

# Intention to Do Whistleblowing in Government Institutions: An Experimental Study

Muhammad IKBAL<sup>1</sup>

---

## ABSTRACT

*This study aims to examine the effect of the provided reporting channels on intention of individuals to disclose fraud actions (whistleblowing), moderated by rewards and guaranteed protection. The approach used is an experiment by assigning graduate students in public sector financial management as participants. The results show that although reporting channels were provided, they did not automatically make individuals whistleblowing even if when reward was provided, it did not significantly affect individuals' whistleblowing. However, when a treatment was given on the experimental model by providing a guarantee of protection for whistleblowers, it was seen that there was significant effect on the strong intention from individuals whistleblowing, the implication of this study is the importance of protection for whistleblowers, so that the disclosure of fraud will be more effective.*

**KEYWORDS:** Whistleblowing, reporting channels, reward, guaranteed protection.

**JEL CLASSIFICATION:** M42.

---

## 1. INTRODUCTION

The impact of fraud, embezzlement and wrongdoing often be accumulated and formed a circle (Asomugha, 1997). Oftentimes with the acts of fraud, embezzlement and wrongdoing, it ultimately distracts management attention and lead to organization's increased costs at the time (Duke and Kankpang, 2012). The disclosure of fraud actions is often known as whistleblowing. The issue of whistleblowing was first proposed by Nader, Petkas and Blackwell (1972) and then supported with literature written by Peters and Branch (1972) both of the literatures explain that there is a phenomenon of one or several individuals who have idealism to prevent acts of fraud and criticize or reject unscrupulous activities within an organization.

A lot of whistleblowing-related researches that have been done such as (Liyanarachichi and Newdick, 2009; Arnold and Ponemon, 1991; Elliston and Coulson, 1982). Then some of the following researches (Mesmer-Magnus and Viswesvaran, 2005; Seifert, 2006; Brennan and Kelly, 2007; Xu and Ziegenfuss, 2008; Taylor and Curtis, 2009), many researches still use Internal Auditors as actors of whistleblowing and still few studies on whistleblowing using Management Accountant or employees as actors of whistleblowing (Kaplan, Pany, Samuels, and Zhang, 2009; Seifert, Sweeney, Joireman, and Thornton, 2010).

Research by Kaplan and Schulz (2007) conveys the limitation of their research where it is necessary to conduct study on emotional and fear variables in whistleblowing-related researches, thus there is an opportunity to conduct research related to whistleblowing if performed on management accountants or employees in public sector, where their existences

---

<sup>1</sup> Mulawarman University, Indonesia, ivaganza@gmail.com

are not as auditors, but as the actors who interact with the perpetrators of fraud, and it is considered essential to overcome the effects of the fears of fraud reporters by making the protection for whistleblowers.

Whistleblowing effort is very important in the effort to reduce fraud or wrongdoing actions (Sarbanes - Oxley Act 2002, Section 301 and 806), designed specifically to encourage whistleblowing effort and provide protection from retaliation for employees who reveal unclear or suspicious things on accounting and auditing issues.

Other research by Kaplan *et al.* (2009) has tested the effectiveness of anonymously reporting channel to encourage individuals to report wrongdoing actions which has been proven on the condition of structural models. Under the conditions of structural models, anonymous reporting is still effective in encouraging people to report wrongdoing, but is anonymous reporting still effective in other models, for example reward model, in which the organization rewards individuals who perform actions in line with the objectives of the organization, in this case is the disclosure of wrongdoing actions. The use of reward model in encouraging people to report wrongdoing has been proven by Xu and Ziegenfuss (2008).

The study is expected to contribute in strengthening the various results of researches related to whistleblowing which are still relatively rare, both in the world and in Indonesia. The research will be an input for private and public sectors in order to provide reporting channel, both anonymous as well as non-anonymous reporting channels. This study is expected to provide input for the establishment of regulations on the protection for fraud disclosers.

This study uses reinforcement theory and Maslow's hierarchy of needs theory to construct the intention to disclose fraud actions (whistleblowing) by using the experimental approach. The research participants are civil servants as well as graduate students in public sector financial management. The next parts on the structure of this study are the composition of writing, background and will be continued with the theoretical background, the third part is about research methodology, the fourth part containing Results and Discussion and the last part discusses conclusion, implications and limitations of the study.

## **2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

Manuscript must contain answers to following questions: what is the problem, what has been done by other researchers and where you can contribute, what have you done, which method or tools you used, what are your results, what is new and good, what is not good.

### **2.1 Reinforcement Theory**

The author(s) guarantee(s) that the manuscript is/will not be published elsewhere in any language without the consent of the copyright holders, that the rights of third parties will not be violated, and that the publisher will not be held legally responsible should there be any claims for compensation.

Statements and opinions expressed in the article are these of the author(s) and not those of the editors. No responsibility is accepted for the accuracy of information contained in the published paper. Editors assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained inside the paper.

Authors wishing to include figures or text passages that have already been published elsewhere are required to obtain permission from the copyright holder(s) and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.

The author(s) are encouraged to transfer the copyright of the article to the publisher upon acceptance of an article by the journal, using the Copyright agreement form.

## **2.2 Maslow's Hierarchy of Need Theory**

Abraham Maslow (1943) argues that all motivation occurred as reaction to the individual's perception on five types of basic needs. Maslow also stated that the hierarchy of need theory itself as dynamic holistic of theory synthesis. Called so because Maslow based his theory by following the tradition of James and Dewey functional, combined with trust elements of Wertheimer, Goldstein, and Gestalt psychology, and the dynamism of Freud, Fromm, Horney, Reich, Jung and Adler. In his literature, Maslow (1934) classifies theories of motivation for people, according to him human needs are arranged in classy and hierarchies classification. These hierarchies must be met to be able to enjoy the next level needs.

## **2.3 Reporting Channel and Disclosure of Wrongdoing Actions**

Based on the Prosocial theory (Brief and Motowidlo, 1986), this theory supports the assumption of fraud disclosure (whistleblowing), prosocial organizational behavior as behavior of individuals within the company or organization whose behaviors are addressed to individuals, groups, or organizations with whom he or she interacts when performing its role in the organization or it is targeted to improve the welfare of an individual, group, or organization.

Its relation to whistleblowing is this reporting requires media or channels. Research by Park *et al.*, (2008) separated multiple reporting channels namely reporting that allows the reporter's identity to be known (non-anonymous) and the reporter's identity to be kept confidential (anonymous). Furthermore, Near and Miceli (1995) proposed that the anonymous or non-anonymous reporting channels will affect the effectiveness of whistleblowing. Two reasons proposed in supporting this proposition. First, the report recipients can guarantee whistleblower who is not willing his/her "identity" to be known. That is, by reporting anonymously, the report recipients can be expected to maintain the credibility of the whistleblower.

Some researches' results show some evidence that the person who disclose fraud or whistleblower using both channels either anonymous or non-anonymous. The research survey conducted by Near *et al.* (2004) states that 77% of the discloser who comes from federal employees in the USA using non-anonymous channel and the remaining of 23% use an anonymous channel, meaning that here is still a lot of whistleblowers who dared to use the non-anonymous channel.

The fear of whistleblowers if the whistleblowers' identities are known will be higher. Consequences of the whistleblowers' identities will increase the threat to whistleblowers both from the perpetrators of fraud and other parties that may hinder reports performed by whistleblowers. These consequences often led to indecision for whistleblowers and causing reduction of intention in reporting, thereby reducing the intensity of fraud disclosure. With the

inconsistency of some of the findings on the use of reporting channels, it can be proposed hypothesis as follows:

H<sub>1</sub>: By providing reporting channels, it will raise individual's intention to disclose fraud action.

#### **2.4 Moderation Effect of Reward Model and Disclosure of Wrongdoing Action**

The linkage between reward model and an intention to disclose fraud action can be explained by Reinforcement Theory. Reinforcement Theory explained that someone would behave in particular way because there is the motivation that drives him in the form of rewards that may be received. Research conducted by Xu and Ziegenfuss (2008) found evidence that the internal auditor's role is very important to disclose and uncover fraud action to the appropriate authorities when they have an incentive or reward. Similarly, Ponemon (1994) stated that the significant impact of monetary reward or reward in form of work contract renewal as motivation for reporting wrongdoing action.

The reward model will gradually lead the individual to commit disclosure of fraud action on any reporting channel, both anonymous and non-anonymous. Seifert *et al.*, (2010) states that whistleblower would not hesitate anymore and would not hide his identity if he/she wants to get reward, because the organization will ensure that reward will be given officially and openly. Some empirical evidence (see Gao, *et al.*, 2015; Henik, 2015; Dyck, Morse, and Zingales, 2007) states that rewards system or reward model that provides reward in the form of money or monetary will be very effective in disclosing fraud actions in organization. This evidence further indicates that a lot of individuals who make the effort of disclosure are encouraged by sufficient rewards provided. Based on various theories and empirical evidence above, the following research hypothesis is proposed:

H<sub>2</sub>: By providing reward, it reinforces intention of individuals to disclose fraud action through reporting channels provided.

#### **2.5 Moderation Effect of Guaranteed protection and Disclosure of Wrongdoing Action**

The use of guaranteed protection for whistleblowers in relation to its use as effect moderator of reporting channel and reward model on the intention to disclose wrongdoing actions supported by Salmond's legal protection theory. Salmond and Fitzgerald (1966) in legal protection theory stated that law is created to integrate and administer as well as coordinate the interests of society, protection to the existence of interests in certain party by providing a limit or trying to give special treatment to the various interests in the other parties. What means by legal interests is an attempt to coordinate the various rights and interests of human beings, so legal has authority to manage public interests that must be authorized by written rules. In Indonesia, protection for whistleblower is not yet fully-regulated implicitly, but it can be connected using the Act No. 13/2006 on the Legal Protection for Witnesses and Victims. This act requires to establish institutions that advocate and protect witnesses and victims called LPSK (*Witness and Victim Protection Agency*), which has been running.

The United States has formed a protection and advocacy agency for Whistleblower named National Whistleblower Center (NWC) which was established in 1988 and the other institution called GAP or Government Accountability Project that was established in 1977, which is continuously to advocate whistleblowers. The roles of NWC and GAP as an

independent institution is very helpful for the prevention of fraud, even there are a lot whistleblowers who receive incentives from the disclosure of wrongdoing cases and have their jobs back that they left previously.

Not many empirical studies that examine the effect of protection for whistleblowers have been done, in Indonesia some studies only review from legal view on the importance of protection for whistleblowers, which discuss the legal protection for whistleblowers of corruption cases based on Act No. 13/2006 on the Legal Protection for Witnesses and Victims. Having regard to the above description, the hypothesis can be formulated as follows:

H<sub>3</sub>: Guaranteed protection for whistleblower reinforces the intention of individuals to disclose fraud actions using reporting channels provided.

### 3.METHODOLOGY

#### 3.1 Experimental Design

The type of this research is experimental research, using the approach of causality. The type of experimental design used is Pretest only and control group design with treatment between subjects. Treatment process using multiple stages, there are two groups on each stage that are randomly selected in order to maintain the strength of internal validity.

**Table 1. Factorial Experimental Design 2x1 (H<sub>1</sub> Testing)**

<b>Reporting Channels</b>	<b>Intention to Disclose</b>	<b>Case</b>
<b>There Is No Official Reporting Channel</b> <i>(Control Group)</i>	<b>Group 1</b>	<b>Case 2</b>
<b>There Is Official Reporting Channel</b> <i>(Treatment Group)</i>	<b>Group 2</b>	<b>Case 3</b>

*Source: author`s contribution*

The first group is given treatment which is considered as the treatment group and the other group is considered as the control group. At first a pre-test is given without distinguishing control and treatment groups by giving question (case 1). Then on the second year treatment is given for Treatment Group (Table 1).

The third stage (Table 2), treatment will be given by inserting reward as moderating variables, which amplified the effect of reporting channel to the intention of participants in reporting fraud he/she knows.

**Table 2. Factorial Experimental Design 2x1 the moderation effect of reward**

<b>Reporting Channels</b>	<b>Intention to Disclose</b>	<b>Case</b>
<b>There Is Reporting Channel but without Reward</b> <i>(Control Group)</i>	<b>Group 1</b>	<b>Case 4</b>
<b>There Is Reporting Channel with Reward Model</b> <i>(Treatment Group)</i>	<b>Group 2</b>	<b>Case 5</b>

*Source: author`s contribution*

The fourth stage (Table 3), treatment will be given by inserting Protection for Whistleblower as moderating variables, which amplified the effect of reporting channel to the intention of participants in reporting fraud he/she knows.

**Table 3. Factorial Experimental Design 2x1 the moderation effect of Protection**

<b>Reporting Channel</b>	<b>Intention to Disclose</b>	<b>Case</b>
<b>There Is No Reporting Channel, and No Protection (Control Group)</b>	<b>Group 1</b>	<b>Case 6</b>
<b>There Is Reporting Channel with Protection (Treatment Group)</b>	<b>Group 2</b>	<b>Case 7</b>

Source: author`s contribution

### 3.2 Variables and Measurement

Variables used are intention to do whistleblowing as the dependent variable, and Reporting Channel as independent variable, two moderating variables namely reward and protection/guaranteed protections. This study uses interval size for intention variable to disclose range from really has no intention to disclose (1) to has strong intention to disclose (5), while variables of reporting channel, reward and protection using nominal size of there is (1) and there is no (0). So the hypothesis testing used is MRA (Moderating Regression Analysis).

### 3.3. Cases

The groups are divided based on the condition of cases received and questions which are distributed to participants. Participants will be given about the first assignment related to the tendency to report the acts of fraud, then the next assignment in two conditions, there is reporting channel and there is no reward model (experimental group) and there is reporting channel and there is no reward model (the control group). The participants will get cases in the two conditions randomly. The last part is interacting the protection for whistleblowers, the assignment of this section is divided into two conditions, there is reporting channel with protection and there is reporting channel without protection. The participants will get cases in the two conditions randomly.

The instrument used in this study is in the form of cases. Cases relating to the dependent variables namely Accounting Cheating, and the intention of participants in disclosing fraud as well as the independent variables, namely Reporting Channel (anonymous reporting channel and non-Anonymous reporting channel And Reward Model (there is or there is no reward provided for whistleblower).

### 3.4. Participants

Participants of this study consist of 54 male students of Regional Financial Economics at Mulawarman University comprising some of the employees in 10 Regencies / Municipals in East Kalimantan which have had work experiences as civil servants. Assignment is done during class hours. Before assignment, Pilot test is performed first in this study so that the researcher can determine whether the instruments used can be understood by the study participants by conducting experiments on some undergraduate Accounting students in Government Accounting study program.

## 4. RESULTS

In this descriptive statistics, the demographic data of respondents or participants will be presented, in terms of sex, age, length of work period at the current position, the length of work period since appointed as civil servant and the length of work period in accounting or financial administration positions in government institutions.

**Table 4. Data of Participants' Demographic**

Sex: Male 35 (64.81%) Female 19 (35.19%)				
	Mean	SD	Min	Max
Age	38.12	3.25	28	54
Length of work period at the current position	8.38	5.12	4	17.4
Length of work period as civil servant	6.13	4.24	3.1	22.6
Length of work period in accounting and Financing	4.21	3.32	2.21	16.2

Source: author`s calculation

### 4.1 Manipulation Testing

Manipulation Testing presents data related to the treatment for the control group, both for Reporting Channel, Reward or Protection (table 5).

**Table 5. Test Results of Pre-test**

<b>Intention to Disclose Wrongdoing</b>	Code	N	%
Have strong intention (HSI)	HSI – 5	2	3.85
Have intention (HI)	HI – 4	5	9.62
Doubt (DB)	DB – 3	8	15.38
Have no intention (HNI)	HNI – 2	21	40.38
Have no strong intention (HNSI)	HNSI – 1	16	30.77
Total of Participants		52	

Source: author`s calculation

In next section, the mechanism of treatment will be performed by showing up the reporting channel whether the intention to report is increasing, then the reward variable is intervened into the reporting channel (Table 6), protection variable is intervened by including it into reporting channel (Table 7).

**Table 6. Manipulation Testing**

<b>Manipulation Testing Part I:Reporting Channel</b>			
<b>Reporting Channel</b>	<b>Intention to report wrongdoing (Code)</b>	N	%
<b>There is no</b>	HSI – 5	2	7.69
	HI – 4	2	7.69
	DB – 3	4	15.38
	HNI – 2	11	42.31
	HNSI – 1	7	26.92
	Total	26	
<b>There is</b>	HSI – 5	7	26.92
	HI – 4	11	42.31

	DB – 3	2	7.69
	HNI – 2	4	15.38
	HNSI – 1	2	7.69
	Total	26	
<b>Manipulation Testing Part II: Reward</b>			
<b>There is reporting channel but no Reward (Control Group)</b>	HSI – 5	8	30.77
	HI – 4	10	38.46
	DB – 3	2	7.69
	HNI – 2	3	11.54
	HNSI – 1	3	11.54
	Total	26	
<b>There is reporting channel with Reward Model (Treatment Group)</b>	HSI – 5	8	36.36
	HI – 4	9	40.91
	DB – 3	5	22.73
	HNI – 2	2	9.09
	HNSI – 1	2	9.09
	Total	26	

Source: author`s calculation

**Table 7. Manipulation Testing Part III: Protection**

<b>There is no reporting channel and no Protection (Control Group)</b>	HSI – 5	7	31.82%
	HI – 4	11	50.00%
	DB – 3	2	9.09%
	HNI – 2	4	18.18%
	HNSI – 1	2	9.09%
	Total	26	
<b>There is reporting channel with Protection (Treatment Group)</b>	HSI – 5	13	59.09%
	HI – 4	7	31.82%
	DB – 3	1	4.55%
	HNI – 2	1	4.55%
	HNSI – 1	0	0.00%
	Total	26	

Source: author`s calculation

### 4.2 Hypothesis Testing

Testing the hypotheses of research used simple regression and Moderating Regression Analysis (MRA) and performed at the limit of significance of 5% or interval confidence of 95%. The results of factorial design analysis (Table 8) that can be used to prove the three hypotheses are presented as follows:

**Table 8. Hierarchy Analysis with Simple Regression and MRA**

	<b>(I)</b>	<b>(II)</b>
Intercept	-2.127	-3.342
Reporting Channel	0.116 (0.134)	0.213 (0.184)
Reward * Reporting Channel		1.159 (0.142)

	(I)	(II)
Protection * Reporting Channel		1.162*) (0.036)
Adjusted-R <sup>2</sup>	0.265	0.242
*) Coefficient has significant value at the level of 0.05 (two-tailed) Intensity Variable to disclose wrongdoing (I) Simple Regression (II) Moderated Regressing Analysis (MRA)		

Source: author`s calculation

## 5. DISCUSSION

This study aims to examine the impact of reporting channel (both anonymous and non-anonymous) to the intention of individuals to do whistleblowing on fraud acts or wrongdoing in government Organization, the causal relationship is moderated by reward and protection for whistleblower. As the main reference research, study performed by Kaplan and Schulz (2007) is used. This study tested three hypotheses related to the individual intentions in reporting or disclosing fraud in public sector organizations.

The first hypothesis assumed that the existence of reporting channels will lead to intention of individuals to disclose fraud actions (H1). Based on the analysis (table 8), reporting channel does not affect significantly the intention of individuals in reporting or disclosing fraud, it certainly rejects the first hypothesis. The result of this study is in contrast to Moberly (2006) which states that the official reporting channel provided will encourage more effective whistleblowing because it avoids the filtering of information. Similarly, the result of this study is in contrast to research performed by Kaplan and Schulz (2007) which states that the existence of reporting channel will reduce reporting costs and encourage individuals' disclosure. In contrast to these two studies, this study does not indicate the existence of reporting channel will encourage whistleblowing, it can be caused by several things; First, public servants who act as participants are structural employees who can be transferred to any section at any time, and may be the concerned (whistleblower) get effects of retaliation by other party if he/she is in new work place, second: eastern and regional cultures in Indonesia still adheres to values of not telling mistakes of others, even if the mistakes of his/her own colleagues.

Then the second hypothesis that assumes that the existence of reward will reinforce intention of individuals to disclose wrongdoing on reporting channel provided. The results of the analysis (Table 8) showed that the interaction between reward and reporting channel does not significantly strengthen intention of individuals to disclose wrongdoing and even though there are rewards provided, it is not necessarily will strengthen intention of individuals to disclose wrongdoing. This is interesting, because by viewing the answers of respondents (Table 6), when the treatment of reward was given, the increase percentage of whistleblowing on the reporting channel provided does not improve significantly. It can be caused by several things, among others are the risk of retaliation is greater than the reward received. This is explained by the Reinforcement Theory (Skinner, 1945) which states that in doing something, employees are very dependent on the potential rewards and consequences they'll get in the future, meaning that the impact of whistleblowing is greater than the reward received.

The last one tries to answer the research gap in this study, Kaplan and Schulz (2007) research has not studied emotions and fears variables, so that whistleblowers who have fear must be protected and guaranteed. The last hypothesis assumed that guaranteed protection or

protection for the individual who have intention to do whistleblowing will encourage the disclosure of wrongdoing using reporting channel provided, the results of the analysis showed that the interaction between protection and reporting channel have significant positive coefficient, meaning that the protection will encourage intention of individuals to disclose wrongdoing. This study supports the Maslow's theory (1943) that humans need a guarantee of security and protection, especially when associated with whistleblowing efforts. This study has been testing a new variable in the form of protection variable for whistleblowers, and the result is guaranteed protection or protection provides significant effect for individuals to perform whistleblowing through reporting channel provided. Guaranteed protection/protection for encourage is very important, and must be guaranteed its existence through strict and binding regulations.

## 6. CONCLUSIONS AND LIMITATIONS

Although reporting channel have been provided, it is not automatically make public servant to do whistleblowing, due to various considerations faced both retaliation from fellow actors or from other party, an also the consideration of cultural and religion values which are reluctant to open up the mistakes of others. Another finding, it can be seen that although reward is provided it does not automatically encourage intention of employees to do whistleblowing, things into consideration is that reward obtained is not comparable to other impacts that may be encountered in the future if someone does whistleblowing. The next finding is evidence that protection has strongly encouraged effort of whistleblowing, however, because protection for whistleblower will become one of the guarantees in order to avoid things that are not desirable for whistleblower. These findings have implications for the government in terms of the lawmakers that the eradication of fraud and corruption must involve internal-whistleblower and security or protection for whistleblower must be confirmed in the form of legislation, in order to have legal certainty.

This study has several limitations, among others; limited number of participants because of the difficulty in collecting public servants whose jobs are in the financial sector on the exact location setting except at the lecture hall that has been formed officially, however, with the number of only 52 participants. In-depth analysis can be done for this study. Then the different educational background of participants has possibility to be problem in understanding the given case, but this is not a significant problem because most of them have more than four years experiences in financial field. The future researches can analyze broader setting by using large numbers of civil servants as participants and long educational background and working experiences, then the opportunity for next researches is to perform testing on what is the most effective protection to encourage whistleblowing.

## REFERENCES

- Arnold, D.F. and Ponemon, L.A. (1991). Internal auditors' perceptions of whistle-blowing and the influence of moral reasoning: An experiment, *Auditing: A Journal of Practice*, 10 (2): 1-15
- Asomugha, E.M. (1997). *Nigerian Law of Banking and Negotiable Instruments*. Bolabay Publications.
- Brennan, N. and Kelly, J. (2007). A study of whistleblowing among trainee auditors. *The British Accounting Review*, 39(1), 61-87.

- Duke II, Joe and Kechi A. Kankpang. (2012). Effect of Fraud Risk Reduction Strategy on the Level of Employee Fraud in Nigerian Public Service Organizations. *Problems Of Management In The 21th Century*. Volume 4, 2012
- Dyck, A., Morse, A. and Zingales, L. (2007). *Who blows the whistle on corporate fraud?* (No. w12882). National Bureau of Economic Research.
- Elliston, F.A. and Coulson, R. (1982). Anonymous Whistleblowing: An Ethical Analysis [with Commentary]. *Business and Professional Ethics Journal*, 1(2), 39-60.
- Gao, J., Greenberg, R. and Wong-On-Wing, B., 2015. Whistleblowing intentions of lower-level employees: The effect of reporting channel, bystanders, and wrongdoer power status. *Journal of Business Ethics*, 126(1), pp.85-99.
- Henik, E., 2015. Understanding whistle-blowing: A set-theoretic approach. *Journal of Business Research*, 68(2), pp.442-450.
- Kaplan Jr, S.E. and Schultz Jr, J.J. (2007). Intentions to report questionable acts: An examination of the influence of anonymous reporting channel, internal audit quality, and setting. *Journal of Business Ethics*, 71(2), 109-124.
- Kaplan, S., Pany, K., Samuels, J. and Zhang, J. (2009). An examination of the association between gender and reporting intentions for fraudulent financial reporting. *Journal of Business Ethics*, 87(1), 15-30.
- Liyanarachchi, G. and Newdick, C. (2009). The impact of moral reasoning and retaliation on whistle-blowing: New Zealand evidence. *Journal of Business Ethics*, 89(1), 37-57.
- Maslow. Abraham H. (1943). A Theory of Human Motivation. *Psychological Review*, Vol. 50, No. 4, July 1943, 370 - 396.
- Mesmer-Magnus, J.R. and Viswesvaran, C. (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. *Journal of Business Ethics*, 62(3), 277-297.
- Moberly, R. (2006). Sarbanes-Oxley's structural model to encourage corporate whistleblowers. *Brigham Young University Law Review*, 1107.
- Nader, R., Petkas, P. J., and Blackwell, K. (Eds.). (1972) *Whistle blowing: The report of the conference on professional responsibility*. New York: Grossman Publishers.
- Near, J.P. and Miceli, M.P., (1995). Effective-whistle blowing. *Academy of management review*, 20(3), pp.679-708.
- Near, T.J. and Sanderson, M.J., (2004). Assessing the quality of molecular divergence time estimates by fossil calibrations and fossil-based model selection. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 359(1450), pp. 1477-1483.
- Peters, C., and Branch, T. (1972). Blowing the whistle: Dissent in the public interest.
- Ponemon, L.A. (1994). Whistle-blowing as an internal control mechanism-individual and organizational considerations. *Auditing-a Journal of Practice and Theory*, 13(2), 118-130.
- Salmond, S.J.W. and Fitzgerald, P.J., (1966). *On Jurisprudence*. by PJ Fitzgerald. Sweet & Maxwell.
- Sarbanes, P., (2002). Sarbanes-oxley act of 2002. *In the Public Company Accounting Reform and Investor Protection Act*. Washington DC: US Congress.
- Seifert, D.L., Sweeney, J.T., Joireman, J. and Thornton, J.M. (2010). The influence of organizational justice on accountant whistleblowing. *Accounting, Organizations and Society*, 35(7), 707-717.
- Skinner, B.F., (1945). The operational analysis of psychological terms. *Psychological review*, 52(5), 270.

Taylor, E.Z. and Curtis, M.B. (2010). An examination of the layers of workplace influences in ethical judgments: Whistleblowing likelihood and perseverance in public accounting. *Journal of Business Ethics*, 93(1), 21-37.

Xu, Y. and Ziegenfuss, D.E. (2008). Reward systems, moral reasoning, and internal auditors' reporting wrongdoing. *Journal of Business and Psychology*, 22(4), 323-331.

**Appendix:**

Case Classification and Participants' Responses

CASE	Case Direction and Participants' Responses										
	<p><i>Irwansyah is one of the civil servants in SKPD-X (type of Local Government Department) in Z regency. Irwansyah has been working for 3 years as one of staffs in the SKPD Financial Department and the Financial Administration. Mr. Ridwan is the head of the finance who is responsible for all financial governance at the office, he also acts as the Budget Authority. Irwansyah has no special relationship with Mr. Ridwan, their relationship is only between a supervisor and a subordinate. No attachment to family or ethnic identity. Irwansyah tasks is to input all transactions in the SKPD books, and occasionally to help Treasurer and to create list of fees and salaries.</i></p> <p><i>One day, Irwansyah found out that there are actions performed by the treasurer that in your opinion are wrongdoings, among others:</i></p> <p><i>a) The Treasurer gave a memo to Irwansyah to record Official Travel for several 3<sup>rd</sup> Echelon employees in the area by using office money in total of IDR24.500.000, - but the fact is some of officials concerned were not departed. The Official Travel was approved by the Department of Budget Authority.</i></p> <p><i>b) Irwansyah received a memo to record the purchase of Fuel during July and August for electrical generator Set operational purposes in July - August, in total of IDR2.400.000, whereas in July-August there was no power outage, which then Irwansyah also accepted Solar purchase orders for November - December.</i></p> <p><i>c) Irwansyah received a memo to record the purchase of procurement of 8 units LCD Projector, in total of IDR52.000.000, that there was no official report of the procurement, the purchase was only done by the Treasurer.</i></p> <p><i>d) Irwansyah received purchase orders of 100 boxes of papers, whereas to his perceived since two months ago there are piling up papers in warehouses and still unused.</i></p> <p><i>Irwansyah concluded that Mr. Ridwan as the head of finance knowing all transactions, which are considered by Irwansyah as wrongdoing and fraud, because all notes and transactions evidence are signed by the head of Finance.</i></p>										
<p><b>Case 1</b> <b>Pre-Test</b></p>	<p><b><u>Question:</u></b> Based on the above conditions, if you were Irwansyah, will you report the wrongdoing?</p> <table border="1" data-bbox="435 1659 1297 1738"> <thead> <tr> <th data-bbox="435 1659 619 1693">HNSI-1</th> <th data-bbox="624 1659 788 1693">HNI-2</th> <th data-bbox="793 1659 957 1693">DB-3</th> <th data-bbox="962 1659 1126 1693">HI-4</th> <th data-bbox="1131 1659 1297 1693">HSI-5</th> </tr> </thead> <tbody> <tr> <td data-bbox="435 1700 619 1738"></td> <td data-bbox="624 1700 788 1738"></td> <td data-bbox="793 1700 957 1738"></td> <td data-bbox="962 1700 1126 1738"></td> <td data-bbox="1131 1700 1297 1738"></td> </tr> </tbody> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							
<p><b>Case 2</b></p>	<p><b><u>Note:</u></b> Regional Supervising Board or the Regional Inspectorate does not provide the reporting media in case of SKPD employees or staffs find out wrongdoing/fraud in their agency or SKPD in Z Regency. If employees are willing to report, they have to make reports directly to the Regional Supervising Board or the Regional Inspectorate or other authorities.</p> <p><b><u>Question:</u></b></p>										

	<p>Based on the above conditions, if you were Irwansyah, will you report the fraud/wrongdoing?</p> <table border="1" data-bbox="435 297 1297 376"> <thead> <tr> <th>HNSI-1</th> <th>HNI-2</th> <th>DB-3</th> <th>HI-4</th> <th>HSI-5</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							
<p><b>Case 3</b></p>	<p><b>Note:</b> Regional Supervising Board or Regional Inspectorate has provided reporting media in case of SKPD employees or staffs find out fraud in their agency or SKPD in Z Regency. Regional Inspectorate presents two models of reporting, The identity of whistleblower will be kept confidential (called <b>Anonymous Channel</b>) or the identity of whistleblower will be reported clearly so that the report responsibility can be accurate (called <b>non-Anonymous Channel</b>).</p> <p><b>Question:</b> Based on the above conditions, if you were Irwansyah, will you use the channels provided by the Regional Inspectorate to report the wrongdoing?</p> <table border="1" data-bbox="435 887 1297 965"> <thead> <tr> <th>HNSI-1</th> <th>HNI-2</th> <th>DB-3</th> <th>HI-4</th> <th>HSI-5</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							
<p><b>Case 4</b></p>	<p><b>Note:</b> Regional Supervising Board or Regional Inspectorate has provided reporting media in case of SKPD employees or staffs find out fraud in their agency or SKPD in Z Regency. Regional Inspectorate presents two models of reporting, The identity of whistleblower will be kept confidential (called <b>Anonymous Channel</b>) or the identity of whistleblower will be reported clearly so that the report responsibility can be accurate (called <b>non-Anonymous Channel</b>).</p> <p><b>Question:</b> Based on the above conditions, if you were Irwansyah, will you use the channels provided by the Regional Inspectorate to report the wrongdoing?</p> <table border="1" data-bbox="435 1442 1297 1518"> <thead> <tr> <th>HNSI-1</th> <th>HNI-2</th> <th>DB-3</th> <th>HI-4</th> <th>HSI-5</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							
<p><b>Case 5</b></p>	<p><b>Notes:</b></p> <p>a) Regional Supervising Board or Regional Inspectorate has provided reporting media in case of SKPD employees or staffs find out fraud in their agency or SKPD in Z Regency. Regional Inspectorate presents two models of reporting, The identity of whistleblower will be kept confidential (called <b>Anonymous Channel</b>) or the identity of whistleblower will be reported clearly so that the report responsibility can be accurate (called <b>non-Anonymous Channel</b>).</p> <p>b) The Z Regent is someone who upholds the good governance, the Regent has issued a decree stating that the Regent would give <i>IDR5.000.000 – IDR50,000,000</i> interval Bonus for employees who report fraud in SKPD as manifestation of good governance, and other bonuses in the form of rewards and promotions in accordance with the provisions</p>										

	<p><b>Question:</b> Based on the above conditions, if you were Irwansyah, will you use the channels provided by the Regional Inspectorate to report the wrongdoing/fraud?</p> <table border="1" data-bbox="435 376 1297 450"> <tr> <th>HNSI-1</th> <th>HNI-2</th> <th>DB-3</th> <th>HI-4</th> <th>HSI-5</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							
<p><b>Case 6</b></p>	<p><b>Notes:</b>`</p> <p>a.) Regional Supervising Board or Regional Inspectorate has provided reporting media in case of SKPD employees or staffs find out fraud in their agency or SKPD in Z Regency. Regional Inspectorate presents two models of reporting, The identity of whistleblower will be kept confidential (called <b>Anonymous Channel</b>) or the identity of whistleblower will be reported clearly so that the report responsibility can be accurate (called <b>non-Anonymous Channel</b>).</p> <p>b.) Up to now there is no regulation at the regional level to protect the whistleblower, but the Regent appealed to all Employees to work with high commitment and honest on the management of state finances.</p> <p><b>Question:</b> Based on the above conditions, if you were Irwansyah, will you use the channels provided by the Regional Inspectorate to report the wrongdoing/fraud?</p> <table border="1" data-bbox="435 1077 1297 1151"> <tr> <th>HNSI-1</th> <th>HNI-2</th> <th>DB-3</th> <th>HI-4</th> <th>HSI-5</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							
<p><b>Case 7:</b></p>	<p><b>Notes:</b>`</p> <p>a) a) Regional Supervising Board or Regional Inspectorate has provided reporting media in case of SKPD employees or staffs find out fraud in their agency or SKPD in Z Regency. Regional Inspectorate presents two models of reporting, The identity of whistleblower will be kept confidential (called Anonymous Channel) or the identity of whistleblower will be reported clearly so that the report responsibility can be accurate (called non-Anonymous Channel)..</p> <p>b) The Regent has made a MoU with the police chief to make a decree for protection of whistleblower as the embodiment of Act No. 13 of 2006 on Witness and Victim Protection, this law has given space to the people who know crime acts to be protected through the Witness and Victims Protection Agency which is the institution who is in charge and authorized to provide protection and other rights to the witness and / or victim.</p> <p><b>Question:</b> Based on the above conditions, if you were Irwansyah, will you use the channels provided by the Regional Inspectorate to report the wrongdoing/fraud?</p> <table border="1" data-bbox="435 1890 1297 1964"> <tr> <th>HNSI-1</th> <th>HNI-2</th> <th>DB-3</th> <th>HI-4</th> <th>HSI-5</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	HNSI-1	HNI-2	DB-3	HI-4	HSI-5					
HNSI-1	HNI-2	DB-3	HI-4	HSI-5							