviews (Zikmund et al., 2013; Pallant, 2011). To test the fitness of the model and to evaluate independent variables, structural equation modelling (SEM) and CFA applications have been used. Robustness analysis was fully performed using SPSS 27 for descriptive statistics analysis. AMOS 27 for SEM and Confirmatory Factor Analysis (CFA) as the vehicle to model structural relationships between preventive, detective, and responsive fraud risk management factors.

2 Presentation and discussion of the findings

As shown in Table 1, the results of these assessments (Regression Weights, a statistically significant relationship was established between proactive forensic auditing and preventive FRM, indicating that [PREV] was strongly empirically supported. There was

also a statistically significant relationship between proactive forensic auditing and detective FRM, indicating that [DETEC] was strongly empirically supported, as well as a statistically significant relationship between forensic auditing and responsive FRM, indicating that [RESP] was also strongly empirically supported.

Table 1 Regression weights

	<i>Constructs</i>		<i>Estimate</i>	<i>S.E</i>	<i>C.R</i>	<i>P</i>	<i>Label</i>
Qd1	←	PREV	1.000				
Qd2	←	PREV	0.706	0.139	5.082	***	Supported
Qd3	←	PREV	0.830	0.194	4.278	***	Supported
Qd4	←	PREV	0.834	0.188	4.444	***	Supported
Qd5	←	PREV	1.015	0.205	4.946	***	Supported
Qd6	←	PREV	0.724	0.158	4.569	***	Supported
Qd7	←	PREV	1.049	0.228	4.600	***	Supported
Qd8	←	PREV	1.010	0.198	5.106	***	Supported
Qd9	←	PREV	0.766	0.185	4.146	***	Supported
Qd10	←	PREV	0.840	0.177	4.754	***	Supported
Qd11	←	PREV	1.033	0.189	5.464	***	Supported
Qd12	←	PREV	1.009	0.186	5.438	***	Supported
Qd13	←	PREV	1.038	0.197	5.264	***	Supported
Qd14	←	PREV	1.080	0.209	5.171	***	Supported
Qf7	←	RESP	1.000				
Qf6	←	RESP	0.945	0.157	6.036	***	Supported
Qf5	←	RESP	0.828	0.162	5.097	***	Supported
Qf4	←	RESP	0.995	0.182	5.476	***	Supported
Qf3	←	RESP	0.974	0.185	5.274	***	Supported
Qf2	←	RESP	0.873	0.143	6.093	***	Supported
Qf1	←	RESP	1.255	0.193	6.502	***	Supported
Qe1	←	DETEC	1.000				
Qe2	←	DETEC	0.794	0.134	5.939	***	Supported
Qe3	←	DETEC	1.123	0.192	5.864	***	Supported
Qe4	←	DETEC	0.946	0.162	5.847	***	Supported
Qe5	←	DETEC	1.023	0.171	5.972	***	Supported
Qe6	←	DETEC	0.817	0.153	5.335	***	Supported
Qe7	←	DETEC	1.040	0.167	6.208	***	Supported
Qe8	←	DETEC	1.058	0.178	5.943	***	Supported
Qe9	←	DETEC	0.931	0.156	5.977	***	Supported
Qe10	←	DETEC	1.065	0.166	6.404	***	Supported
Qe11	←	DETEC	1.034	0.163	6.357	***	Supported
Qe12	←	DETEC	0.978	0.165	5.914	***	Supported
Qe13	←	DETEC	1.085	0.161	6.736	***	Supported

Source: Online Survey (2021), AMOS Version 27

In line with Curran et al.’s (2006) recommendation, the researcher examined the standardised regression weights for the study’s indicators and found that all indicators had a high loading towards the latent variable and all the values of the different parameter estimates met the minimum recommended value of 0.5. More so, research result supports the current body of knowledge that found that the proactive preventive, detective and responsive factors related to financial statement fraud are the drivers of FRM, proactive forensic auditing and FRM measures go hand in hand (Samociuk et al., 2010; Taylor, 2018; McIntyre (2016).

As shown in Table 2, the results of the overall model from the structural equation analysis on the evaluation of theoretical FRM (goodness-of-fit indices) confirm that proactive forensic auditing techniques have a positive impact in enhancing FRM among NGOs in the eThekweni region. It was found that, overall, this model on FRM factors exhibited a good fit to the data: CMIN = 107.520; DF = 524; P = 0.000; SRMR* = 0.002; CMIN/DF = 2.053; GFI = 0.920; AGFI = 0.520; CFI = 0.998; PGFI = 0.648; PCFI = 0.652; TLI = 0.976; IFI = 0.904; RFI = 0.517; NFI = 0.549; PNFI = 0.613; RMSEA = 0.076; and HOELTER = 0.05 for the sample of 87. This model is significant and acceptable at all acceptable levels per the literature, more specifically Marsh et al. (1988) and Enders and Mansolf’s (2018) observations. The findings from the test of hypothesis 1 revealed that, proactive forensic auditing techniques have a positive impact in enhancing FRM among NGOs in the eThekweni region. This is in line with Ola (2018), who found that forensic auditing significantly increased the possibility of identifying, preventing, detecting, investigating and responding to the risks of fraud at the global level. He also concluded that proactive forensic auditing has assisted in uncovering financial and economic crimes in countries such as UK, US, Germany, Malaysia, Nigeria, India, Kenya, and Canada. The finding in respect of FRM theory is strongly empirically supported.

Table 2 GOF indices for SEM on fraud risk management factors

<i>GOF indices</i>	<i>Complex model</i>	<i>GOF indices</i>	<i>Complex model</i>
CMIN	107.520	PGFI	0.648
DF	524	CFI	0.998
P	0.000	PCFI	0.652
SRMR*	0.002	TLI	0.976
CMIN/DF	2.053	IFI	0.904
GFI	0.920	RFI	0.517
AGFI	0.520	NFI	0.549
PNFI	0.613	RMSEA	0.076
HOELTER 0.05	87		

Table 3 provides snapshot of the results of the goodness-of-fit indices, namely:

Table 3 The results of the goodness-of-fit indices (results for the theoretical model)

<i>Inter construct correlation</i>			<i>Estimate</i>	<i>S.E.</i>	<i>t-Value C.R.</i>	<i>P-Value</i>	<i>Empirical evidence (Label)</i>
PREV	↔	RESP	0.212	0.053	4.002	***	Supported
DETEC	↔	RESP	0.258	0.059	4.369	***	Supported
DETEC	↔	PREV	0.269	0.068	3.972	***	Supported

Source: Online Survey (2021), AMOS Version 27

Following this, PREV ↔ RESP: (Estimates = 0.784); (S.E. = 0.053); (t-Value (C.R.) = 4.002); and (P-Value = ***), while DETEC ↔ RESP: (Estimates = 0.876); (S.E. = 0.059); (t-Value (C.R.) = 4.369); and (P-Value = ***), and DETEC ↔ PREV: (Estimates = 0.884); (S.E. = 0.068); (t-Value (C.R.) = 3.972); and (P-Value = ***). All loading values have *p*-values significantly higher than 0.05, which indicates that the CFA model was theoretically sound.

The result of this thesis supports the current body of knowledge by Taylor (2011) and Othman et al. (2019), who found that a comprehensive fraud risk management strategy attempts firstly to prevent fraud by reducing fraud risk and its main aim is to prevent high-impact fraud and reduce high hidden cost related to fraud which leads to low impact fraud risks (proactive preventive fraud risk factors), secondly, to detect fraud by being attentive to misconduct that could relate to fraud risk (proactive detective fraud risk factors), and thirdly, to respond to the fraud risks by taking action when it occurs (proactive, responsive fraud risk factors).

Largely consistent with the literature by Pagano, Walter, and Thomas Buckhoff (2015), proactive forensic auditing in terms of shared knowledge between main drivers influencing fraud risk management and fraud reduction was found to have a positive influence on strategic prevention detection and investigation. Consistent with Akenbor and Ironkwe (2014), deploying proactive FRM measures was found to be positively and strongly correlated with the strategic management of financial and economic crimes. This is also in line with Asaolu and Owojori's (2009) theory of the fraud diamond, where the services of forensic auditors are required to effectively identify, prevent, investigate, detect, and respond to the risks of fraud. Thus, the model was strongly empirically supported. Therefore, the theory was empirically supported strongly. This implies that proactive forensic auditing has a greater ability to enhance fraud risk management among NGOs in the eThekweni region.

2.1 *The study's contribution to the science*

This research study is one of the few that have attempted to empirically investigate the phenomenon of forensic auditing and FRM in NGOs in a developed country (Makwetu, 2019). Generally, there have been calls for more studies in this area, and this study responded to these calls. It thus adds to the current understanding of fraud risk factors and indicators that, arguably, drive FRM practices in the NGO sector by demonstrating the relationship between the main drivers of FRM. This paper adds to the current body of knowledge by introducing the New Fraud Combination Theory, a consolidation of all the fraud models and contributory fraud risk factors for fraudulent activities to enable external auditors and forensic practitioners to perform fraud risks assessments (FRAs)

robustly and effectively. This implies that there is a great need for NGOs in the eThekweni region to explore how they could use new fraud combination theory to enhance fraud risk management measures in their entities. This paper contributed to the scholarly debates for NGOs and their funders, auditors, regulators, professional bodies, and academia on the use of proactive forensic audit techniques to proactively prevent, detect and respond to the fraud risks in NGO's context and beyond and guide researchers to further research on the subject matter in areas that were not addressed in this research.

The findings also point to the critical fraud risk factors that auditors and forensic auditors should consider. The study thus contributes to the literature on fraud risk factors and fraud risk indicators, provides a model, and empirically tests a theory that describes the relationship between proactive forensic auditing and FRM in NGOs in South Africa. This paper contributes to the critical realist philosophy in accounting and auditing, and accommodates interpretivism and positivism in these fields. The paper expands knowledge of FRM using a more robust scientific research methodology (SEM). It also demonstrates the relevance of critical accounting and auditing research in the South African NGO sector.

The practical application of the proposed model is expected to empower NGOs and their stakeholders to manage the risks of financial statement fraud. Based on the study's results, it is suggested that NGOs in the eThekweni region revisit their current FRM practices and compare them with the study's recommendations. Should any gaps be found in their current FRM practices, their boards should consider implementing the recommendations. It is hoped that the practical application of this knowledge will have a positive effect on the NGO community. Based on the adage that prevention is better than cure, proactive techniques for fraud prevention, identification, and detection are strongly recommended rather than reactive techniques, which favour the philosophy of 'wait and see' or "repulse when attacked". Forensic audit functions should be created in NGOs to complement and supplement the work of internal controls in order to enhance the effectiveness of FRM within these entities.

3 Conclusion, implications, limitations and suggestions for further research

The findings revealed that \$61 billion dollars were lost to financial statement frauds in NGOs with serious implications for growth and development. Various measures have been adopted to minimise fraudulent activities without success. The study analysed why attention has to be given to the question of NGOs' fraud risk management in South Africa with the aid of forensic auditors. From the study's findings, it is clear that, as confirmed by Mehta and Bhavani (2017), the non-involvement of forensic auditors in FRM is one of the greatest challenges to combatting the risks of fraud among NGOs in South Africa. This implies that an increase in forensic auditing will lead to a decrease in fraudulent activities among these NGOs. In summary, proactive forensic auditing techniques were found to have a strong, statistically significant relationship with the preventative, detective, and responsive FRM.

The findings from both the questionnaire and interview data revealed that the proactive detective, preventive and responsive techniques that forensic auditors employ in performing their operational duties are significant factors in managing the risks of fraud and financial statement fraud among NGOs in South Africa. The overall conclusion

is thus that proactive forensic auditing can be used to support the fight against fraudulent activities among NGOs in South Africa. Previous studies that support this finding include Samociuk et al. (2010) and Othman et al. (2019).

The study established a positive and significant relationship between proactive forensic auditing and the main drivers of FRM to, firstly, prevent high-impact fraud and reduce the hidden costs related to fraud which leads to low-impact fraud risks (proactive preventive fraud risk factors); secondly, detect fraud by being attentive to misconduct that could relate to fraud risk (proactive detective fraud risk factors); and thirdly, respond to fraud risks by taking action when it occurs (proactive, responsive fraud risk factors). This implies that there is a need for NGOs in the eThekweni region to explore how they could use proactive forensic auditing techniques to enhance FRM in their entities. The study's findings highlight the need for funders and donors to encourage the NGOs they support to embrace effective FRM in order to create a fraud-free environment and secure donor support. Forensic auditors go beyond rules-based principles and focus on principle- and transaction-based investigations, which are critical for effective FRM. This implies that there is a need for external auditors to embrace proactive forensic auditing techniques as part of their daily duties. Regulators that set auditing standards should integrate and regulate forensic auditing principles in order to harmonise auditing standards and principles. This would make forensic auditing mandatory for any legal entity. The South Africa Institute of Chartered Accountants (SAICA) should encourage formalisation and specialisation in the field of forensic auditing in curricula and higher education institutions should emphasise skills development in the field of forensic auditing through teaching and research. This study has also provided a very robust plan for future researchers in the field of auditing and FRM that conduct further research could use this study as a point of reference, as it could serve as a stepping stone towards finding sustainable solutions to fraud risks in the NGO sector and beyond.

References

- Abdinasiir, G.A. (2017) *The Impact of Forensic Audit Services on Fraud Detection Among Commercial Banks in Kenya* (Doctoral dissertation, University of Nairobi).
- ACFE (2016) *Report to the Nations on Occupational Fraud and Abuse: 2016 Global Fraud Study*, Association of Certified Fraud Examiners.
- Akenbor, C.O. and Ironkwe, U. (2014) 'Forensic auditing techniques and fraudulent practices of public institutions in Nigeria', *Journal of Modern Accounting and Auditing*, Vol. 10, No. 4, pp.451–459.
- Andrés-Alonso, P., Garcia-Rodriguez, I. and Romero-Merino, M.E. (2016) 'Disentangling the financial vulnerability of nonprofits', *Voluntas: Journal of Voluntary and Nonprofit Organisations*, Vol. 27, No. 6, pp.2539–2560.
- Asaolu, T.O. and Owojori, A.A. (2009) 'The role of forensic accounting in solving the vexed problem of corporate world', *European Journal of Scientific Research*, Vol. 29, No. 2, pp.183–187.
- Domański, J. (2016) 'Risk categories and risk management processes in nonprofit organizations', *Foundations of Management*, Vol. 8, No. 1, pp.227–242.
- Felix, R., Gaynor, G., Pevzner, M. and Williams, J.L. (2017) 'Societal trust and the economic behavior of nonprofit organizations', *Advances in Accounting*, Vol. 39, pp.21–31.
- Fortvingler, J. and Szivós, L. (2016) 'Different approaches to fraud risk assessment and their implications on audit planning', *Periodica Polytechnica Social and Management Sciences*, Vol. 24, No. 2, pp.102–112.

- Friscilla, Y. and Nugroho, P.I. (2020) 'Love of money, machiavellian dan persepsi etis: analisis berdasarkan perspektif gender', *Jurnal Akuntansi Profesi*, Vol. 11, No. 2, pp.223–234.
- Kang'ethe, S.M. and Manomano, T. (2014) 'Exploring the challenges threatening the survival of NGOs in selected African countries', *Mediterranean Journal of Social Sciences*, Vol. 5, No. 27 P3, p.1495.
- Mehta, A. and Bhavani, G. (2017) 'Application of forensic tools to detect fraud: the case of Toshiba', *Journal of Forensic and Investigative Accounting*, Vol. 9, No. 1, pp.692–710.
- Okoye, E.I., Nwoye, U. and Okeke-Okonkwo, C.I. (2019) 'Forensic accounting and performance management among non-governmental organisations in Nigeria', *International Journal of Recent Innovations in Academic Research*, Vol. 3, No. 12, pp.47–60.
- Othman, R., Ameer, R. and Laswad, F. (2019) 'Forensic auditing tools in detecting financial statements' irregularities: Benford's Law and Beneish Model in the case of Toshiba', *Organizational Auditing and Assurance in the Digital Age*, IGI Global, pp.256–275.
- Rindayanti, R. and Budiarto, D.S. (2017) 'Hubungan antara love of money, machiavellian dengan persepsi etis: analisis berdasarkan perspektif gender', *Akuntabilitas*, Vol. 10, No. 2, pp.261–272.
- Samociuk, M., Iyer, N. and Doody, H. (2010) *A Short Guide to Fraud Risk: Fraud Resistance and Detection*, Routledge.
- Setyaki, R.S., Pesudo, D.A.A., Andreas, H.H. and Chang, M.L. (2022) 'Does personality impact academic fraud?', *Review of Integrative Business and Economics Research*, Vol. 11, No. 3, pp.81–98.
- Taylor, M., Haggerty, J., Gresty, D. and Lamb, D. (2011) 'Forensic investigation of cloud computing systems. exploring and evaluating tools, trust, and techniques. network security', *Journal of Digital Investigation*, Vol. 2011, No. 3, pp.4–10.