

Factors Affecting Intention on Whistleblowing with Anonymous Reporting as Moderating Variable

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Abstract

Purpose – The aim of this study was to determine the effect of personal cost, the seriousness of frauds, and legal protection to whistleblowing intentions on Auditors from The Audit Board of the Republic of Indonesia with anonymous reporting as a moderating variable.

Design/methodology/approach – To test the hypothesis, Multiple Regression Analysis and Moderated Regression Analysis are applied to questionnaire survey data from 81 Auditors from The Audit Board of the Republic of Indonesia.

Findings – The results revealed that the seriousness of frauds and legal protection has a positive effect on whistleblowing intentions, but personal cost does not negatively affect the whistleblowing intentions. In addition, anonymous reporting does not moderate the influence of the seriousness of frauds, and legal protection to whistleblowing intentions.

Research limitations/implications – This study provides relevant empirical evidence in explaining the phenomena or factors that influence whistleblowing intentions based on Prosocial Organizational Theory.

Originality/value – This study has made a valuable contribution for scholars and relevant institute to understanding factors that affect whistleblowing intention at The Audit Board of the Republic of Indonesia.

Keywords: Personal cost, the seriousness of frauds, legal protection, whistleblowing intentions

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1. Introduction

The rise of fraud cases revealed in recent years has received serious attention from the public. The results of a survey conducted by the Institute of Business Ethics in 2007

concluded that one of four employees were aware of frauds, but more than half (52%) of those who knew the frauds had remained silent and did not report it. Whistleblowing intention is described as a condition where a person has a tendency or decision to be involved in whistleblowing actions. Personal cost is one of the factors considered by a person in deciding whether he/she will “blow the whistle” or not. The employee’s view of the risk of retaliation/sanctions that they are likely to receive can reduce their interest in reporting wrongdoing. In the end, it can distort their interest in whistleblowing.

In addition to personal cost, the seriousness of frauds also affect the interest in whistleblowing. The intensity of whistleblowing will increase if the prospective whistleblower considers that the frauds committed are material in the future which can bring a bad image for the company/institution where they works. It is because these frauds can impact on the welfare of employees. The next factor that can affect whistleblowing intentions is legal protection for the whistleblowers. It is because whistleblowers are very vulnerable to retaliation because they are considered committing criminal acts of defamation and unpleasant acts.

Some researchers reveal different conclusions from other researchers. Napitupulu and Bernawati (2016) and Bagustianto and Nurkholis (2015) shows that personal cost has a positive effect on the intention to do whistleblowing. It means that the higher the personal cost generated, the whistleblowing intention will increase. Differences in the results of these studies may be caused by other factors that affect whistleblowing intentions, like the intensity of fraud, the level of seriousness of fraud , and the reporting channel of fraud available.

These differences allow other variables to moderate the relationship between personal cost, the seriousness of fraud, and legal protection against whistleblowing intentions. Anonymous reporting can allegedly moderate these relationships. Akbar *et al.* (2016) stated that anonymous reporting could increase interest in reporting indications of fraud by students receiving STAR BPKP scholarships at Andalas University and Jambi University. Putri (2015) states that the anonymous reporting pathway in the structural model has a positive effect on the intention of conducting whistleblowing on accounting students from a public and private university affiliated with religion in Yogyakarta.

The aim of this study is to obtain empirical evidence regarding the factors that affect whistleblowing intentions, and the affect of anonymous reporting in moderating the relationship of these factors to whistleblowing intentions. The approach of this this study is quantitative with survey methods.

2. Literature Review and Hypothesis Development

2.1. Theoretical Foundation

Prosocial Organizational Behavior Theory

Prosocial behavior is behavior/actions taken by members of an organization against individuals, groups, or organizations aimed at improving the welfare of the individuals, groups, or organizations (Brief and Motowidlo, 1986 in Marliza, 2018). This study uses the seriousness of frauds variable that represents prosocial behavior. When a whistleblower candidate becomes aware of a fraud committed by his/her colleague's organization and that is considered to be material enough and endangering the organization, he/she will tend to blow the whistle to save the welfare of the organization, including his personal welfare.

Theory of Planned Behavior

Theory of Planned Behavior is a psychological theory proposed by Ajzen (1991) which attempts to explain the relationship between attitude and behavior. This theory assumes that conceptually interest has three mutually independent determinants: attitude towards behavior, subjective norms, and perceived behavioral control. This study uses personal cost variable that represent subjective norms that refer to the perception of how much social pressure is felt as a consequence of whistleblowing. Someone tends to do whistleblowing when social pressure in the form of threats/retaliation faced is not big.

2.2. Hypothesis Development

According to Marliza (2018) one of the considerations for employees to report such fraud is the threat/retaliation from the perpetrators of fraud. Septianti (2013) and Setyawati *et al.* (2015) shows that personal cost negatively affect whistleblowing intentions. The results of the studies illustrate that when the whistleblower candidate assumes that the impact of physical, economic, and psychological losses that he/she will receive is quite large, then his intensity in conducting whistleblowing will be low.

H₁ : Personal cost negatively affect whistleblowing intentions

Marliza (2018) states that someone will tend to report fraud that occurs if it causes a significant financial loss, or has a negative impact on more than one person. Bagustianto and Nurkholis (2015) and Hakim *et al.* (2017) shows that the seriousness of frauds has a positive effect on whistleblowing intentions. The results of the study

illustrate that a person tends to take whistleblowing actions when the frauds committed are considered to be serious and can be detrimental to many parties.

H₂ : The seriousness of frauds positively affect whistleblowing intentions

Whistleblowers have an important role in disclosing fraudulent practices. In order to increase whistleblowing intentions, it is necessary to have a system of reporting violations as well as adequate protection for whistleblowers. Kuswanto (2016) states that good treatment includes guaranteeing protection against acts of revenge, such as dismissal. Vandenabeele and Kjeldsen (2011) cited by Kuswanto (2016) shows that whistleblowing protection has a strong positive effect on whistleblowing intention in cases of finding the supervisor's dishonest behavior. The results of the study illustrate that a person tends to take whistleblowing actions when there is adequate protection that makes him feel safe in exposing frauds.

H₃ : Legal protection positively affect whistleblowing intentions

Not many people are willing to take the risk to report a crime if themselves, their family and property do not get protection from threats that may arise because of the reports they made (Abdullah and Hasma, 2017). Therefore, the seriousness of frauds and legal protection variables which are factors that are considered to have a positive effect on whistleblowing intentions have the potential to have a negative impact when carrying out the whistleblowing action. Putra (2014) and Saud (2015) stated that the seriousness of frauds had no positive effect on whistleblowing intentions. Besides that, Kuswanto (2016) states that protection does not have a positive and significant influence on identity whistleblowing intentions. The results of these studies indicate that the seriousness of frauds and legal protection still can not increase the intention of whistleblowing in a person because the seriousness of frauds are not enough to be a reason for someone to take action on whistleblowing and distrust that legal protection can really protect it. Personal cost factor that indicate the threat of retaliation against the complainants have a negative correlation on whistleblowing intentions means the less retaliation they get, the greater their intention to do whistleblowing. An anonymous reporting will encourage organizational employee participation to be more willing to report fraud to those who can handle it.

H₄ : Anonymous reporting moderate the negative effect of personal cost on whistleblowing intentions

H₅ : Anonymous reporting moderate the positive effect of the seriousness of frauds on whistleblowing intentions

H₆ : Anonymous reporting moderate the positive effect of legal protection on whistleblowing intentions

3. Methodology

3.1. Research Design, Population, and Sample

The approach of this study is quantitative research with survey methods. The population in this study was 1,545 State Financial Auditors (SFA) from The Audit Board of the Republic of Indonesia. Determination of the number of samples made using the Slovin formula and obtained a minimum sample size that will be examined as follows:

$$n = \frac{N}{1 + Ne^2} = \frac{1.545}{1 + 1.545 (0,11)^2} = 78,44 \approx 79$$

This study uses a cluster sampling technique. This technique is used because the sample used covers seven sectors of the SFA in The Audit Board of the Republic of Indonesia with a sample of 81 respondents. The sampling technique from each sector is carried out by selective sampling, namely the selection of samples based on population characteristics and research objectives (Crossman, 2018).

3.2. Research Setting

This research was conducted at the office of The Audit Board of the Republic of Indonesia, which located in Central Jakarta.

3.3. Measurement Method

This study uses a Likert scale with a score of 1-5 with the following scores: (1) the answer “Strongly Agree” is given a value of 5; (2) the answer “Agree” is given a value of 4; (3) the answer “Neutral” is given a value of 3; (4) the answer “Disagree” is given a value of 2, and; (5) the answer “Strongly Disagree” is given a value of 1.

3.4. Data Collection Method

This research uses primary and secondary data collection methods. Primary data collection is done through distributing questionnaires directly to respondents and online through Google Forms. Meanwhile, secondary data collection is done through documentation in the form of information from The Audit Board of the Republic of Indonesia, articles, blogs, journals, literature, as well as previous research references relating to whistleblowing.

3.5. Plan for Data Analysis

The data analysis technique of this study was classified into 6 parts. First, the Data Quality Test which consists of Validity and Reliability Tests. Second, descriptive statistics. Third, the Classic Assumption Test consisting of the Normality Test, the Multicollinearity Test, the Heteroscedasticity Test, and the Linearity Test. Fourth, Multiple Linear Regression. Fifth, Moderated Regression Analysis. Sixth, the coefficient of determination.

4. Results and Discussion

4.1. Results

Table 1. Validity Test Summary

Personal Cost	r_{value}	r_{table}	Explanation
Item 1	0,556	0,361	Valid
Item 2	0,396	0,361	Valid
Item 3	0,362	0,361	Valid
Item 4	0,420	0,361	Valid
Item 5	0,565	0,361	Valid
Item 6	0,665	0,361	Valid
Item 7	0,511	0,361	Valid
Item 8	0,550	0,361	Valid
Item 9	0,404	0,361	Valid
Item 10	0,430	0,361	Valid
The Seriousness of Fraud	r_{value}	r_{table}	Explanation
Item 1	0,733	0,361	Valid
Item 2	0,774	0,361	Valid
Item 3	0,610	0,361	Valid
Item 4	0,619	0,361	Valid
Legal Protection	r_{value}	r_{table}	Explanation
Item 1	0,607	0,361	Valid
Item 2	0,911	0,361	Valid
Item 3	0,859	0,361	Valid
Item 4	0,810	0,361	Valid
Item 5	0,683	0,361	Valid
Anonymous Reporting	r_{value}	r_{table}	Explanation
Item 1	0,901	0,361	Valid
Item 2	0,906	0,361	Valid

Item 3	0,915	0,361	Valid
Item 4	0,965	0,361	Valid
Whistleblowing Intentions			
	rvalue	rtable	Explanation
Item 1	0,931	0,361	Valid
Item 2	0,897	0,361	Valid
Item 3	0,938	0,361	Valid
Item 4	0,880	0,361	Valid
Item 5	0,876	0,361	Valid

Table 2. Reliability Test Summary

Variable	Cronbach's Alpha Coefficient	Reliability Standard	Explanation
Whistleblowing Intentions	0,943	0,60	Reliable
Personal Cost	0,636	0,60	Reliable
The Seriousness of Frauds	0,615	0,60	Reliable
Legal Protection	0,829	0,60	Reliable
Anonymous Reporting	0,940	0,60	Reliable

Table 1 explains that each statement item on each variable is declared valid. Meanwhile, Table 2 explains that all variables are declared reliable with a significance above 0.60.

Table 3. Descriptive Statistics Summary

Variable	N	Min	Max	Mean	Standar Deviation
Whistleblowing Intentions	81	1	5	3,71	0,68
Personal Cost	81	1	5	3,37	0,79
The Seriousness of Frauds	81	1	5	3,67	0,73
Legal Protection	81	2	5	3,94	0,66
Anonymous Reporting	81	2	5	3,80	0,62

Table 3 shows that Personal Cost variable has the highest standard deviation. It shows that Personal Cost has the most varied and fluctuating data in this study when compared to the data of other variables.

Table 4. Normality Test Summary

Variable	Residual Standard	Alpha	Explanation
Kolmogorov Smirnov Z	0,088	0,05	Normal

Asymp.sig 0,187 0,05 Normal

Table 5. Multicollinearity Test Summary

Variable	TOL	VIF	Explanation
Personal Cost	0,806	1,241	Multicollinearity free
The Seriousness of Frauds	0,621	1,609	Multicollinearity free
Legal Protection	0,425	2,351	Multicollinearity free
Anonymous Reporting	0,463	2,158	Multicollinearity free

Table 6. Heteroscedasticity Test Summary

Variable	Sig.	Alpha	Explanation
Personal Cost	0,999	0,05	No symptoms of heteroscedasticity
The Seriousness of Frauds	0,321	0,05	No symptoms of heteroscedasticity
Legal Protection	0,105	0,05	No symptoms of heteroscedasticity
Anonymous Reporting	0,677	0,05	No symptoms of heteroscedasticity

Table 7. Linearity Test Summary

R Square <i>old</i>	0,523
R Square <i>new</i>	0,756

Table 4 shows that the data were normally distributed with an *asymp.sig* value of 0.187 or above 0.05. Table 5 shows that there are no independent variables that have a tolerance value less than 0.1 or have a VIF value more than 10 so that it can be concluded that the data are free from multicollinearity symptoms. Table 6 shows that the data in the study are free from heteroscedasticity symptoms so that it can be concluded that the regression model of this study is appropriate. Table 7 shows that based on linearity test, the value of R Square *old* is 0.523 and R Square *new* is 0.756. Thus, the amount of Fvalue can be obtained as follows:

$$F = \frac{\frac{(R_{new}^2 - R_{old}^2)}{m}}{\frac{(1 - R_{new}^2)}{(n - k)}} = \frac{\frac{(0,756 - 0,523)}{1}}{\frac{(1 - 0,756)}{(81 - 5)}} = \frac{0,233}{0,003} = 77,66$$

Because Fvalue (77.66) > Ftable with df = (0.05; 1; 76) of (3.97) it can be concluded that the regression model contained in this study is linear.

Table 8. Multiple Regression Analysis Summary

Variable	Regression Coefficient	t _{value}	t _{table}	Sig.
Constanta	0,877	1,905	1,664	0,060
Personal Cost	0,142	0,974	1,664	0,333
The Seriousness of Frauds	0,197	1,751	1,664	0,084
Legal Protection	0,548	5,163	1,664	0,000

Table 9. Determination Coefficient Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,703 ^a	,495	,475	,49764

Table 8 shows that personal cost variable has no negative effect on whistleblowing intentions, because the t value is higher than the -t table. Meanwhile, the seriousness of frauds and legal protection variables positively affect whistleblowing intentions, because the t value is higher than the t table. Table 9 shows that the coefficient of determination (R Square) of 0.495 means that personal cost, the seriousness of frauds, and legal protection simultaneously affect the whistleblowing intention variable by 49.5%, while the rest is influenced by other variables not examined. The Standard Error of the Estimate shows the magnitude of the deviation in the regression model equation that is equal to 0.49764.

Table 10. Moderated Regression Analysis Summary

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	Interaction_1	-,032	,211	-,160	-,154	,878
	Interaction_2	,062	,093	,394	,665	,508
	Interaction_3	,035	,080	,232	,437	,663

Table 10 shows that anonymous reporting variable does not moderate the negative effect of personal cost on whistleblowing intentions. It can be seen from the t value of Interaction_1 which is higher than the -t table. The anonymous reporting variable also does not moderate the positive effect of the seriousness of frauds and

legal protection on whistleblowing intentions. It can be seen from the t value of Interaction_2 and Interaction_3 which is smaller than the t table.

4.2. Discussion

The first hypothesis concluded that there was no negative effect of personal cost on whistleblowing intentions. Personal cost risks that are likely to be experienced by whistleblowers are not a consideration of the whistleblower in deciding to be involved or not involved in whistleblowing. The results of this study are not in line with the Theory of Planned Behavior proposed by Ajzen (1991) regarding subjective norms as one of the determinant factors that affect interest. The existence of personal cost risks that represent subjective norms in the form of social pressure which is felt as a consequence of whistleblowing is not successfully explained by this study. The results of this study also contradicted to what was discovered by Septianti (2013) and Lestari and Yaya (2017), but it is in line with Akbar et al. (2016) and Marliza (2018).

There are several justifications that might explain the affect of personal cost on whistleblowing intentions. First, the number of respondents who disagreed with the opinion stating that they would not report fraud that they knew for fear of being retaliated showed that the existence of personal cost did not reduce his intention to be whistleblower. Second, the number of respondents who agree with the opinion stating that they are willing to commit to participate in whistleblowing actions shows the high organizational commitment held by them. Third, the number of respondents who are dominated by male respondents can be a reason for not influencing personal cost factors in the intention to take whistleblowing actions. Napitupulu and Bernawati (2016) state that male auditors perceive frauds as negative things, so they feel responsible for taking whistleblowing actions and overriding the personal cost risks they receive. Fourth, other factors related to personal costs such as the seriousness of frauds and legal protection allow the auditor to rule out existing personal cost risks.

The second hypothesis concluded that there was a positive effect of the seriousness of frauds on whistleblowing intention. The number of respondents who are willing to report material or non-material fraud shows that ethical violations are considered as one of the factors that encourage them to behave prosocially by acting as whistleblowers. The results of this study are in line with Prosocial Organizational Behavior Theory by Brief and Motowidlo (1986) regarding whistleblowing as one of 13 forms of prosocial behavior. The results of this study is also in line with

Bagustianto and Nurkholis (2015) and Abdullah and Hasma (2017), but contrary to what has been discovered by Putra (2014) and Saud (2015).

The third hypothesis concluded that there was a positive effect of legal protection on whistleblowing intentions. It explains that the higher the legal protection that the respondents receives from their reporting actions, the higher their intention to take the whistleblowing action. The results of this study are in line with the Hierarchy of Needs by Maslow (1954) in the form of safety needs. The results of this study are also in line with Cho and Song (2015) and Gökçe (2013), but contrary to what Kuswanto (2016) has found.

The fourth hypothesis concluded that the anonymous reporting did not moderate the negative effect of personal cost on whistleblowing intentions. The existence of anonymous reporting among the existing personal cost risks does not become a reason that strengthens the respondents to report frauds that occur within the organization, even when they know that the personal cost risks they receive are very large. The justification might explain it as explained in the first hypothesis.

The fifth hypothesis concluded that the anonymous reporting did not moderate the positive effect on the seriousness of frauds on whistleblowing intentions. The existence of anonymous reporting between the seriousness of frauds that occur within the organization does not become a reason that further strengthens the respondents to report frauds that occur within the organization, both when frauds that occur are material or non-material. The justification that might explain it is the respondents' perception of the existence of anonymous reporting. The number of respondents who gave answers "disagree" and "neutral" to "be willing to report fraud if there is an anonymous reporting option because the fraud is serious" indicates that the existence of anonymous reporting in the midst of serious frauds that occurred has not been able to make the respondent fully committed to conducting whistleblowing action.

The sixth hypothesis concluded that the anonymous reporting did not moderate the positive effect of legal protection on whistleblowing intentions. It shows that the existence of anonymous reporting does not become a reason that strengthens the respondents to report frauds that occur within the organization, even when they get legal protection for their reporting actions. The justification that might explain it is the respondent's distrust of the security of anonymous reporting. Respondents who provide "disagree" and "neutral" answers to "are willing to report fraud if there are

anonymous reporting options because legal protection is not sufficient” can be used as a basis to justify this justification.

5. Conclusion, Implications, Limitations, and Recommendation for Future Research

The conclusions of this study are as follows: (1) Personal cost has no negative effect on whistleblowing intentions; (2) The seriousness of frauds and legal protection has a positive effect on whistleblowing intentions; and (3) Anonymous reporting does not moderate the effect of personal cost, the seriousness of frauds, and legal protection against whistleblowing intentions.

This research has several implications. First, Prosocial Organizational Theory provides relevant empirical evidence in explaining the phenomena or factors that affect whistleblowing intentions. Second, The Audit Board of the Republic of Indonesia is expected to design strategies that can further increase the intention of the whistleblowing of its employees. Some efforts to increase interest in whistleblowing can be done through socialization related to the whistleblowing system, benefits and procedures of whistleblowing, and also enforcing legal protection for whistleblower.

This study also has several limitations. First, internet-based questionnaire data collection methods have the potential to cause selection bias because they are limited to respondents who can access the internet. Future research can use the method of distributing questionnaires directly or using experimental research methods to avoid selection bias. Second, raising the issue of sensitive research (whistleblowing) is feared to cause respondents to answer survey questions normatively, so that research results can be biased with conditions in the field. Future research can develop and perfect related research. Research development can be in the form of exploration of other factors that can influence whistleblowing intentions so that a research regression model that can predict more accurately is generated.

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