# The Effect of Ethical Climate on Whistleblowing Intention with Ethics Training as a Moderating Variable

#### Alfiana Antoh

Accounting, Faculty of Economics and Business, Universitas Cenderawasih Jayapura, Indonesia

#### ARTICLE INFO



ISSN: 2620-6196 Vol. 8 Issues 1 (2025)

Article history: Received – May 31, 2025 Revised – June 02, 2025 Accepted – June 03, 2025

Email Correspondence alfianaantoh2@gmail.com

## **Keywords**

Ethical Climate Theory; Ethics Training; Whistleblowing Intention

### ABSTRACT

This study aims to analyse the effect of organisational ethical climate and ethics training on whistleblowing intentions of local government accounting staff based on the Ethical Climate Theory proposed by Victor and Cullen (1988), as well as the moderating effect of ethics training on the relationship between ethical climate and whistleblowing intentions. Using data collected through a questionnaire survey with direct mailing method to 63 employees working in the accounting and assets department in the Regional Financial Management Agency in 3 regencies/cities in Papua Province, Indonesia. This study found that ethical climate and ethics training influence whistleblowing intentions. However, ethics training did not strengthen the relationship between ethical climate and whistleblowing intentions. These findings support the Ethical Climate Theory. Practically, this study suggests that increasing whistleblowing intentions by LG accounting staff can be achieved by improving the ethical climate within the organisation and supporting accounting staff to attend ethics training.

#### INTRODUCTION

Fraud is a serious threat to organisations and must be prevented as early as possible. One of the efforts to prevent fraud is to build a good internal control system. The existence of a fraud disclosure system is one way to improve the effectiveness of the organisation's internal control system which aims to safeguard organisational assets, check the accuracy and reliability of accounting data, encourage operational efficiency and encourage compliance with management policies. In a survey conducted by the Association of Certified Fraud Examiners (ACFE 2020), it was seen that the total losses suffered by organisations in the world due to fraud in the organisation were more than USD 3.6 billion with three types of fraud dominating, namely misuse of assets (86%), corruption (50%), and financial statement fraud (9%). The survey also shows that most frauds within organisations are detected through tips or insider information-whistleblowing (42%), internal audits (16%) and management reviews (12%) while external audits only account for 4%. The survey results show that whistleblowing is the largest fraud detection method.

Research on the relationship between whistleblower characteristics and fraud disclosure intentions shows that accounting research more often tests general demographic information such as gender, age, and work experience (Gao and Brink 2017). This research focuses on a different side, namely organisational characteristics. The effective fraud disclosure model proposed by Near and Miceli(1985) emphasises the role of organisational characteristics as one of the factors that increase fraud disclosure intentions. Disclosure intentions are influenced by individuals' perceptions of organisational support and whether the organisation is willing to change wrongful actions (Gao and Brink 2017). Organisational characteristics play an important role in employees' willingness to report fraud. Accounting research so far has examined many organisational characteristics including the accuracy of reporting actions, organisational structure (Brennan and Kelly 2007; Lowe, Pope, and

Samuels 2015; Rose, Brink, and Norman 2018), and organisational climate (Brink et al. 2013; Dalton and Radtke 2013; Seifert et al. 2010; Xu and Ziegenfuss 2008). Organisational climate refers to the ethical climate, which can either encourage or discourage fraud disclosure. An organisation's fraud disclosure climate can be influenced by many factors, such as the organisation's response to previous fraud disclosure incidents, the ethical environment, and internal rewards for fraud disclosure (Gao and Brink 2017). The ethical climate of an organisation greatly influences an employee's responses and considerations in making decisions about whether an action should be taken or not. In addition, organisations can improve the ethical climate to encourage whistleblowing (Smaili 2023). There are several previous studies that examine the effect of ethical climate on fraud disclosure intentions (Aydan and Kaya 2018; Liu et al. 2018; Nuswantara 2023; Potipiroon and Wongpreedee 2021; Rothwell and Baldwin 2006, 2007) but these studies are not in the accounting field. Previous research examining the ethical environment in organisations distinguishes between organisations that emphasise the application of ethical standards and those that do not (Dalton and Radtke 2013) and does not examine the influence of the ethical climate developed by Victor and Cullen (1988) which consists of five forms, namely caring, law and code, rules, instrumental, and independence. In addition to the ethical climate, another factor that plays a role in the organisation is the ethics training attended by members of the organisation. Through ethics training (usually when new members join) members of the organisation understand the organisation's views and how members of the organisation respond to ethical issues. Research conducted by Park and Blenkinsopp(2013) and Stöber, Kotzian, and Weißenberger(2019) shows that ethics training can improve ethical behaviour and encourage whistleblowing intentions.

The contribution of this research is to provide additional empirical evidence to the accounting literature, especially regarding the effect of organisational characteristics (ethical climate and ethics training) on whistleblowing intention, expanding the limited fraud disclosure literature, especially in the field of public accounting, making a practical contribution to the government on the extent of the role of organisational characteristics (ethical climate and ethics training) in increasing fraud disclosure intentions in local government accounting employees and as an evaluation for government policies regarding methods that are more effectively used in efforts to increase fraud disclosure, especially in local government.

## RESEARCH METHOD

This study uses a quantitative approach with an explanatory design to examine the effect of organisational ethical climate and ethics training on whistleblowing intentions, as well as the role of ethics training as a moderating variable. This approach was chosen because it is suitable for testing the relationship between variables that have been formulated in the form of hypotheses (Yakin at al., 2023). Respondents in this study are civil servants who work in the accounting and asset fields at the Regional Financial and Asset Management Agency of Jayapura City, Jayapura Regency and Keerom Regency, Papua Province. This respondent selection was carried out on the grounds that Local Government accounting staff who oversee carrying out accounting functions in the organisation have a greater opportunity to detect fraud that occurs in the organisation. Jayapura City, Jayapura Regency and Keerom Regency were selected as survey locations because they are LGUs with good financial management in Papua Province as evidenced by the acquisition of an Unqualified Opinion (WTP) for several consecutive years. Of the 90 questionnaires circulated, we utilised 63 responses (72%). Table 1 presents information on the profile of accounting staff including age, academic qualifications, gender.

**Table 1. Respondent Profile** 

Profile	Frequency	Percentage		
Gender				
Male	15	45,5%		
Female	18	28,6%		
Total	63	74,1%		
Age				
20-30	17	27,0%		
31-40	31	49,2%		
41-50	12	19,0%		
>50	3	4,8%		
	63	100,0%		
Education Background S1				
Accounting	26	41,3%		
Non Accounting	37	58,7%		
	63	100,0%		

Source: Data processed, 2025

The instruments used in this study include those by Park and Blenkinsopp(2009) to measure the whistleblowing intention variable (Alleyen at al., 2017 and (Latan at al., 2018), the ethical climate variable is measured using the instrument used by Tsai and Huang(2008) which consists of 14 statement items, while for ethics training it is measured by the number of ethics training attended by respondents. To test the validity, the Pearson's Product Moment correlation method is used, while reliability testing uses the Cronbach alpha technique. Each variable instrument is tested for validity, namely by looking at the level of significance at the 0.01 and 0.05 levels.

Based on the validity test results, all statement items for whistleblowing intention are valid, while in the ethical climate variable there are six invalid statements, namely IE statements 3, 4, 5, 12, 13, 14 so they are excluded from the analysis. The reliability test results of the whistleblowing intention are 0.908 and the ethical climate is 0.702, this means that each variable to be analysed is reliable, that is, there is consistency between the items of questions or statements in the instrument used (Sekaran and Bougie 2016).

#### RESULTS AND DISCUSSION

Before testing the hypothesis using the multiple regression method, it must fulfil several assumptions first. Therefore, a classic assumption test is carried out which consists of multicollinearity test, autocorrelation test, heteroscedasticity, and normality test. The test results show that there is no multicollinearity (Tolerance value is less than 0.10 and the VIF value of the two independent variables is not more than 10), there is no autocorrelation between independent variables (Durbin-Watson value of 1.467 is greater than the upper limit (du) 1.3093), no heteroscedasticity (by using a plot graph there is no regular pattern where the points spread above and below the number 0 (zero) on the Y axis) and the residual data is normally distributed (Kolmogorov-Smirnov test results) shows that the t-statistic value is 0.113 with a significance higher than 0.01, which is 0.194.

Furthermore, the coefficient of determination test was carried out to test the goodness-fit of the regression model. The results show that the adjusted R Square is 0.203, indicating that 20.3 per-cent of the variation in whistleblowing intention can be explained by the variability of the independent variables, while the rest is explained by other variables not included in the model. The F test was also conducted

and showed an F value of 8.919 and a significance level of 0.000 smaller than the p-value of 0.01, which means that the organisation's ethical climate and ethics training simultaneously affect whistleblowing intention.

## **Direct Effect Testing**

The t test results in Table 2 From the t test results above, a mathematical equation can be prepared, namely:

WI= 9.647+0, 450 IE+ 2.256 PE+e

It shows that the organisational ethical climate variable has a significant effect on whistleblowing intention with a significance level smaller than 0.05, namely 0.012, as well as the ethical training variable which has a significant effect with a significance level of 0.011 because it is smaller than the p-value of 0.05.

**Table 2. t Test Results** 

	Coefficients <sup>a</sup>										
	Unstandardised		Standardised				Collinearity				
	Coefficients		Coefficients				Statistics				
Model		В	Std. Error	Beta	T	Sig.	Tolerance	VIF			
1	(Constant)	9.647	5.214		1.850	.069					
	IE	.450	.173	.303	2.594	.012	.943	1.061			
	PE	2.256	.863	.305	2.615	.011	.943	1.061			

Source: data processed, 2025

The results of statistical analysis show that the organisational ethical climate and ethics training affect the fraud disclosure intention of PEMDA accounting staff, which means that the ethical decision-making process (whistleblowing intention) is influenced by the organisational ethical climate. These results are consistent with previous research conducted by Ahmad et al(2014), Rothwell and Baldwin(2006, 2007) and Nuswantara(2023). When PEMDA accounting employees intend to disclose fraud, these employees will consider whether the organisation implements typical practices and procedures that contain ethical content (Victor and Cullen 1988) which will ultimately provide confidence to individuals to act in accordance with the ethical values that apply in the organisation.

Wimbush and Shepard(1994) state that fraud disclosure as a form of ethical decision is related to the climate of care, independence, laws and codes and rules that apply to an organisation. LG accounting employees will be more likely to report the fraud they encounter when they perceive that there is a climate in the organisation that supports such actions. Because the perception of PEMDA accounting employees of the prevailing ethical climate in the organisation greatly influences their intention to disclose fraud, PEMDA needs to socialise the applicable rules and regulations related to preventing and overcoming fraud and providing fraud reporting facilities and infrastructure such as a whistleblowing system within the organisation and providing support for fraud disclosure actions, for example by providing rewards for whistleblowers so as to encourage the intention of government employees to report the fraud they encounter.

The results of this study also show that ethics training attended by government accounting employees can increase the employee's intention to report the fraud they encounter. This finding supports the findings of Brennan and Kelly(2007) and Andon et al.(2018) who found that the ethics training followed can increase employee courage in reporting fraud and ethics training can improve ethical behaviour and encourage the intention of reporting violations (Stöber et al. 2019). PEMDA accounting employees have more opportunities to discover fraud than other employees in the organisation because they carry out verification and guidance functions on financial management in regional apparatus organisations (OPD), therefore PEMDA can encourage and provide opportunities for PEMDA

accounting employees to attend ethics training to further increase employee intentions in disclosing fraud.

## **Testing the Moderating Effect**

Testing moderating variables using Moderated Regression Analysis (MRA) which uses an analytical approach by maintaining sample integrity and providing a basis for controlling the influence of moderator variables. To use MRA with one predictor variable, you must compare three regression equations to determine the type of moderator variable (Ghozali 2018), the three equations are:

```
WI1 = a + b1IE ......(1)
WI2 = a + b1IE + b2PE.....(2)
WI = α + b1IE + b2PE + b3IE * PE + e..(3)
```

After the analysis, the regression summary results can be obtained as follows:

- 1. WI1 = 9,463 + 0,559IE with t statistics = 1.743 and significance 0.002, R2 Adj = 0.127 (see table 4.11)
- 2. WI2 = 9,467 + 0,450IE + 2,256 PE with t statistics = 2.594; significance 0.012 (IE) and t statistics = 2.615; significance 0.011 (PE), R2 Adj 0.203 (see table 4.10).
- 3. WI = -0,265IE 13,882PE + 0,501 IE \* PE with t statistic = -0.756, significance 0.453 (IE); t statistic =-1.985; significance 0.052 (PE); t statistic = 2.360, significance 0.024 (Interaction).

By comparing the three regression results, it is obtained that the ethics training variable is not a moderating variable in the relationship between organisational ethical climate (IE) and fraud disclosure intention (WI) but is a predictor variable that is directly related to the fraud disclosure intention variable.

## **CONCLUSION**

This study found a direct effect of ethical climate and ethics training on whistleblowing intentions among LG accounting employees, although ethics training was not shown to moderate the relationship between ethical climate and whistleblowing intentions. This shows that employees' perceptions of how the organisation responds to ethical issues and perceptions of what the organisation views as ethical behaviour are factors that greatly influence employees' decisions to disclose the fraud they encounter.

The results of this study imply that PEMDA is expected to create an infrastructure that supports the creation of an ethical climate in the organisation such as regulations that protect whistleblowers, providing rewards and whistleblowing channels. In addition, PEMDA can also provide opportunities for accounting employees to attend ethics training and organise ethics training regularly so as to further increase the intention of accounting employees in particular as well as other PEMDA employees to report the fraud they encounter.

The limitations in this study are first, the number of respondents is limited because it uses only accounting employees in BPKAD and comes from 3 cities / districts in Papua Province, further research can use a larger sample. Second, the data used in the analysis comes from instruments that are filled in based on respondents' perceptions. This will cause problems if the respondent's perception is different from the actual situation. Future research can consider the use of scenarios or the use of qualitative methods such as interviews. Third, the use of two independent variables (ethical climate and ethics training) is less able to describe the factors that can influence fraud disclosure intentions, this is indicated by the low Adjusted R Square amount, further research can add other variables to the model we used in this research.

Although this study has limitations, the results can provide a basis for other studies in this area, especially regarding the role of organisational ethical infrastructure in ethical decision making (whistleblowing intention).

#### **REFERENCE**

- Ahmad, Syahrul Ahmar, Rahimah Mohamed Yunos, Raja Adzrin Raja Ahmad, and Zuraidah Mohd Sanusi. 2014. "Whistleblowing Behaviour: The Influence of Ethical Climates Theory." *Procedia Social and Behavioural Sciences* 164(August):445-50. doi: 10.1016/j.sbspro.2014.11.101.
- Alleyne, Philmore, Wayne Charles-Soverall, Tracey Broome, and Amanda Pierce. 2017. "Perceptions, Predictors and Consequences of Whistleblowing among Accounting Employees in Barbados." *Meditari Accountancy Research* 25(2):241-67. doi: 10.1108/MEDAR-09-2016-0080.
- Andon, Paul, Clinton Free, Radzi Jidin, Gary S. Monroe, and Michael J. Turner. 2018. "The Impact of Financial Incentives and Perceptions of Seriousness on Whistleblowing Intention." *Journal of Business Ethics* 151(1):165-78. doi: 10.1007/s10551-016-3215-6.
- Association of Certified Fraud Examiners (ACFE). 2020. "Report to the Nations on Occupational Fraud and Abuse: 2020 Global Fraud Study." *Acfe* 88.
- As'ad, A., Junaidin, J., Syarifuddin, S., Herison, R., & Syukur, A. (2024). The Impact of Cross-Cultural Management on Global Collaboration and Performance. *Bata Ilyas Educational Management Review*, 4(2), 30-42.
- Aydan, Seda, and Sıdıka Kaya. 2018. "Ethical Climate as a Moderator between Organizational Trust & Whistle-Blowing among Nurses and Secretaries." *Pakistan Journal of Medical Sciences* 34(2):429-34. doi: 10.12669/pjms.342.14669.
- Bowen, Shannon. 2004. "Organisational Factors Encouraging Ethical Decision Making: An Exploration into the Case of an Exemplar." *Journal of Business Ethics* 52(4):311-24. doi: 10.1007/s10551-004-1527-4.
- Brennan, Niamh, and John Kelly. 2007. "A Study of Whistleblowing among Trainee Auditors." *British Accounting Review* 39(1):61-87. doi: 10.1016/j.bar.2006.12.002.
- Brink, Alisa G., D. Jordan Lowe, and Lisa M. Victoravich. 2013. "The Effect of Evidence Strength and Internal Rewards on Intentions to Report Fraud in the Dodd-Frank Regulatory Environment." *Auditing* 32(3):87-104. doi: 10.2308/ajpt-50449.
- Centre for Business Ethics. 1986. "Are Corporations Instituonalising Ethics?" *Journal of Business Ethics* 5:85-91.
- Dalton, Derek, and Robin R. Radtke. 2013. "The Joint Effects of Machiavellianism and Ethical Environment on Whistle-Blowing." *Journal of Business Ethics* 117(1):153-72. doi: 10.1007/s10551-012-1517-x.
- Fritzsche, David J. 2000. "Ethical Climates and the Ethical Dimension of Decision Making." *Journal of Business Ethics* 24(2):125-40. doi: 10.1023/A:1006262914562.
- Gao, Lei, and Alisa G. Brink. 2017. "Whistleblowing Studies in Accounting Research: A Review of Experimental Studies on the Determinants of Whistleblowing." *Journal of Accounting Literature* 38(May):1-13. doi: 10.1016/j.acclit.2017.05.001.
- Ghozali, Imam. 2018. Application of Multivariate Analysis with the SPSS 25 Programme. 9th ed. Semarang: Diponegoro University Publishing Agency.
- Kancharla, Raviteja, and Anubha Dadhich. 2021. "Perceived Ethics Training and Workplace Behaviour: The Mediating Role of Perceived Ethical Culture." *European Journal of Training and Development* 45(1):53-73. doi: 10.1108/EJTD-03-2020-0045.
- Latan, Hengky, Christian M. Ringle, and Charbel Jose Chiappetta Jabbour. 2018. "Whistleblowing Intentions among Public Accountants in Indonesia: Testing for the Moderation Effects." *Journal of Business Ethics* 152(2):573-88. doi: 10.1007/s10551-016-3318-0.
- Liu, Yan, Shuming Zhao, Rui Li, Lulu Zhou, and Feng Tian. 2018. "The Relationship between Organizational Identification and Internal Whistle-Blowing: The Joint Moderating Effects of Perceived Ethical Climate and Proactive Personality." *Review of Managerial Science* 12(1):113-34. doi: 10.1007/s11846-016-0214-z.
- Lowe, D. Jordan, Kelly R. Pope, and Janet A. Samuels. 2015. "An Examination of Financial Sub-Certification and Timing of Fraud Discovery on Employee Whistleblowing Reporting

- Intentions." Journal of Business Ethics 131(4):757-72. doi: 10.1007/s10551-013-2020-8.
- Martin, Kelly D., and John B. Cullen. 2006. "Continuities and Extensions of Ethical Climate Theory: A Meta-Analytic Review." *Journal of Business Ethics* 69(2):175-94. doi: 10.1007/s10551-006-9084-7.
- Murphy, Patrick E. 1988. "Implementing Business Ethics." Journal of Business Ethics 7(12):907-15.
- Near, Janet P., and Marcia P. Miceli. 1985. "Organisational Dissidence: The Case of Whistle-Blowing." *Journal of Business Ethics* 4(1):1-16. doi: 10.1007/978-94-007-4126-3.
- Nuswantara, Dian Anita. 2023. "Reframing Whistleblowing Intention: An Analysis of Individual and Situational Factors." *Journal of Financial Crime* 30(1):266-84. doi: 10.1108/JFC-11-2021-0255.
- Park, Heungsik, and John Blenkinsopp. 2009. "Whistleblowing as Planned Behaviour A Survey of South Korean Police Officers." *Journal of Business Ethics* 85(4):545-56. doi: 10.1007/s10551-008-9788-y.
- Park, Heungsik, and John Blenkinsopp. 2013. "The Impact of Ethics Programmes and Ethical Culture on Misconduct in Public Service Organizations." *International Journal of Public Sector Management* 26(7):520-33. doi: 10.1108/IJPSM-01-2012-0004.
- Park, Heungsik, John Blenkinsopp, and Myeongsil Park. 2014. "The Influence of an Observer's Value Orientation and Personality Type on Attitudes Toward Whistleblowing." *Journal of Business Ethics* 120(1):121-29. doi: 10.1007/s10551-013-1908-7.
- Potipiroon, Wisanupong, and Achakorn Wongpreedee. 2021. "Ethical Climate and Whistleblowing Intentions: Testing the Mediating Roles of Public Service Motivation and Psychological Safety Among Local Government Employees." *Public Personnel Management* 50(3):327-55. doi: 10.1177/0091026020944547.
- Pratama, T. P., & As' ad, A. (2025). Pengaruh Employee Engagement dan Budaya Organisasi Terhadap Kinerja Pegawai pada Pengadilan Tinggi Agama Makassar. *Economics and Digital Business Review*, 6(2), 1166-1177.
- Rose, Jacob M., Alisa G. Brink, and Carolyn Strand Norman. 2018. "The Effects of Compensation Structures and Monetary Rewards on Managers' Decisions to Blow the Whistle." *Journal of Business Ethics* 150(3):853-62. doi: 10.1007/s10551-016-3222-7.
- Rothwell, Gary R., and J. Norman Baldwin. 2006. "Ethical Climates and Contextual Predictors of Whistle-Blowing." *Review of Public Personnel Administration* 26(3):216-44. doi: 10.1177/0734371X05278114.
- Rothwell, Gary R., and J. Norman Baldwin. 2007. "Ethical Climate Theory, Whistle-Blowing, and the Code of Silence in Police Agencies in the State of Georgia." *Journal of Business Ethics* 70(4):341-61. doi: 10.1007/s10551-006-9114-5.
- Schwartz, Mark S. 2016. "Ethical Decision-Making Theory: An Integrated Approach." *Journal of Business Ethics* 139(4):755-76. doi: 10.1007/s10551-015-2886-8.
- Seifert, Deborah L., John T. Sweeney, Jeff Joireman, and John M. Thornton. 2010. "The Influence of Organizational Justice on Accountant Whistleblowing." *Accounting, Organizations and Society* 35(7):707-17. doi: 10.1016/j.aos.2010.09.002.
- Sekaran, Uma, and Roger Bougie. 2016. Research Methods for Business: A Skill-Building Approach. 7th ed. Wiley.
- Sekerka, Leslie E. 2009. "Organisational Ethics Education and Training: A Review of Best Practices and Their Application." *International Journal of Training and Development* 13(2):77-95. doi: 10.1111/j.1468-2419.2009.00319.x.
- Smaili, Nadia. 2023. "Building an Ethical Culture by Improving Conditions for Whistleblowing." *Journal of Business Strategy* 44(1):37-43. doi: 10.1108/JBS-07-2021-0123.
- Stöber, Thomas, Peter Kotzian, and Barbara E. Weißenberger. 2019. "Design Matters: On the Impact of Compliance Programme Design on Corporate Ethics." *Business Research* 12(2):383-424. doi: 10.1007/s40685-018-0075-1.
- Tsai, Ming Tien, and Chun Chen Huang. 2008. "The Relationship among Ethical Climate Types, Facets of Job Satisfaction, and the Three Components of Organizational Commitment: A Study of Nurses in Taiwan." *Journal of Business Ethics* 80(3):565-81. doi: 10.1007/s10551-007-9455-8.
- Vadera, Abhijeet K., Ruth V. Aguilera, and Brianna B. Caza. 2009. "Making Sense of Whistle-Blowing's Antecedents: Learning from Research on Identity and Ethics Programs." *Business Ethics*

- Quarterly 19(4):553-86. doi: 10.5840/beq200919432.
- Valentine, Sean, and Gary Fleischman. 2004. "Ethics Training and Businesspersons' Perceptions of Organizational Ethics." *Journal of Business Ethics* 52(4):391-400. doi: 10.1007/s10551-004-5591-6.
- Victor, Bart, and John B. Cullen. 1988. "The Organizational Bases of Ethical Work Climates." 33(1):101-25.
- Wimbush, James C., and Jon M. Shepard. 1994. "Toward an Understanding of Ethical Climate: Its Relationship to Ethical Behaviour and Supervisory Influence." *Journal of Business Ethics* 13(8):637-47.
- Xu, Yin, and Douglas E. Ziegenfuss. 2008. "Reward Systems, Moral Reasoning, and Internal Auditors' Reporting Wrongdoing." *Journal of Business and Psychology* 22(4):323-31. doi: 10.1007/s10869-008-9072-2.
- Yakin, I. H., Supriatna, U., Rusdian, S., & Global Akademia, M. (2023). Research Methodology (Quantitative & Qualitative). *Paper Knowledge. Toward a Media History of Documents*.
- Zhang, Jian, Kurt Pany, and Philip M. J. Reckers. 2013. "Under Which Conditions Are Whistleblowing 'Best Practices' Best?" *Auditing* 32(3):171-81. doi: 10.2308/ajpt-50451.
- Zhou, Lulu, Yan Liu, Zhihong Chen, and Zhao. 2018. "Psychological Mechanisms Linking Ethical Climate to Employee Whistle-Blowing Intention." *Journal of Managerial Psychology* 33(2):196-213.