Accounting Students' Intent to Blow the Whistle on Corporate Fraudulent Financial Reporting: An Experiment

Danny Kennett* Alexis Downs M. George Durler

Department of Accounting and Information Systems School of Business Emporia State University 1200 Commercial, Emporia, KS 66801 United States of America *Email: dkennett@emporia.edu, Phone: 620-341-5346

Abstract

When an employee becomes aware of corporate management misconduct, he/she has two alternatives: blow the whistle or remain silent. In a whistle-blowing situation, the individual weighs the personal costs and societal benefits of blowing the whistle versus the personal benefits and societal costs of remaining silent. This study reports the results of an experiment involving accounting majors to ascertain their intent to externally blow the whistle on massive fraudulent financial reporting given specified personal and societal consequences for each alternative. While approximately 75% of the participants indicated a tendency to, none were certain they would blow the whistle. The decision to blow the whistle or remain silent is the result of a difficult and complex decision-making process. Suggestions for future research that permits a decisionmaking process are provided.

Key Words: Whistle-Blowing, Fraudulent Financial Reporting

1. Introduction

This article reports the results of a case-questionnaire survey of undergraduate and graduate accounting majors regarding their intent to blow the whistle externally on fraudulent financial reporting. Recent research underscores the need to better understand the decision-making process and predict the likelihood that employees will blow the whistle on fraudulent financial reporting. Brown et al. (2010) find that firms subjected to employee whistle-blowing on corporate misconduct to the news media are more likely to make important corporate governance changes than control groups. Additionally, they conclude that external whistle-blowing is a valuable means for discovering agency problems and "far from a trivial nuisance." In a study of 216 court cases of alleged corporate fraud, Dyck et al. (2010) determine that 17 percent of the frauds were disclosed by employees, whereas external auditors revealed only 10 percent of the frauds. Although external auditors may generally have incentives not to disclose (Dyck et. al 2010) or as in the Enron-Arthur Andersen scandal the external auditor may be actively engaged in concealment (Jennings 2004), the disparity may also be attributed to discovery.

External auditors contend that top management can conceal even material financial reporting from detection (Schultz and Hooks 1998; Jennings 2004). In large, complex corporations, employees are almost certain to become aware of the fraudulent practices because they are executing the instructions of top management (Dyck et al. 2010; Jennings 2004; Zyglidopolulos and Fleming 2008). Accounting-employees, as a result of their education, are expected to recognize their actions are questionable if not wrong and the potential impact on the financial statements. Finally, the need to understand and predict external whistle-blowing by employees depends on the expected rate of fraudulent financial reporting. Verschoor (2010) believes serious corporate misconduct is increasing and thus the need for employee whistle-blowing is increasing. The remainder of the paper is organized as follows. Whistle-blowing is defined and discussed in the first section. Research objectives and research questions are presented in the second section. The third section discusses the methodology and results of the survey. A discussion of the results and implications are considered in the fourth section. Limitations of the study and future research opportunities are discussed in the next sections followed by a summary.

2. Whistle-Blowing Process

Near and Miceli (1985, 4) define whistle-blowing as "the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action."

Our literature review revealed other more restrictive definitions (e.g., Jubb 1999; Lindblom 2007; Alford 2007; see Verschoor 2010b). However, the Near and Miceli definition is more widely cited, and used in the accounting literature (e.g., Arnold and Ponemon 1991; Brown et al. 2010; Hooks et al. 1994), and it includes disclosure channels or options an individual may consider. Employees who become aware of fraudulent financial reporting have three disclosure options or channels: 1) parties within the organization; 2) independent auditor; and 3) a government agency or news media. We are concerned with external whistleblowing for the following reasons. Disclosure internally may be ineffective when fraudulent financial reporting is perpetrated and concealed by the chief executive officer and other senior executives (management fraud). Employees may not trust the external auditor to take effective action and/or protect their anonymity (Schultz and Hooks 1998). As noted previously, when the news media report fraudulent financial reporting the identified firms are more likely to adopt important corporate governance changes that reduce the likelihood of future management misconduct (Brown et al. 2010). If the wrongful acts are disclosed externally, the perpetrators are more likely to be prosecuted. Park and Blenkinsopp (2009) contend that internal whistle-blowing and external whistle-blowing are qualitatively different behaviors. Last, as Dworkin and Baucus (1998, 1281) note: "Researchers need to develop different theoretical explanations of internal and external whistle-blowing processes.

The decision to blow the whistle or remain silent is difficult, and complex, and a topic of a substantial body of literature. Factors that might influence the decision include the following: institutional pressures; ethical climate at the top; support from peers and supervisors; quality and reliability of the evidence of wrongdoing; perception of the wrongdoer; intended purpose of wrongdoing; fear and/or anger; likelihood of; remaining anonymous; the individual's moral reasoning/development; nature of the harm caused by the wrongdoing; likelihood of harm; dispersion of harm among victims; materiality of the act; effectiveness of the reporting channel/option; employee's status in the organization; employee's tenure with the organization; age or gender; culture; perceived behavioral control; social pressure; attitude toward whistle-blowing; reward; protection from retaliation; and retaliation (Mesmer-Magnus and Viswesvaran 2005; Miceli and Near 1992; Park and Blenkinsipp 2009; Zyglidopoulos and Fleming 2008; Liyanarachchi and Newdick 2009; Decker and Calo 2007; King, 1997; Gundlach et al. 2003; Chiu 2002; Brody et al. 1999; Stansbury and Victor 2009; Bouville 2008; Near and Miceli 1995; Henik 2008). Retaliation is generally recognized as the most important or influential factor in the decision making process.

Consequently, governing authorities have implemented laws to protect whistle-blowers, such laws include: the Sarbanes-Oxley Act (SOX) in the U.S., the Public Interest Disclosure Act in the U.K., and the Protected Disclosures Act in New Zealand (Beard 2007; Brown et al. 2010; Liyanarachchi and Newdick 2009; Lewis 2008; See Hassink et al. 2007 for acts). The protection afforded by the U.K. and New Zealand legislation appears inadequate (Liyanarachchi and Newdick 2009; Lewis 2008, Hartley 2008) while SOX's protection is more apparent than real (Levitz 2009; Verschoor 2010; Shine 2007; Culbertson 2008; Hartley 2008). Retaliation on the other hand is real, and the potential whistle-blower should expect it. The potential personal costs for the whistle-blower are the subject of numerous articles (e.g., Qusqas and Kleiner 2001; Beard 2007; Shine 2007; Rufus 2004). Potential personal costs include being fired or forced to retire early; being black-listed and unable to secure comparable employment; harassment such as obscene mailings, gestures and insults; false allegations about the character and actions of the whistle-blower; time and financial costs suing a past employer for unfair termination; vandalism of personal property; bankruptcy; suicide; and divorce. Additionally, the courts offer little hope for whistle-blowers (Shine 2007; Culbertson 2008).

In their study of 216 alleged corporate fraud cases, Dyck et al. (2010) identified 27 cases of employee whistle-blowing. The whistle-blower concealed his/her identity in 37 of the cases: i.e., "a clear sign that the expected reputational costs exceed the expected reputational benefits of whistle-blowing". In 82 percent of the cases, the whistle-blower was "fired, quit under duress, or had significantly altered responsibilities." Additionally, many of the whistle-blowers moved to another industry and/or town to avoid personal harassment. In their review of 33 cases of employees wrongfully fired for blowing the whistle, Dworkin and Baucus (1998) report similar findings: specifically employees who blew the whistle externally suffered greater retaliation than internal whistle-blowers. As Dyck et al. observe (2245), "Given these costs, the surprising part is not that most employees do not talk, but that some talk at all." Of course, employees can avoid the personal financial costs by remaining silent. As Dyck et al. (2010, 2245) note, "The case of Sharon Watkins at Enron suggests, the best way to avoid the reputational loss is to change jobs as soon as possible, without whistle-blowing." The survey reported in this paper provides respondents with specified, severe personal costs of whistle-blowing as well as the opportunity to change jobs immediately without whistle-blowing. No other study of which we are aware includes both opportunities.

3. Research Objectives

The primary objective of the study is to provide empirical evidence regarding the intent of accounting majors to blow the whistle externally on massive fraudulent financial reporting. Accounting majors are the future employees who are most likely to become aware of and recognize fraudulent financial reporting. The decision making process is temporal. It begins with an ethical question, proceeds with the accumulation and evaluation of evidence regarding the ethical question and consequences, and ends with the decision. Research examines intent at the earliest point and at points during the evidence-gathering-evaluation process. Schultz et al. (1993) examine the intent of managers and professional staff to disclose internally at the earliest point, that is, when it seems likely that a potential wrongdoer might commit a material fraudulent reporting act. Arnold and Ponemon (1991) examine internal auditors', Liyanarachchi and Newdick (2009) examined accounting majors and Kaplan et al (2009) examined MBA students' intent to blow the whistle after occurrence of the material fraudulent financial reporting act(s) but prior to end of the evidence-gathering-evaluation process. While Kaplan et al. specify internal whistle-blowing and anonymous or nonanonymous channels, in the other studies the whistle-blower's identity would be known and internal whistle-blowing is implied.

The mean intents for nonanonymous disclosure are best described as uncertain: i.e., ranging around the midpoints of the scales. Because respondents have only two alternatives, (blowing the whistle or remaining silent), intent uncertainty strongly suggests that respondents intend to remain silent at least temporarily. Results may be different at the end of the evidence-gathering-evaluation process: at that point, an individual is confident about the effectiveness of the reporting channel, materiality and nature of the fraudulent financial reporting, supporting evidence of the act(s), consequences of blowing the whistle (personal and societal), and the consequences of remaining silent (personal and societal). The current study is the first experimental study of which we are aware to investigate the intent to blow the whistle at the end of the evidence-gatheringevaluation process. Participants were given a scenario (Appendix A) in which the participant volunteered time to his/her "professional accounting organization's" "anonymous and confidential" hotline for ethical questions. A caller, whose gender and identity are unknown, was given a fictitious name of "Kelly." "Kelly" revealed the dilemma/scenario in the first person. In summary, "I" have been a loyal employee of ABC for ten years and have a "prestigious management position." "I" have a "substantial" personal portfolio of investments, 70% of which is ABC stock.

ABC's stock price jumped 15% based on "stellar" reported earnings and the new CEO's promise of "even better" performance. "I" have "unquestionable and irrefutable proof" the CEO is actively engaged in a "massive fraudulent financial reporting scheme" that overstates income by 20% and the CEO will borrow "heavily" from a "local bank" to conceal the fraud. "I" have anonymously notified the independent auditors and the board of directors. "They have done nothing" and, both subsequently endorsed the new CEO publicly. "I" am "thinking about blowing the whistle" to the appropriate government agency. "Kelly" has two choices: blow the whistle or accept a job offer and remain silent. As "Kelly" explains, "I" have a "very good job offer from a solid, well-known company" "comparable to my current job" with an "excellent opportunity for advancement". "If" I blow the whistle, the fraud will be revealed to the public; ABC will fire me; my job offer will be withdrawn; no company will hire me; ABCs stock price will plummet; and "I" will lose 70% of my portfolio. However, if "I" blow the whistle ABC will survive and the local bank will not suffer a "devastating loss." If "I" remain silent, the fraud will continue, ABC will be bankrupt in three years; ABC's employees will lose their jobs; and the local bank will suffer a devastating loss.

We believe the scenario provides sufficient information for participants to make a decision regarding intent to blow the whistle. Participants were asked to respond from the third-person viewpoint. This approach is common in research involving sensitive ethical issues (e.g., Arnold and Ponemon 1991; Liyanarachchi and Newdick 2009; Schultz et al. 1993) and it is expected to reduce the effect of "social desirability response bias" (Randall and Fernandes 1991): that is, the tendency for participants to self-report the known socially desirable and ethically "correct" action. We examine the following research questions (RQ):

RQ 1: Given appropriate, sufficient information to decide, will participants make a decision to blow the whistle?

RQ 2: Do the personal financial costs of blowing the whistle influence participants' intent?

- RQ 3: Do the societal benefits of blowing the whistle influence participants' intent?
- RQ 4: Do participants believe a moral obligation exists to blow the whistle?
- RQ 5: Does a moral obligation to blow the whistle influence participants' intent?

RQ 6: Do participants believe their peers would approve blowing the whistle?

RQ 7: Does peer approval of blowing the whistle influence participants' intent?

4. Methodology and Results

In March 2011, accounting majors in two senior-level accounting courses at a regional Mid-western university were given the opportunity to participate in the study. Participation was entirely voluntary and the research instrument and data collection methodology were approved by the University's applicable review board. Demographic data are presented in Table 1. Of the 81 accounting majors participating in the study, 53 (65.4%) are female and 28 (34.6%) are male; 18 (22.2%) are married and 63 (77.8%) are not married; and 42 (51.9%) are U.S. citizens; and 39 (48.1%) are nonresident aliens. On average, the nonresident aliens are students who have lived in the U.S. for approximately three years. The average age of the participants is approximately 27 years. Academic classification of the participants is as follows: 23 (284%) are juniors, 25 (30.9%) are seniors, and 33 (40.7%) are MBA students with a concentration in accounting. Over 75% of the participants reported university grade point averages equal to or greater than 3.00 (on a 4.00 scale). Thirty-eight participants (46.9%) had completed a business ethics course while an equal number had not completed a business ethics course. Finally, 40 (49.4%) reported knowledge of a serious unethical act by a person of higher authority, 35 (43.2%) were not aware of such an act, and 6 (7.4%) were unsure.

Participants' responses regarding intent to blow the whistle are shown in Table 2. Although participants were asked their expectations regarding "Kelly's" beliefs and intent, consistent with prior research we assume the participants' responses reflect their personal beliefs and intent. We consider an alternative in the section discussing limitations. Would participants blow the whistle? Participants were given the choices of "yes" with 100% certainty; "no" with 100% certainty; or responses from a 9-point likelihood scale (9, extremely likely, to 1, extremely unlikely). "Yes" and "No" were recoded to 11 and 0, respectively to calculate the mean intent to blow the whistle. No participant was certain he/she would blow the whistle. The likelihood points shown in parentheses, frequencies and percents, are as follows: (9) 5, 6.2%; (8) 7, 8.6%; (7) 34, 42.0%; (6) 15, 8.5%; (5) 10, 12.3%; (4) 5, 6.2%; (3) 2, 2.5%; (2) 1, 1.2%; and (1) 1, 1.2%.

Table 3 presents the results of a linear regression and related descriptive statistics. Four independent variables are used in the model. According to the Theory of Planned Behavior (Ajzen 1991; Park and Blenkinsopp 2009), the approval/disapproval of a participant's referent persons is expected to have a significant influence on the participant's whistle-blowing intent. Using a 7-point scale (7, strongly agree, to 1, strongly disagree), participants on average (4.74) somewhat agreed that friends would approve of whistle-blowing. Using the same 7-point agree/disagree scale, participants on average (5.87) show relatively strong agreement that a moral obligation exists to blow the whistle. As noted previously, the severe personal financial costs are expected to strongly influence participants' whistle-blowing intent. Using a 7-point scale (7, extremely influential, to 1, extremely uninfluential), participants on average (5.40) believe the personal costs would have a relatively strong influence on the intent to blow the whistle. Using the same 7-point influential/uninfluential scale, participants on average (5.48) believe the other consequences of blowing the whistle would have a relatively strong influence on intent. As shown in Panel D of Table 3, friends' approval is positively related to intent to blow the whistle and significant (.004). Moral obligation is also positively related to whistle-blowing intent but not significant (.385). The personal financial costs variable is negatively correlated with the intent to blow the whistle and statistically significant (.018). All other consequences of blowing the whistle is positively correlated with whistle-blowing intent and statistically significant (.002). As shown in Panel C, the model accounts for 18.8% (adjusted R^2 .188) of the variance.

5. Discussion and Implications

We address the research questions first. Given adequate, sufficient information will participants make a decision to blow the whistle? Only one participant made a decision, and that decision was to remain silent. All the other participants are willing to refrain from or delay making a decision, such delay is a decision to remain silent at least temporarily. We consider the implications of this finding subsequently. As noted previously, there is no prior experimental research for comparison. The current study's mean intent (6.24; standard deviation of 1.62; on a 11-point scale from 10 to 0) clearly indicates that participants are unsure/uncertain, on average. This result is consistent with the internal whistle-blowing experimental research (Arnold and Ponemon 1991; Kaplan et al. 2010; Liyanarachchi and Newdick 2009; Schultz et al. 1993) mean whistle-blowing intents, all of which are around the mid-points of the related scales and indicating uncertainty. Regarding RQ 2, the results are somewhat surprising. Do the personal financial costs influence the whistle-blowing intent? On average, participants believe that personal financial costs are important (5.40; standard deviation of 1.15), but given the severity of the personal financial costs, we expected a mean much closer to 7.00 (extremely influential) and a tighter standard deviation. As expected, personal financial costs are negatively correlated with the intent to blow the whistle (-.334) and statistically significant (.018).

As for the societal benefits, RQ 2, participants on average (5.48; standard deviation of 1.13) believe these are important in the decision making process. The societal benefits of blowing the whistle included preventing bankruptcy, employees losing their jobs, and a devastating loss for a local bank. As expected, the societal benefits are positively correlated (.463) with the intent to blow the whistle and statistically significant (.002). When compared to the personal costs of blowing the whistle, the societal benefits appear to have a somewhat greater impact on participants' decision making processes. Research questions 4 and 5 are concerned with a moral obligation to blow the whistle. On average (5.87), participants rather strongly believe and recognize that a moral obligation exists to blow the whistle. This finding is important because participants must first recognize an ethical issue exists: such belief is a necessary condition, a trigger, for the ethical decision making process. While participants strongly agree they have a moral obligation to blow the whistle, that obligation is not a statistically significant variable in the regression analysis (.385).

The potential influence of peers is the subject of research questions 6 and 7. Participants mildly agree, on average (4.74) that their friends would approve of blowing the whistle. With apparently mild support from friends, it is surprising that this variable is statistically significant in the regression analysis (.004). Overall, we anticipated the severe personal financial costs would dominate the participants' decision making. That is, we anticipated that several participants would know they would not blow the whistle and a clear majority would know that blowing the whistle would be highly unlikely. Instead, a majority of the participants appear willing to seriously consider blowing the whistle. This finding is very "good news" and speaks highly of the participants' moral compass.

6. Limitations

The study has limitations. A sample of accounting students from a regional Mid-western university limits generalizing the results to the population of accounting students. Respondents may be biased toward the socially desirable and what they believe is the "correct ethical" response. The study measures participants' "intent." Thus the study's reliability in predicting actual whistle-blowing behavior depends on the probability that "intent" leads to action. Of course, as in any case-questionnaire survey the participants' jobs, future, and savings are not at risk. These limitations are common to the case-questionnaire research method involving sensitive ethical issues and widely recognized. This study used the "third-person" approach, an accepted method when sensitive ethical issues are involved. We assume, as other researchers assume, that participants' responses reflect their personal values and intents. In fact, some participants may have responded to the questions explicitly. That is, their responses represent their expectations about the third-person's values and intents. For example, when asked to indicate the likelihood that "Kelly" (the third-person) would blow the whistle, some participants may have predicted "Kelly's" action, which may not be the participants' intent.

7. Future Research

As the first in a line of research, our study provides a basis for numerous future research opportunities. Replications of the current study will provide evidence regarding generalization of results to other populations including other countries and cultures. Future research could provide half the participants with a "third-person" case and half with the same case requesting the participants' personal views. Deciding whether to blow the whistle or remain silent when the consequences for each action are great, is a complex, difficult decision. The decision is the result of a decision making process that requires time to evaluate and weigh the costs and benefits. The current study and all studies of which we are aware, do not provide participants with a case and request multiple, longitudinal responses which would come much closer to representing the decision making process. Ultimately employees who are aware of material management misconduct decide to blow the whistle or remain silent. Thus, the last case in the decision-making process should require a decision: blow the whistle or remain silent.

8. Summary

A sample of accounting majors participated in an external whistle-blowing case-questionnaire survey. The case specified personal and societal consequences for blowing the whistle or remaining silent about a massive fraudulent financial reporting scheme perpetrated and concealed by the chief executive officer. On average, participants reveal a mild tendency to blow the whistle. The approval of peers to blow the whistle, personal financial costs of blowing the whistle, and societal benefits of blowing the whistle are statistically significant variables affecting participants' intent. The study is the first to experimentally examine external whistle-blowing tendencies at the point when participants have adequate, sufficient information to form a decision. As such, it begins a new line whistle-blowing research opportunities and questions.

Descripti	ve Statistics					
Gender		Number	Percent			
	Female	53	65.4			
	Male	<u>28</u>	<u>34.6</u>			
	Total	81	100			
Marital st						
	Married	18	22.2			
	Single	<u>63</u>	<u>77.8</u>			
	Total	81	100			
U.S.Citi						
	Yes	42	51.9			
	No	<u>39</u> 81	<u>48.1</u>			
	Total	81	100			Standard
			<u>Minimum</u>	<u>Maximum</u>	Mean	Deviation
Nonresid	ent alien students' years in U.S.	33	1	12	3.06	2.19
Age		80	19	48	27.01	6.80
Academi	c classification	<u>Number</u>	Percent			
	Junior	23	28.4			
	Senior	25	30.9			
	Masters	<u>33</u> 81	<u>40.7</u>			
	Total	81	100			
Universit	v GPA					
	3.50 - 4.00	44	54.3			
	3.00 - 3.49	22	27.2			
	2.50 - 2.99	9	11.1			
	2.00 - 2.49	2	2.5			
	Below 2.00					
	No response	$\frac{4}{81}$	<u>4.9</u>			
	Total	81	100			
Complete	ed business ethics course					
	Yes	38	46.9			
	No	38	46.9			
	Unsure	<u>5</u> 81	<u>6.1</u>			
	Total	81	100			
Knowled authority	ge of serious unethical act by person of higher					
	Yes	40	49.4			
	No	35	43.2			
	Unsure	<u>6</u> 81	$\frac{7.4}{100}$			
	Total	81	100			

TABLE I

TABLE 2

Whistle-Blowing Intent

Blow the whistle	<u>Mean</u> 6.27		Standard <u>Deviation</u> 1.681									
Scale ^a Frequency Percent	<u>Yes</u> 0	<u>9</u> 5 6.20	<u>8</u> 7 8.60	<u>7</u> 34 42.00	<u>6</u> 15 18.50	<u>5</u> 10 12.30	<u>4</u> 5 6.20	<u>3</u> 2 2.50	<u>2</u> 1 1.20	<u>1</u> 1 1.20	<u>No</u> 1 1.20	<u>Total</u> 81 100

^a "Yes" and "No" are "100% certain"; 9 = extremely likely to 1 = extremely unlikely

TABLE 3					
Linear Regression Results					
Panel A: Descriptive Statistics					
-	Mean ^a	Standard Deviation	Scale		
Friends' would approve of whistle-blowing	4.78	1.378	7 to 1 ^a		
Has a moral obligation to blow whistle	5.95	.934	7 to 1 ^a		
Personal financial costs of whistle-blowing	5.46	1.152	7 to 1 ^b		
All other consequences of whistle-blowing	5.51	1.185	7 to 1 ^b		
Blow the whistle	6.27	1.681	10 to $0^{\rm c}$		
Panel B: ANOVA ^d					
	Sum of Squares	<u>df</u>	Mean Square	<u>F</u>	Sig.
Regression	46.629	4	11.657	4.939	.001
Residual	179.396	76	2.360		
Total	226.025	80			
Panel C: Model Summary					
R Square	.206				
Adjusted R Square	.165				
Standard error of the estimate	1.536				
Panel D: Coefficients					
	<u>Unstandardized</u>	Standardized	<u>t</u>	<u>Sig.</u>	
Friends' approval of whistle blowing	.298	.244	2.376	.020	
Moral obligation to blow whistle	029	016	148	.882	
Personal financial costs of whistle-blowing	353	242	-2.276	.026	
All other consequences of whistle-blowing	.489	.344	3.102	.003	

^a Scale: 7 = strongly agree to 1 = strongly disagree

^b Scale: 7 = extremely influential to 1= extremely uninfluential

^c Scale: 10 = certain whistle blown; 9 = extremely likely; 1 = extremely unlikely; 0 = certain of silence

^b Dependent variable: Blow the whistle

References

- 1. Alford, Fred (2007). Whistle-blower narratives: The experience of choiceless choice. *Social Research* 74 (1), 223 250.
- 2. Ajzen, I. (1991). The theory of planned behavior. Advances in Experimental Psychology, 50, 179-211.
- 3. Arnold, Donald and Ponemon, Lawrence (1991). Internal auditors' perceptions of whistle-blowing and the influence of moral reasoning: An experiment. *Auditing: A Journal of Practice & Theory* 10 (2), 1-15.
- 4. Beard, Deborah (2007). Retaliation: Unlawful, enethical, or just to be expected? *Strategic Finance*, 89 (2), 32-38.
- 5. Bouville, Mathieu (2008). Whistle-blowing and morality. Journal of Business Ethics 81, 579-585.
- 6. Bowen, Robert, Call, Andrew and Rajgopal, Shiva (2010). Whistle-blowing: Target firm characteristics and economic consequences. *The Accounting Review* 85 (4), 1239-1271.
- 7. Brody, Richard, Coulter, John and Lin, Suming (1999). The effect of national culture on whistle-blowing perceptions. *Teaching Business Ethics* 3, 385-400.
- 8. Chiu, Randy (2002). Ethical judgement, locus of control, and whistleblowing intention: a case study of mainland Chinese MBA students. *Managerial Auditing Journal* 17 (9), 581-587.
- 9. Culbertson, William (2008). Whistleblowers and prosecutors. Business Law Today 17 (5), 30-33.
- 10. Decker, Wayne and Calo, Thomas (2007). Observers' impressions of unethical persons and whistleblowers. *Journal of Business Ethics* 76, 309-318.
- 11. Dozier, Janelle and Miceli, Marcia (1985). Potential predictors of whistle-blowing: A prosocial behavior perspective. *The Academy of Management Review*, 10 (4), 823-836.
- 12. Dworkin, Terry and Baucus, Melissa (1998). Internal vs. external whistleblowers: A comparison of whistleblowing processes. *Journal of Business Ethics*, 17 (12) 1281-1298.
- 13. Dyck, Alexander, Morse, Adair and Zingales, Luigi (2010). Who blows the whistle on corporate fraud? *Journal of Finance*, LXV (6), 2213-2253.
- 14. Gundlach, Michael, Douglas, Scott and Martinko, Mark (2003). The decision to blow the whistle: A social information processing framework. *Academy of Management Review*, 28 (1), 107-123.
- 15. Hartley, Floyd (2008). An uncertain protection. Internal Auditor, 65 (3), 33-36.

- 16. Hassink, Harold, Vries, Meinderd and Bollen, Larry (2007). A content analysis of whistleblowing policies of leading European companies. *Journal of Business Ethics* 75, 25-44.
- 17. Henik, Erika (2008). Mad as hell or scared stiff? The effects of value conflict and emotions on potential whistle-blowers. *Journal of Business Ethics*, 80, 111-119.
- 18. Hooks, Karen, Kaplan, Steven and Schultz, Joseph (1994). Enhancing communication to assist in fraud prevention and detection. *Auditing: A Journal of Practice & Theory*, 13 (2), 86-117.
- 19. Jennings, Marianne (2004). Incorporating ethics and professionalism into accounting education and research: A discussion of the voids and advocacy for training in seminal works in business ethics. *Issues In Accounting Education* 19 (1), 7-26.
- 20. Jubb, P. B. (1999). Whistleblowing: A restrictive definition and interpretation. *Journal of Business Ethics* 21 (1), 77-94
- 21. Kaplan, Steven, Pany, Kurt, Samuels, Janet and Zhang, Jian (2009). An examination of the association between gender and reporting intentions for fraudulent financial reporting. *Journal of Business Ethics*, 87, 15-30.
- 22. King, Granville (1997). The effects of interpersonal closeness and issue seriousness on blowing the whistle. *The Journal of Business Communication* 34 (4) 419-436.
- 23. Lewis, David (2008). Ten years of public interest disclosure legislation in the UK: Are whistleblowers adequately protected? Journal of Business Ethics, 82, 497-507.
- 24. Levitz, Jennifer (2009). Corporate news: Congress seeks to close whistleblower loophole. *Wall Street Journal* (Eastern edition) Dec. 1, B.4.
- 25. Lindblom, Lars (2007). Dissolving the moral dilemma of whistleblowing. *Journal of Business Ethics* 76, 413-426.
- 26. Liyanarachchi, Gregory and Newdick, Chris (2009). The impact of moral reasoning on whistle-blowing: New Zealand evidence. *Journal of Business Ethics*, 89, 37-57.
- 27. Mesmer-Magnus, Jessica and Viswesvaran, Chockalingam (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. *Journal of Business Ethics* 62, 277-297.
- 28. Near, Janet and Miceli, Marcia (1985). Organizational Dissidence: The case of whistle-blowing. *Journal* of Business Ethics, 4, 1-16.
- 29. Near, Janet and Miceli, Marcia (1995). Effective whistle-blowing. *The Academy of Management Review* 20 (3), 679-708.
- 30. Park, Heungsik and Blenkinsopp, John (2009). Whistleblowing as planned behavior Survey of South Korean police officers. *Journal of Business Ethics* 85, 545-556.
- 31. Ponemon, Lawrence (1994). Whistle-blowing as an internal control mechanism: individual and organizational considerations. *Auditing: A journal of Practice & Theory*, 13 (2), 118-130.
- 32. Qusqas, Firas and Kleiner, Brian (2001). The difficulties of whistleblowers finding employment. *Management Research News*, 24, 97-100.
- 33. Randall, Donna and Fernandes, Maria (1991). The social desirability response bias in ethics research. *Journal of Business Ethics*, 10, 805-817.
- 34. Rufus, Robert (2004). Whistleblowers: Truth, justice, and the American way. *Journal of Applied Management and Entrepreneurship* 9(4), 120-132.
- 35. Schultz, Joseph, Johnson, Douglas, Morris, Deigan and Dyrnes, Sverre (1993). An investigation of the reporting of questionable acts in an international setting. *Journal of Accounting Research*, 31, 75-103.
- 36. Schultz, Joseph and Hooks, Karen (1998). The effect of relationship and reward on reports of wrongdoing. *Auditing: A Journal of Practice & Theory* 17 (2), 15-35.
- 37. Shine, Bruce (2007) Pity the SOX whistleblower; Pity the SOX lawyer whistleblower! Labor Law Journal 58, 228-241.
- 38. Sims, Randi and Keenan, John (1998). Predictors of external whistleblowing: Organizational and intrapersonal variables. *Journal of Business Ethics* 17 (4), 411-421.
- 39. Stansbury, Jason and Victor, Bart (2009). Whistle-blowing among young employees: A life-course perspective. *Journal of Business* Ethics 85, 281-299.
- 40. Verschoor, Curtis (a) (2010). We need more whistleblowers. Strategic Finance, 91 (11), 15-17.
- 41. _____ (b) (2010). Increased motivation for whistleblowing. *Strategic Finance*, 16-19.
- 42. Zyglidopoulos, Stelios and Fleming, Peter (2008). Ethical distance in corrupt firms: How do innocent bystanders become guilty perpetrators? *Journal of Business Ethics* 78, 265-274.

Appendix: Survey Instrument

You are a member of a professional accounting organization that maintains an anonymous and confidential hot line the organization's members use to discuss ethical questions. The hot line is staffed by volunteers and each week you volunteer one evening. A pre-recorded message randomly assigns each caller a unique name to protect the caller's identity and gender.

The randomly assigned name for the first caller this evening is "Kelly," who revealed the following.

"Two weeks ago, I received a very good job offer from a solid, well-known company. The job is comparable to my current job and I will have an excellent opportunity for advancement. I was going to respectfully decline the offer, but now I am having second thoughts.

"Ten years ago after graduation I accepted an offer from ABC, a fictitious name. Now, after ten years of hard work and dedication, I have a prestigious management position in ABC with a high salary and lucrative stock bonus plan. I have a substantial personal portfolio of investments, about 70 percent of which is ABC stock. Just recently, the market value of ABC's stock jumped 15% based on stellar reported earnings and guarantees from the new chief executive officer (CEO) of even better future performance. But, it is a sham.

"I have unquestionable and irrefutable proof the CEO is actively engaged in a massive fraudulent financial reporting scheme that involves recording huge amounts of fictitious sales and related assets. The fraudulent scheme overstates ABC's income by 20%. To cover the cash flow problems and conceal the fraud, the CEO will borrow heavily from a local bank. I have anonymously notified both the independent auditors and ABC's board of directors. They have done nothing. In fact, a couple days ago the auditors publicly stated they have not found any problems and the board of directors publicly announced its endorsement of the CEO.

"I am considering disclosing the fraudulent financial reporting to the appropriate government agency. That is, I am thinking about 'blowing the whistle'.

"If I blow the whistle now, the fraud will be revealed to the public. The market value of ABC's stock will plummet and I will lose 70% of my portfolio. ABC will fire me and the job offer I mentioned earlier will be withdrawn. I know that company will not hire me. I don't know of any company that will hire me if I blow the whistle. But, if I blow the whistle now, ABC will survive and the local bank will not suffer a devastating loss.

"If I don't blow the whistle, the fraud will continue. In three years ABC will fail and be forced into bankruptcy. ABC's employees will lose their jobs and the local bank will suffer a devastating loss. I can quit ABC, accept the new job offer I have and over the next year sell all of my ABC stock. I will not have any personal financial loss."

As you recall, "Kelly" is the name randomly assigned to the caller. "Kelly's" gender is unknown.

Please circle the number that best represents the extent to which you agree/disagree with the following statements.	Strongly Agree				Strongly Disagree			
If "Kelly" blows the whistle, most of "Kelly's" friends would approve.	7	6	5	4	3	2	1	
"Kelly" feels a moral obligation to blow the whistle.	7	6	5	4	3	2	1	
What is "Kelly's" attitude toward each of the following? Please circle the number that best represents your expectation.		emely uential				emely fluentia	1	
Please circle the number that best represents your		5	5	4		•	ıl 1	

Please circle the number that best represents your prediction that "Kelly" will blow the whistle. Circle "yes" if you are 100% certain "Kelly" will blow the whistle. Circle "no" if you are 100% certain "Kelly" will not blow the whistle. Otherwise circle the number that best represents the likelihood that "Kelly" will blow the whistle.

	Extremely likely						Extrem unlikel	•		
Yes	9	8	7	6	5	4	3	2	1	No
105	-	Ū	,	Ů	5	•	5	2	1	110
Please	provide th	e follov	ving inforr	nation.						
Your ge	ender		re arried?	you	Are yo	u a U. S. c	itizen?			
	Male	11	Yes			Yes				
	Femal		No		<u> </u>	No				
	e									
Which	one of the	follow	ing best de	scribes v	your acade	emic class	ification?			
	Freshman		-	Junior	our uoud	Master				
	Sophomo	re		Senior		Other				
Vour		~~~ .								
	3.5 - 4.0	grade p	oint averag	2.5 – 2.9		Below	2.0			
	3.0 - 3.99)		2.0 - 2.4			plicable			
	_									
What is	s your maj Accou				М	nogomo				
	Accor	unung			nt	anageme				
	Busin	ess				arketing				
		nistratio								
	Inform	nation S	Systems		Ot	her				
-		t busine	ss ethics c	ourse?						
	Yes No									
	Unsure									
Have y	ou ever l	learned	of a perse	on of hi	gher auth	ority who	committe	d a seriou	18	
unethic										
	Yes No									
	Unsure									
How ol	d are you	?	ye	ears						
If you a U. S.?	are not a U	J. S. cit	izen, how	long hav	e you live	ed in the		years		