



# Does Type of Fraudulent Act Have an Impact On Whistleblowing Intention?

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**ABSTRACT:** The purpose of this research is to examine empirically the impact of two types of fraudulent act on individual's reporting intention under reward model. This research applied the Reinforcement theory in designing whistleblowing policies. In this context, reward system in encouraging disclosure of fraudulent act was used. This study was designed using experiment method 2x2 between subjects with 86 participants from private universities. Sarbanes-Oxley Act of 2002 requires that every public company must establish anonymous channel regarding disclosure of fraudulent act. However, under the reward system it may become different prediction that non-anonymous channel is preferable than the other one. Using two types of fraudulent act, this research investigated whether those types affected individual's intention for disclosing fraud in choosing the reporting channel because a reward is provided or not. The result shows that the interaction between the type of fraudulent act and type of channel could encourage individual's intention to blow the whistle. However, individual prefers to report the misappropriation of asset through anonymous channel than non-anonymous even though a reward is provided.

**KEYWORDS:** reward system; type of fraudulent act; whistleblowing intention

## Introduction

The purpose of reporting fraud in the organization is to achieve economic goal as well as social goal. In order to achieve those goals, support from others is needed by whistleblower, even though fact shows that whistleblowers will get lots of harms. Elliston (1982) states that employee only has a little right and will be refused by other employees. Retaliation is one of the negative consequences for whistleblower. There are a lot of studies concerning retaliation on employee who blow the whistle, one of them is a study conducted by Liyanarachichi and Newdick (2009). Reporters of wrongdoing probably expect a strong procedural protection to hide identity (Kaplan, Peny, Samuels & Zang, 2009).

Whistleblowing as an effective mechanism for disclosing corporate fraud is highlighted by the disclosure of the biggest reporting scandal that involves two corporations in United States: Enron and WorldCom (Bowen, Call & Rajagopal, 2010). In Indonesia, one of the whistleblowing cases has been conducted by the former head of Indonesian National Police's Criminal Investigation Agency who disclosed corruption scandal that happened in the police department (Lestari & Yaya, 2017).

The importance of whistleblowing to disclose corporate malfeasance encourages regulator for creating effective ways to disclose wrongdoing in organization. Section 301 & 806 of Sarbanes-Oxley Act 2002 are designed to encourage whistleblowing and provide safety from retaliation. Section 301 and 806 require audit committee of corporate director that already

go public to establish anonymous channel for rejecting and detecting accounting fraud and weakness of control. The anonymous reporting channel is expected to reduce cost of reporting (Kaplan & Slutz, 2007). This regulation is needed since the facts show that big frauds were disclosed by employee and media instead of an auditor whose responsibilities are to disclose frauds (Dyck, Morse & Zingales, 2007). Their study shows that media (academic publication) contribution is 23.5% and employee is 16.8%.

The study that examines the effectiveness of anonymous reporting channel to encourage individual for disclosing fraud in structural system held by Kaplan, Peny, Samuels and Zang (2009). Their study indicates that individuals better to report a fraud that involves misappropriation of asset than fraud that involves financial reporting anonymously under weak and strong procedural safeguard. AICPA professional standards (AICPA 2008, AU 316) distinguish fraud into misappropriation of asset and fraudulent financial statement, Kaplan, Peny, Samuels and Zang (2009) use those fraudulent act type in their study. Ayers and Kaplan (2005) are consistently found the relation between the degrees of the seriousness of wrongdoing on the reporting intention.

Ayers and Kaplan (2005) examine further the seriousness of wrongdoing to individual reporting intention through anonymous and non-anonymous channels, the degree of the seriousness of wrongdoing is significantly related to reporting intention trough anonymous and non-anonymous channels. On other hand, the studies (Kaplan, Peny, Samuels & Zang, 2009; Schlutz, 1993) only use anonymous channel for reporting fraud. It may be irrelevant when the organization only provides anonymous channel instead of non-anonymous channel when there is financial reward provided for encouraging whistleblower (Seifert, Sweeny, Joiremen & Thornton, 2010).

Reinforcement theory assumes that behavior is motivated by reward which has been given to such kind of behavior. Xu and Ziegenfuss (2008) state that reward system has an effect in encouraging individual to report wrongdoing. Their research tells that the intention of internal auditors in reporting wrongdoing to their superior is higher when they get incentives. Reward system<sup>1</sup> that is implemented in organization, by providing financial rewards as well as long term employment contract, could abolish the negative impact of the retaliation on whistleblower. It means that reward system has a positive effect to disclose wrongdoing or fraud. Fraud in organization is divided into two types, misappropriation of asset and fraudulent financial statement.

The types of fraud in organization will lead different respond from the organization member. The misappropriation of asset involves taking company assets such as cash and inventory to enrich the employee who take it. Since theft of asset is involved in misappropriation of assets, individuals perceive this type of fraudulent act is more serious than fraudulent financial

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<sup>1</sup> Reward system is mechanism which an organization will implement reward scheme for individual that act congruence with organization goal.

reporting. Kaplan, Peny, Samuels and Zang, (2009) indicate that individual's intention to report fraud is stronger for misappropriation of assets act than for the fraudulent financial reporting. This different perception of fraud type has relation with the whistleblowing intention. Ayers and Kaplan (2005) found that seriousness of act and reporting intention has a relation.

There are a lot of studies about whistleblowing factor is in the auditing area such as Coram, Ferguson and Moroney (2008); Mustafa and Youssef (2010), but only a few numbers came from management accounting context (Seifert, 2010). Whistleblowing can be divided in two areas of study, the auditing and management accounting area. In Audit context, auditor's role is detecting and disclosing financial reporting irregularities. In management accountant context, management accounting must have ability to observe, participate in, or have knowledge of financial statement fraud (Seifert, Sweeny, Joiremen & Thornton, 2010).

Chiasson, Johnson and Byington (1995) state that Management accountants have some obligations to organization where they work in, their profession as well as society (public) and their selves. Management accountants also have responsibility in keeping confidential information, disclosing all relevant information and communicating unfavorable information. Therefore, when management accountants are faced with wrongdoing, they have a responsibility to communicate this information. The responsibility of management accountant to communicate unfavorable information can be interpreted as a responsibility to act as whistleblowing. Therefore, the current study's purpose is to prove whether the type of fraudulent act have an effect on encouraging employee to disclose company fraud through different reporting channel under reward model in management accounting context.

## Literature Review and Hypothesis Development

### Whistleblowing

Whistleblowing is defined by Near and Miceli (1985) as follows:

"The disclosure about illegal, immoral or illegitimate practices under the control of their employers by organization members (former or current) to persons or organizations that may be able to effect action."

Seifert (2006) explains the definition above by describing that an illegal act is any criminal act which can get punishment from the law, an immoral act is a wrong act and an illegitimate practice as an action that is justified by the whistleblower to be beyond the organization's authority.

Whistleblowing will be successful if supported by communicating tools that include audience, purpose, language and tone of wrongdoing. According to Near and Miceli (1985), individual can do whistleblowing internally and externally. One of the advantages of internal whistleblowing is organization's issue may still be solved internally before exposed to outside organization or public. Gao (2015) states that lower level employee will report fraud to external channel if it is available to avoid retaliation.

Whistleblower needs support from surroundings people because whistleblowing is intended to achieve specific goals, economic and social. However, the facts show that whistleblower will get intimidation like retaliation (Liyanarachichi & Newdick, 2009; Robinson, Robertson & Curtis 2012; Dyck, Morse & Zingales, 2010; Kaplan, Peny, Samuels & Zang, 2009).

### **Non-anonymous and Anonymous Hotline**

Sarbanes-Oxley Act 2002 asks audit committee of go public organization to provide reporting channel anonymously to refuse and detect fraud in accounting and control weakness. Sarbanes-Oxley requires anonymous reporting channel that can encourage employee to report information without feeling terrified. Anonymous reporting channel makes individual feel comfortable and safe since his/her identity is covered. The requirement of anonymous reporting channel for reporting unclear accounting problem is consistent with the findings of previous studies conducted by Schultz, Johnson, Morris and Dyrnes (1993) and Schultz and Hook (1998). Kaplan, Peny, Samuels and Zang (2009) states that there are two things that affect the effectiveness of anonymous reporting channel; extend of the employees in discovering fraud or symptom of fraud and the willingness of the employee in reporting their discovery to an appropriate person. They state that anonymous reporting channel become the most effective channel for detecting fraud act earlier than others and potentially preventing and restricting such act to occur in the future.

Nevertheless, other studies show different evidence. Previous researches state that it is better for reporter to use anonymous reporting channel than non-anonymous reporting channels (Near & Miceli, 1995). There are two reasons that explain the condition. First, they are avoiding retaliation. This suggests that the report under an anonymous reporting channel will result lower personal costs because the organization cannot trace the individual's identity who report misconduct. Second, since the organization is difficult in assessing the credibility of the reporter, the information provided through this channel will be taken less seriously. Individuals may think to avoid anonymous reporting channel if they believe that the response to the wrongdoing is not effective or serious, it means that non-anonymous channel is perceived to be more effective because the reporter can be contacted by the organization for further investigation. Previous discussion shows that individuals still need further consideration to decide whether they prefer to use anonymous or non-anonymous channel in reporting any wrongdoings.

The previous discussion shows that anonymous reporting channel is not the only effective channel to report fraud in comparison to non-anonymous. Individuals still consider the corporate's response about the disclosure of fraudulent act. Individual may hope positive response instead of negative response.

### **Reward System**

Reinforcement theory assumes that individual's behavior is motivated by reward which ever given by organization to that behavior. Klinge (1996)

states that reinforcement theory is based on central premise, getting reward stimuli and eliminating aversive one may drive individual's behavior. Motivation and intensive are two of seven components which are used to formulate management control system. Five other components are corporate governance, responsibility accounting, performance measurements and directions. The biggest challenge for organization is how to motivate employee to do the best for achieving organization's goal (Hoque, 2003). The evidence shows that internal auditors is willing to report wrongdoing to the highest authority if reward is provided (Xu & Ziegenfuss, 2008). Putri (2012) states individual will disclose fraud through non-anonymous hotline if reward is provided.

Near and Miceli (1985) state that when wrongdoing is consistently followed by positive management reaction, it will be stimuli for behavior. Reward system which provides monetary payment will effectively encourage whistleblowing and evidence shows that incentive is effective for disclosing wrongdoing (Dworkin, 2007; Dyck, Morse & Zingales, 2007). It indicates that reward system will revise wrongdoing and fraud detection. Ponemon (1994) brings the issue about significant of monetary reward or long-term contract as incentive to report organizational fraud or wrongdoing to abolish negative consequence from retaliation on whistleblower. Therefore, whistleblowers are not scare to show their identity if reward is provided.

Reward system changes paradigm that anonymous channel in structural system is the most effective way to encourage individual for whistleblowing. According to previous studies that discussed above, it can be predicted that non-anonymous reporting channel still effective to report wrongdoing under reward system.

### **Reporting Channel, Reward System and Fraudulent Act Type**

Ayers and Kaplan (2005) give evidence that based on the consideration of cost and benefit that may occur, individual prefer to use anonymous reporting channel. Lower cost is occurred when reporter use anonymous channel. Meanwhile non-anonymous reporting channel is used because this channel has more effective response to the fraudulent act. Since there is higher probability that recipient will assess the validity of information reporter. Another study (Xu & Ziegenfuss, 2008) examine about reward systems that may have effects on auditors' disclosing wrongdoing. Organization that establish reward system usually use cash, bonus, or employee contract as incentive for encouraging disclosing. The results indicate that the individual's intention to report wrongdoing in organization to higher authority is higher when cash incentive or guaranteed employee contract are provided. This reward system has strong influence on the likelihood of whistleblowing behavior. It means that there is no fear to show their identity or report using non-anonymous channel when reward is provided.

The study conducted by Xu and Ziegenfuss (2008) proves that in the condition when reward is provided for whistleblower, internal auditors have higher likelihood in reporting wrongdoing, compared to when it is without reward provided. These results however, only applicable under specific whistleblowing mechanism. By reducing and eliminating the retaliation,

anonymous channel that is provided in internal organization, become a positive structural mechanism for encouraging whistleblowing (Kaplan, Peny, Samuels & Zang, (2009). On other hand, it may be irrelevant when financial reward is provided for motivating individual to report the wrongdoing. Based on the discussion above, hypothesis 1 is formulated below:

*H<sub>1</sub>: It is more likely that individual will report through non-anonymous channel than anonymous channel when reward is provided.*

Auditing literatures divide fraud into two types: misappropriation of asset and fraudulent financial reporting. These two types of fraud have different extend of fraud. The first type involves taking company assets such as cash and inventory to enrich the employee who take it. Therefore, this type involves taking company's real resources illegally. On other hand, the second type of fraud is referring such kind of "cooking the book", by overstating income through misreporting financial results and financial position (Kaplan, Peny, Samuel & Zang 2009). In the fraudulent financial reporting context there is no direct resources or wealth transfer to individual who do that. Even though engaging in the fraud may give indirect benefit through reward such as compensation, bonuses, promotion and so on. The most frequent act involved in fraudulent financial reporting is overstating revenues or understating expenses; since they think that it will correct naturally by the time (Wells, 2008).

Since theft of asset is involved in misappropriation of assets, individuals perceive this type of fraudulent act is more serious than fraudulent financial reporting. Kaplan, Peny, Samuels and Zang, (2009) indicate that individual's intention to report fraud is stronger for misappropriation of assets act compared to the fraudulent financial reporting. Ayers and Kaplan (2005) and Schultz, Johnson, Morris and Dyrnes (1993) found that seriousness of act and reporting intention has a relation. However, seriousness of wrongdoing influences individual intention to choose type of channel. Based on the above discussion, current research expect that individuals will likely report misappropriation of asset and fraudulent financial reporting without feeling scared if their identity is known by others because reward is provided. Hypothesis below summarizes these expectations:

*H<sub>2</sub>: It is more likely that individual will report misappropriation of assets than fraudulent financial statement.*

*H<sub>3</sub>: It is more likely that individual will report misappropriation of asset through anonymous channel and report fraudulent financial reporting through non-anonymous channel.*

## **Research Method**

### **Experiment Design**

This study used experiment 2x2 between subjects. This research used laboratory experiment because this method provides high validity in explaining the relation between independent and dependent variables. The

experiment used two treatments, two types of fraudulent act, misappropriation of assets and fraudulent financial reporting under reward system, by anonymous and non-anonymous channels. Experiment design is in Table 1. This experiment used experiment method since the internal validity level was higher in this method. Between subject method was used to avoid carryover effect because in the between subjects design participant only get one treatment (Harsha & Knapp, 1990).

### Participants

Participants in this study were undergraduate students in management accounting class. This study used undergraduate students because they are free from disturbing variable that will not be tested in this research, such as retaliation and experiences. They come from private university in Yogyakarta. The consideration is that they should have taken management accounting class since they should have comprehension in participating, observing or having knowledge about fraud in financial statement and in the ethical conflict situation (Seifert, Sweeny, Joiremen & Thornton, 2010). In this experiment participant became an assistant purchasing manager in organization for misappropriation asset of fraudulent act type and became divisional financial accountant for fraudulent financial reporting.

Pilot test used 40 graduate students in private university in Yogyakarta. There were many inputs received from pilot test. This experiment was divided into 4 batches. Participants in the first batch were 23 students, the second batch were 36 students, the third batch were 39 students and the last batch were 40 students. The experiment was suited with management accounting class.

### Dependent Variable Measurement

#### Whistleblowing Intention

In this study, whistleblowing refers to individual's intention as employee of organization to report individual and corporate wrongdoing to internal organization resources. Individual's intention to report wrongdoing is dependent variable. Dependent variable in this experiment is measured using self-assessment. Participants were asked to measure their intention to report fraud in 7-point Likert scale at 1 (extremely unlikely) and at 7 (extremely likely). The instrument used in this experiment is adopted from Ayers and Kaplan (2005).

**Table 1** Experiment Group Design

Type of fraudulent act		Channel	
		Anonymous	Non-anonymous
Type of fraudulent act	Misappropriation of assets	Group 1	Group 2
	Fraudulent financial reporting	Group 3	Group 4

## Independent Variable Measurement

### Anonymous and Non-anonymous

Anonymous reporting channel is a reporting channel in which the identity of the reporter will be kept. Meanwhile the non-anonymous reporting channel is the channel when the identity of the reporter is known. The reporting channels are manipulated between participants. Using statement adopted from Ayers and Kaplan (2005), anonymous (ANONYM) and non-anonymous (NON-ANONYM) channels were manipulated.

### Reward System

Reward system (RWDM) is a mechanism in which an organization will implement reward scheme for individual that act congruence with organization goal. This system is manipulated with statement related organization policy to encourage employee for reporting or not reporting. Statement manipulation for structural system adopted from (Seifert, Sweeny, Joiremen & Thornton, 2010) while reward system is adopted from Xu and Zeigenfuss (2008).

### Type of Fraudulent Act

There are two types (TYPE) of fraudulent act variable used in this research; misappropriation of asset (ASSET) and fraudulent financial reporting (FR), which are adopted from Kaplan, Peny, Samuels and Zang (2009). The case for misappropriation of assets involve a false billing scheme by creating a shell company<sup>2</sup>. Since a false billing scheme represents one of the most frequent schemes to misappropriation asset so it was selected for this research and it often involves substantial amounts of cash (ACFE, 2008). The fraudulent financial reporting case involves improper valuation of asset, a frequent method of fraudulent financial reporting (ACFE, 2008).

## Procedure and Task of Participants

Whistleblowing intention, reporting channel and type of fraudulent act were measured using previous instrument which is used by many studies such as Kaplan, Peny, Samuels and Zang, (2009) and Ayers and Kaplan, (2005). While reward system was manipulated using the study instrument of Xu and Ziegenfuss (2008).

Experiment process was started from reading experiment instruction related to requirement of experiment process. First step, participants were divided into groups, each group was supervised by one experiment instructor. The groups were made so that when distributing the experiment case is easier and preventing the participants from working together. Second step, instructors distributed experiment case to participant in each group. After all participants received experiment case, the third step was they did the case and answered the question.

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<sup>2</sup> A shell company is entity that has no active business and usually exists only in name as a vehicle or another company's business operations.

In this experiment, participants were given an experimental instrument describing ABC Inc., a food and beverage manufacturer. The background information about the company shows that there is an indication that the performance is slightly below the industry average. In this experiment participant became an assistant purchasing manager in organization for misappropriation asset of fraudulent act type and became divisional financial accountant for fraudulent financial reporting.

**Treatment in group 1:** The case stated that there was a billing for the company about service that never received by a fictitious firm (shall company). In this case, the assistant purchasing manager discovered the scheme when he realized that the vendor's post office box address was identical to that purchasing manager. The assistant purchasing manager determined that approximately \$800,000 in expenditure for services was not received but paid to the shell company had occurred, reducing earning per share by \$0,02 per share, which exactly met the financial analyst's expectation.

The corporate had a policy to encourage their employees to report by providing substantial amount cash reward. The corporate provided reporting channel anonymously by telephone channel to inform the company of any wrong doing. The reporter's identity would not be asked by the receiver. As assistant of purchasing manager, who likely the respondents would report this case using anonymous channel.

**Treatment in group 2:** The case stated that there was a billing for the company about service that never received by a fictitious firm (shall company). In this case, the assistant purchasing manager discovered the scheme when he realized that the vendor's post office box address was identical to that purchasing manager. The assistant purchasing manager determined that approximately \$800,000 in expenditure for services not received but paid to the shell company had occurred, reducing earning per share by \$0.02 per share, which exactly met the financial analyst's expectation.

The corporate had a policy to encourage their employees to report by providing substantial amount cash reward. Employee could report any wrong doing to corporate non-anonymously by informing top manager or the ethics committee. As assistant of purchasing manager, who likely the respondents would report this case directly to the top manager and the ethics committee.

**Treatment in group 3:** The case for the fraudulent financial reporting context involved improper asset valuation. In this case, a divisional financial accountant discovered that \$800,000 of expenses had been capitalized by his supervisor. The supervisor was the controller of the division. The misrecording increased earnings per share by \$0.02, which exactly met the financial analyst's expectation.

The corporate had a policy to encourage their employee to report by providing substantial amount cash reward. The corporate provided reporting channel anonymously by telephone channel to inform the company of any wrong doing. The reporter's identity would not be asked by the receiver. As

assistant of purchasing manager, who likely the respondents would report this case using anonymous channel.

**Treatment in group 4:** The case for the fraudulent financial reporting context involved improper asset valuation. In this case, a divisional financial accountant discovered that \$800,000 of expenses had been capitalized by his supervisor, the controller of the division. The misrecording increased earnings per share by \$0.02, which exactly met the financial analyst's expectation. The corporate had a policy to encourage their employees to report by providing substantial amount cash reward. Employee could report any wrong doing to corporate non-anonymously by informing the top manager or the ethics committee. As assistant of purchasing manager, who likely the respondents would report this case directly to the top manager and the ethics committee. Fourth step, participants were asked in manipulation checks. The manipulation questions were: (1) do you think that this is serious fraudulent act? (2) Is the whistleblower's identity will be kept confidential? (3) Who will know the whistleblower's identity? (4) What would he get if whistleblower reports the wrongdoing? These questions are provided in last page of experiment questions.

### **Hypothesis Test**

Analysis of Variance (ANOVA) was used to test the hypothesis. ANOVA is data calculation procedure for testing mean difference of more than two groups (Robert Ho, 2013). In this research ANOVA was used to compare individual intention for reporting two types of wrongdoing under reward system by anonymous and non-anonymous channels.

## **Result and Discussion**

### **Participants' Characteristics**

Eighty-six participants from one hundred thirty-eight participants were success in manipulation check. They were forty-three males and forty-three females. To know whether there was an effect of demographic variable to dependent variable, then first, this study tested demographic variable. Demographic data that were collected from participant were only sex or gender. The result indicated that there was no effect between demographic variable to individual intention to blow the whistle (Table 2).

### **Hypothesis Testing**

First of all, this study examined batch (BATCH) to whistleblowing intention. This test is to indicate if there is difference in dependent variable score between two universities and five experiment batches. The result from the test of control variable is insignificant. It means that BATCH variable does not affect INT (See panel A in Table 3).

**Table 2** The Result of ANOVA Test  
Panel: Test Between Subject Effect

Dependent Variable: whistleblowing Intention				
Source	SS	df	F	Sig
Control Variables: Sex	0,432	1,00	0,789	0,377

### The Result and Interpretation of Main Effect

The main effect of type of fraudulent act (TYPE) to whistleblowing intention (INT) is insignificant, with F-value= 0,058 and probability 0.811, this value is above 0.05 (Panel A; Table 3). Meanwhile, the mean of fraudulent financial reporting (FR) is 6.129 and misappropriation asset (ASSET) is 6.158. The mean value of two variables is not significant with the significant value is 0.811. It means that whistleblowing intention is not only be influenced by the type of fraudulent act.

Main effect of channel variable (CHANNEL) to whistleblowing intention (INT) is not significant, with F-value= 1.175 and probability is 0.281, this value is above the significant level 0.05 (Panel A; table 3). Meanwhile, the mean in anonymous channel is 6.078 and non-anonymous channel is 6.208. The mean value for two variables is not significant with significant level is 0.281. It means that whistleblowing intention is not only influenced by the channel.

### The Result of Interaction Test

In this sub chapter, the result of interaction effect between variables is presented in experiment design 2x2 between subjects (Table 1). Analysis result of the interaction between variables can be seen in panel B and C Table 3. Post Hoc test result is summarized in Table 3. The result of Post Hoc test shows that mean difference between group 1 (SYSTEM= RWRD, TYPE= ASSET, CHANNEL= ANONYM) and group 2 (SYSTEM= RWRD, TYPE= ASSET, CHANNEL= NON-ANONYM) is significant. With mean difference of 0,815. It means that there is difference in individual intention to report through anonymous reporting channel than non-anonymous channel.

The mean difference between group 3 (SYSTEM= RWDM, TYPE= FR, CHANNEL= ANONYM) and group 4 (SYSTEM= RWDM, TYPE= FR, CHANNEL= NON-ANONYM) is significant, with mean difference of -1,076. It means that there is a difference in individual intention to report through anonymous reporting channels compared to non-anonymous reporting channel. Hypothesis 1 predicts that non-anonymous channel is chosen by individual in reporting wrongdoing when reward is provided, however, the result shows that it happens only on a special case, that is fraudulent financial statement. On other hand, individual reports misappropriation of asset through anonymous channel.

However, if the means of group 1 and 3 (anonymous channel) are added, the result is 12.156. Instead, the total mean of group 2 and 4 (non-anonymous channel) is 12.427. The difference of total mean bet-

**Table 3** The Result of ANOVA Test Means (SD) and The Comparison Between Cells

Panel A: Test Between Subject Effect				
Dependent Var: Whistleblowing Intention				
Sources	SS	df	F	Sig.
Control Variables				
Batch	1,507	3	0,917	0,437
Sex	0,432	1	0,789	0,377
Main Effect				
Type	0,018	1	0,058	0,811
Channel	0,364	1	1,175	0,281
Interaction effect				
Type*Channel	19,168	1	61,912	0,00
Error	25,387	82		
Correlated Total	45,035	85		
R Squared= 0,436 (Adjusted R squared= 0,416)				
Panel B: Means (SD) and Participants in Each Cell				
Comparison	Mean diff (J-I)	Channel		
		Anonymous	Non-anonymous	
Type	Misappropriation of assets	$\bar{x}$ = 6,565 (0,507) N=23	$\bar{x}$ = 5,750 (0,716) N=20	
	Fraudulent Financial reporting	$\bar{x}$ = 5,591 (0,503) N=22	$\bar{x}$ = 6,667 (0,483) N=21	
Panel C: Comparison				
Comparison	Mean diff (J-I)	ES	Sig.	
Group 1 - Group 2	0,815	0,170	0,000**	
Group 3 - Group 4	-1,076	0,170	0,000**	
Group 1 - Group 3	0,9743	0,165	0,000**	
Group 2 - Group 4	-0,9167	0,174	0,000**	
Group 1 - Group 4	-0,101	0,168	0,930	

ween anonymous channel and non-anonymous channel is not significant. It can be concluded that hypothesis 1 is rejected.

The mean difference between group 1 (SYSTEM= RWRD, TYPE= ASSET, CHANNEL= ANONYM) and group 3 (SYSTEM= RWRD, TYPE= FR, CHANNEL= ANONYM) is significant, with the mean difference of 0.9743. It means that there is difference in individual intention to report fraud under reward system between misappropriation of asset and fraudulent financial reporting through anonymous channel. The individual intention to disclose misappropriation of asset is stronger compared to report fraudulent financial reporting under anonymous channel.

The mean difference between group 2 (SYSTEM= RWRD, TYPE= ASSET, CHANNEL= NON-ANONYM) and group 4 (SYSTEM= RWRD, TYPE= FR, CHANNEL= NON-ANONYM) is significant, with the mean difference of -0.9167. It means that there is a difference in individual intention to report fraud under reward system between misappropriation of asset and

fraudulent financial reporting through non-anonymous channel. As a result, between group 2 and 4, the individual intention to disclose fraudulent of financial reporting is stronger compared to the report misappropriation of asset under non-anonymous channel. However, if the mean of group 1 and 2 (misappropriation of asset) is 12.315 and total mean of group 3 and 4 (fraudulent financial statement) is 12.258, then it is not significant. The hypothesis 2 states that it is more likely that individual will report misappropriation of asset that financial statement. Therefore, it could be concluded that hypothesis 2 is partially supported.

The comparison of group 1-2 and group 3-4 on the explanation above is also used to answer hypothesis 3. Hypothesis 3 states that it is more likely that individual will report the misappropriation of asset through anonymous channel and report fraudulent financial reporting through non-anonymous channel. Hypothesis 3 is accepted. However, additional analysis by comparing the mean difference between group 1 (SYSTEM= RWRD, TYPE= ASSET, CHANNEL= ANONYM) and group 4 (SYSTEM= RWDM, TYPE: FR, CHANNEL= NON-ANONYM) is not significant. It means that both channels are effective to report each type of fraud, the anonymous channel for misappropriation of asset and non-anonymous channel for fraudulent financial statement. In this research, the mean value of control group is 2.00 with the significant value of 0.000. It means that without reward system and reporting channel, individual does not report fraudulent act.

This study examines the type of fraudulent act and reporting channel for encouraging individual's intention to blow the whistle under reward model. The result shows that individual still considers the channel, the anonymous or non-anonymous, in reporting type of fraudulent act. Individual reports the misappropriation of asset through anonymous channel and the fraudulent financial report through non-anonymous channel even though the reward is provided. It means that degree of seriousness of act does not influence the intention to report. The type of channel still becomes a consideration for blow the whistle.

The combination between the type of act and type of channel is the best way to encourage individual disclose fraudulent act. The result does not confirm Xu and Zeigenfuss (2008). They said that internal auditor will report to higher authority if reward is provided. The difference may be influenced by the background of the participant of the experiment in which this research used undergraduate students that have never work as professionals while Xu and Zeigenfuss (2008) used regional internal auditor. As a result, incentive or reward will influence the auditor in disclosing wrong doing or fraud.

This unexpected result in hypothesis 1 might be influenced by the seriousness of fraudulent act. Since misappropriation of assets involves the illegal act by taking or theft of assets, individuals perceive this type of fraudulent act is more serious than fraudulent financial reporting. Kaplan, Peny, Samuels and Zang (2009) indicate that individual's intention to report misappropriation of assets act is higher compared to the report fraudulent financial reporting. This result has proven a relation between the degree of act seriousness and reporting intention and it is consistent with studies of Ayers and Kaplan, (2005) and King (1999). Individual feels scared if their

identity is known by others when reporting serious fraudulent act. On other hand, this study confirms previous researches in reward system (Xu & Zeigenfuss, 2008; Ponemon, 1994). Individual prefers to use the non-anonymous channel for reporting fraudulent financial reporting when reward is provided. In this case, individual still thinks about retaliation in reporting serious fraudulent act even though reward is provided.

The interesting evidence in this research is that under reward system individual prefers to use the anonymous channel to report more serious fraudulent act (misappropriation of asset) and prefers to use non-anonymous channel to report less serious fraudulent act (fraudulent financial reporting). The result indicates that reward system is not the only reason for individual for disclosing wrongdoing. Individual still considers the cost of reporting such as retaliation compared to benefit that may get. The type of fraudulent act still influences the individual's consideration in choosing channel to disclose fraud even though incentive is provided.

## Conclusion

The purpose of this study is to investigate the impact of two types of fraudulent act on individual's reporting intention under reward model. The result shows that individual intention to disclose misappropriation of asset is higher than fraudulent financial statement. However, the result shows that even though reward is provided, individual will report misappropriation of asset through anonymous channel and fraudulent financial statement through non-anonymous channel.

The implication of this study is for top management in an organization when they decide policy for encouraging their employees to disclose fraudulent act. The reward system in the organization is less effective in encouraging individual to report misappropriation of asset. Individual feels that they prefer disclose serious fraudulent act without getting reward. They feel scared about retaliation for reporting serious fraudulent act when their identities are known. On other hand, economic incentive can motivate individual to disclose less serious (such as; fraudulent financial reporting).

This research has two limitations. First, participants in this research are undergraduate students in management accounting class. Their responses on whistleblowing intention probably become different from professionals that may have experiences in the real organization. Second, the cases in that experiment are not real situation, therefore emotions such as anger and fear that may exist in a real situation are absent as consequences of not involving the professionals as the participants.

This study is a complementary research for survey research in wrongdoing disclosure. Experiment study has high validity and could explain the cause and effect relationship between variables strongly. Therefore, future research can extent this study in survey research. Another future research should test the effect of type of reward system, such as financial incentive or long-term employment contract and so on.

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