

**AN EXAMINATION OF THE IMPACT OF AN
EVIDENTIARY PRIVILEGE PROTECTING CORPORATE
WHISTLEBLOWERS ON INTENTION TO REPORT
WRONGDOING**

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Abstract

The goals of an effective whistleblowing system are to encourage whistleblowing as a fraud detection tool and to deter wrongdoing by increasing a wrongdoer's risk of detection. Public companies are mandated to provide internal, confidential hotlines through which employees can report fraudulent or illegal activities, though current law does not protect the disclosure of the whistleblower's identity in subsequent judicial or administrative proceedings. Requiring a whistleblower to reveal his or her identity carries both psychological and financial risks, and reduces the likelihood of reporting. Yet obtaining a whistleblower's name enables employers to more thoroughly investigate claims of wrongdoing and enact reforms. The present study used experimental methodology to assess the impact of an evidentiary privilege

prohibiting disclosure of the whistleblower's identity in exchange for the whistleblower's name on the personal cost of reporting and reporting likelihood. Results showed that the likelihood of reporting was significantly increased and the perceived personal cost was significantly decreased when a whistleblower required to provide his or her name to a hotline was afforded an evidentiary privilege. The study informs policymakers about the impact that an evidentiary privilege protecting whistleblowers would have on the likelihood of reporting and sets the stage for further exploration of the feasibility of such an evidentiary privilege being implemented.

INTRODUCTION

The Sentencing Reform Act of 1984¹, the Sarbanes-Oxley Act of 2002 (SOX), and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) reflect U.S. public policy promoting whistleblowing hotlines as a means to increase the accuracy and reliability of the financial statements of publicly-traded companies. SOX was intended to restore investor confidence in financial statements through emphasis on strong internal control mechanisms, including employee reporting hotlines (Kalelkar and Nwaeze, 2011; Zhang et al., 2007). Section 301 of SOX requires publicly-traded companies to establish procedures for the "confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters" (15 U.S.C.A. §78j-1(m)(4)). In addition, Section 806 prohibits publicly-traded companies from "discharging, demoting, suspending, threatening, harassing, or in any other

¹ Under the Federal Organizational Sentencing Guidelines adopted pursuant to the Sentencing Reform Act of 1984, a company that has engaged in criminal conduct may have its fines and penalties reduced if it has implemented internal whistleblowing channels and safeguards protecting whistleblowers against retaliation (Dworkin and Near, 1997; Kaplan and Schultz, 2007; U.S. Sentencing Commission, 1994).

manner discriminating against an employee in the terms and conditions of employment” that has reported an act of corporate wrongdoing (18 USCA 1514A). The driving force behind these provisions was the belief that “a company employee may be reticent to report concerns regarding questionable accounting or other matters for fear of management reprisal” (SEC, 2003, p. 24).

One limitation of SOX-mandated employee hotlines is that under current law whistleblowers can be called as a witness or be deposed in an administrative or judicial proceeding regarding their report. The reports by whistleblowers are also subject to subpoena without the benefit of any legal protection from disclosure. A litigant obtaining a copy of a whistleblower’s report in discovery is free to take the deposition of each person that possibly could have submitted the report to the hotline and ask whether he/she was the whistleblower or knows the identity of the whistleblower (i.e. deposing each employee in a department with knowledge of the subject matter of the report).² The whistleblower has two choices under current law when being deposed in this situation: (1) tell the truth and be exposed as the whistleblower or (2) commit perjury. The first choice would be undesirable and the second illegal. Neither encourages employees to disclose acts of accounting or auditing irregularities to a SOX-mandated reporting hotline.

To encourage employees to report acts of corporate fraud and wrongdoing to the internal SOX-mandated hotline of publicly-traded companies, we propose consideration of legislation that would prohibit the disclosure of the reports, communications, and identity of whistleblowers in administrative or judicial proceedings and prohibit questions either in depositions or at trial regarding the same. Such legislation could also prohibit any member of the audit committee, the third-party or department managing the hotline, and any employee of the internal audit department, from disclosing

² A deposition is out-of-court oral testimony given under oath that is transcribed by a court reporter for later use at trial. In the deposition, the witness is subject to questioning by attorneys representing parties in the lawsuit for which the deposition is being taken.

to anyone (other than a member of the audit committee) the report, the information provided by the whistleblower, and the identity of the whistleblower (the “whistleblower evidentiary privilege” or “whistleblower privilege”).

Our proposal has its roots in Section 21F of the Dodd-Frank Act which requires the SEC to pay an award to whistleblowers that voluntarily provide original information to the SEC about a violation of federal securities laws leading to a successful enforcement action with monetary sanctions exceeding \$1,000,000 (SEC, 2011). To encourage employees to whistleblow, Section 21F permits whistleblowers to use their attorney to anonymously report to the SEC (Dodd-Frank Act, 2010, Section 21F(d)). The whistleblower’s attorney acts as an intermediary between the SEC and the whistleblower to obtain clarification of the report, to address follow-up questions, and to obtain additional information from the whistleblower (SEC, 2011, §240.21F-8). This allows whistleblowers to utilize the shield of the attorney-client privilege to protect their identity.³ Section 21F of the Dodd-Frank Act raises the question of whether the *de facto* evidentiary privilege granted to anonymous whistleblowers to the SEC should be extended to the identity, reports, and communications of whistleblowers to SOX-mandated employee hotlines.

One disadvantage of the anonymous, confidential reporting channel mandated by SOX is that employee-whistleblowers in most cases will probably not provide their name to the hotline making it impossible to obtain clarification of the information submitted or to ask follow-up questions thereby reducing the effectiveness of the hotline (e.g., Near and Miceli, 1995). In implementing Section 21F, the SEC addressed this issue by requiring that whistleblowers to the SEC, either personally or

³ The identity of the whistleblower must be revealed to the SEC if the whistleblower wishes to apply for a financial reward after the successful prosecution or settlement of an action (SEC, 2011, § 240.21F-10). At that point the whistleblower can decide whether the personal costs of disclosing his/her identity are worth the financial reward.

through their attorney, be available to provide explanations and clarification of information to qualify for the financial reward (SEC, 2011, §240.21F-8). Granting whistleblowers to an internal compliance hotline an evidentiary privilege likewise addresses this deficiency by enabling the hotline to obtain the whistleblowers' name while protecting their identity, report, and communications from disclosure to management and to third parties.

This study is the first step in evaluating the feasibility of a whistleblower evidentiary privilege protecting employee-whistleblowers to Section 301 SOX-mandated hotlines. The purpose of our study is to evaluate the impact that an evidentiary privilege protecting corporate employees that report an act of wrongdoing to their employer's internal compliance hotline would have on the perceived personal cost of reporting and the likelihood to report. A whistleblower privilege should improve the quality of information available to reporting hotlines and audit committees while protecting the whistleblower from reprisal. It should also increase the confidence that investors have in the accuracy and reliability of corporate financial information.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The general rule of law in U.S. courts is that there is a duty to testify if called as a witness in a case. The U.S. Supreme Court succinctly summarized this rule in *United States v. Bryan* by observing that "for more than three centuries it has now been recognized as a fundamental maxim that the public has a right to every man's evidence" (p. 31). However, evidentiary privileges are granted to protect certain relationships and to promote the open and free flow of communication between persons in such relationships (American Jurisprudence, 2004b, § 273). Communications and documents covered by an evidentiary privilege are protected from disclosure in judicial or administrative proceedings (American Jurisprudence, 2004b, §274). Privilege

differs from confidentiality in that the latter only addresses the obligation not to disclose communications or documents to third-parties other than in a judicial or administrative proceeding (American Jurisprudence, 2004b, §274). Therefore, the fact that a communication is made in confidence does not necessarily entitle it to protection by an evidentiary privilege (American Jurisprudence, 2004b, §274).

In order to justify the creation of an evidentiary privilege, the relationship or interest sought to be protected must be “regarded of sufficient social importance to justify some sacrifice of the availability of evidence relevant to the administration of justice” (Brown, 2006, §72). An evidentiary privilege must be justified by a “public good transcending the normally predominant principle of utilizing all rational means for ascertaining the truth” (*Elkins v. United States*, p. 235; *Jaffee v. Redmond*, p. 10; *Trammel v. U.S.*, p. 50). Evidentiary privileges that have been recognized for centuries include the attorney-client privilege, the doctor-patient privilege, the marital privilege, and the priest-penitent privilege. In addition, courts have recognized that the government is entitled to an evidentiary privilege to protect state secrets and confidential information regarding military and diplomatic matters (American Jurisprudence, 2004b, §513; *Bank Line v. U.S.*; *Pollen v. U.S.*; *U.S. v. Reynolds*). While an argument has been made for the adoption of an accountant-client privilege (Leete, 1983; Smith, 1990; Volz, 1983), under common law and in most U.S. states an accountant-client privilege is not recognized (American Jurisprudence, 2004a, ¶9 and ¶10). Nor has an accountant-client privilege been recognized under U.S. federal law for suits in federal court (American Jurisprudence, 2004a, ¶11).

While the recognition of evidentiary privileges was historically within the purview of the judiciary, in recent years legislative bodies have created evidentiary privileges by statute. The creation of an evidentiary privilege by statute is a legislative balancing between communications that society thinks should be fostered through the shield of privilege and the interests served by

disclosure of the information in a court of law (American Jurisprudence, 2004b, §275; *In Interest of Westland*). As discussed above, the Dodd-Frank Act extended a *de facto* evidentiary privilege to anonymous whistleblowers to the SEC by allowing the submission of reports through the whistleblower's attorney. The question we raise is whether an extension of an evidentiary privilege to reports submitted to SOX-mandated hotlines would serve the public good by increasing the likelihood of reporting of corporate wrongdoing to these hotlines.

Impact of Evidentiary Privilege on Perceived Personal Cost of Whistleblowing and Likelihood to Report

Whistleblowing has most often been defined as the disclosure by organizational members, former or current, of illegal, immoral or illegitimate practices under the control of their employers to persons and organizations that may be able to effect action (Dasgupta and Kesharwani, 2010; King, 2001; Near and Miceli, 1985; Zhuang et al., 2005). Academic research establishes that formal procedures for reporting wrongdoing encourage whistleblowing (Brennan and Kelly, 2007; Miceli and Near, 1992; Taylor and Curtis, 2010). An effective internal whistleblowing system provides organizations an opportunity to investigate and correct accounting irregularities before they occur without the negative consequences associated with reporting wrongdoing outside the organization (Barnett et al., 1993; Dworkin and Near, 1997).

In deciding whether to blow the whistle on corporate wrongdoing, observers weigh the benefits of blowing the whistle against the costs (Hooks et al., 1994; Keil et al., 2010; Miceli and Near, 1985, 1992). The perceived risk of negative personal consequences discourages individuals from blowing the whistle (Dozier and Miceli, 1985; Keil et al., 2010; Schultz et al., 1993). The perceived personal costs include retaliation by employers such as intimidation, defamation of character, job loss, demotion, and negative impact on one's career (Delikat, 2007; Graham, 1986;

Gundlach et al., 2008; Keil et al., 2010, Rosenblatt, 1997; Zhuang et al., 2005). In the 2013 National Business Ethics Survey, twenty-one percent of employees that reported misconduct perceive that they were retaliated against (ERC, 2013, p. 27). Of those experiencing adverse job action, 69 percent report that their supervisor intentionally ignored them or began treating them differently, 54 percent perceived being excluded from decisions and work activity, 43 percent were verbally abused by other employees, 47 percent were denied promotions or raises, and 21 percent were demoted (ERC, 2013, p. 45). Sixteen percent indicated being subjected to physical harm to their person or property and fifteen percent reported online harassment (ERC, 2013, p. 45). The retaliation experienced by whistleblowers may exact a psychological as well as a physical toll on them (Keil et al., 2010). The options of an employee that encounters a wrongful act are limited — he can leave the organization, ignore the situation and remain silent, or take action by blowing the whistle (Miceli and Near, 1992; Mesmer-Magnus and Viswesvaran, 2005).

The goals of an effective whistleblowing system are to encourage whistleblowing as a fraud detection tool and to deter wrongdoing by increasing a wrongdoer's risk of detection (Braithwaite and Geis, 1982; Ugrin and Odom, 2010). Industry surveys and academic research establish that reporting mechanisms aid in the prevention and detection of unethical behavior (Taylor and Curtis, 2010, p. 22). The SOX-mandated anonymous, confidential channel was intended to increase an employee's willingness to report by reducing the likelihood that management discovers the whistleblower's identity (SEC, 2003, p. 24). In turn, the risk of retaliation against the whistleblower should be reduced. Academicians argue that reducing the personal cost of reporting should increase the willingness of employees that observe wrongdoing to report (Ayers and Kaplan, 2005; Kaplan et al., 2009b; Kaplan and Schultz, 2007; Moberly, 2006).

The whistleblower evidentiary privilege that we propose would prohibit the disclosure of the whistleblower's report, the

information provided by the whistleblower, and the identity of the whistleblower to anyone other than the members of the company's audit committee, employees of the company's internal audit department, and any third-party contracted to manage the hotline. Any person violating the nondisclosure provision would be subject to civil and criminal sanctions. In addition, an evidentiary privilege would protect the communications and identity of the whistleblower. The whistleblower evidentiary privilege should reduce the perceived risk that management will discover the identity of the whistleblower, the perceived risk of adverse job action, and the perceived personal cost of whistleblowing. It should also increase the likelihood that employees will report an accounting irregularity.

The preceding discussion leads to the following hypotheses:

H1a *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline protected (not protected) by an evidentiary privilege will perceive less (more) risk of discovery of his/her identity by management.*

H1b *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline protected (not protected) by an evidentiary privilege will perceive less (more) risk of adverse job action.*

H1c *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline protected (not protected) by an evidentiary privilege will perceive less (more) personal costs of reporting.*

H1d *An employee protected (not protected) by a whistleblower evidentiary privilege will be more*

(less) likely to report an act of wrongdoing to his/her employer's SOX-mandated employee hotline.

Impact of Disclosure of Whistleblower Identity on Perceived Personal Cost of Whistleblowing and Likelihood to Report

As discussed above, SOX-mandated hotlines are required by law based on the assumption that an anonymous, confidential reporting channel will increase the likelihood that an employee observing accounting or auditing irregularities will whistleblow (SEC, 2003). The prevalent interpretation of the “anonymous, confidential” language in SOX is that the audit committee must provide an avenue for whistleblowers to submit their report without providing their name or other identifying information (Kaplan and Schultz, 2007; Keil et al., 2010). Another interpretation is that the audit committee may request the whistleblower to provide his/her name to the hotline while protecting it from disclosure to management (Business Controls, 2011; AuditConcerns, 2003; Confidential Communications Services, LLC, 2003; Gold, 2003).

Keil et al. (2010) established that observers of wrongdoing engage in a cost-benefit analysis in making a decision on whether to whistleblow. Smith et al. (2001) report a significant relationship between fear of negative personal consequences and reluctance to report. The ability of a whistleblower to report anonymously increases the likelihood of reporting by increasing the benefits of reporting relative to the perceived cost (Keil et al., 2010). Kaplan et al. (2009a) demonstrated that females were more likely to report to an anonymous reporting channel as compared to a non-anonymous reporting channel and that the reduction in the perceived personal costs of reporting wrongdoing mediated the difference in reporting intention based on gender. Contrary to these studies, Lee and Pope (2011) found that the ability to report

anonymously had no effect on the intention to report a questionable act. Our study further explores this question.

The purpose of the whistleblower evidentiary privilege would be to enable the audit committee to obtain the name of the whistleblower to better equip it to investigate the allegations of wrongdoing. The trade-off for the audit committee obtaining the name of the whistleblower would be a whistleblower evidentiary privilege. Whistleblowers providing their name to the reporting hotline will likely perceive a greater risk of their identity being discovered by management than when their name is not provided. In addition, they will likely perceive a greater risk of adverse job action and a higher perceived personal cost of whistleblowing. Requiring whistleblowers to provide their name to the reporting hotline should decrease the likelihood that employees will report an accounting irregularity.

The preceding discussion leads to the following hypotheses:

- H2a** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline required (not required) to provide his/her name will perceive more (less) risk of discovery of his/her identity by management.*
- H2b** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline required (not required) to provide his/her name will perceive more (less) risk of adverse job action.*
- H2c** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline required (not required) to provide his/her name will perceive more (less) personal cost of reporting.*

H2d *An employee required (not required) to provide his/her name act of wrongdoing will be less (more) likely to report an act of wrongdoing.*

Impact of Identity Discovery and Job Threat on Perceived Personal Cost of Whistleblowing

Academicians argue that there is an inverse relationship between the personal cost of reporting and the willingness of employees that observe wrongdoing to report it (Ayers and Kaplan, 2005; Kaplan et al., 2009b; Kaplan and Schultz, 2007; Keil et al., 2010; Moberly, 2006). However, most studies have failed to establish such a relationship in an experimental setting (Keil et al., 2010; Miceli and Near, 1984, 1985; Miceli et al., 1991; Near and Jensen, 1983; Near and Miceli, 1986). Consistent with prior literature, we predict an inverse relationship because an employee considering whether to whistleblow is likely to expect adverse personal consequences from reporting. Keil et al. (2010) established that the ability to anonymously report was a factor that employees considered in their cost-benefit evaluation.

A company employee may be reticent to report concerns regarding questionable accounting or other matters for fear of management reprisal (SEC, 2011). We predict that employees that fear the discovery of their identity by management if they whistleblow will fear adverse job action, such as being fired, demoted, or passed over for promotion. Likewise, concern about the discovery of the whistleblower's identity by management and fear of adverse job action will increase the perceived personal cost of whistleblowing (e.g., Delikat, 2007; ERC, 2009; Graham, 1986; Gundlach et al., 2008; Keil et al., 2010; Rosenblatt, 1997; Zhuang et al., 2005).

The preceding discussion leads to the following hypotheses:

- H3a** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline will perceive a greater risk of adverse job action the greater the likelihood that his/her identity is discovered by management.*
- H3b** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline will perceive a higher (lower) personal cost of reporting if his/her identity is discovered (not discovered) by management.*
- H3c** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline that has a higher (lower) level of fear of adverse job action will perceive more (less) personal cost of reporting.*
- H4** *An employee reporting an act of wrongdoing to his/her employer's SOX-mandated employee hotline with a high (low) perceived personal cost of reporting will be less (more) likely to report.*

Impact of granting evidentiary privilege in exchange for disclosure of whistleblower's name on likelihood to report

Under current law a whistleblower's report, communications, and identity are not protected by an evidentiary privilege whether he/she discloses his/her name (Alternative 1) or does not disclose his/her name (Alternative 2) to the reporting hotline. It is likely that a whistleblower will elect not to disclose his/her name when offered the choice given the potential personal costs associated with reporting making investigation of the claim by the audit committee more challenging. We propose a third

alternative: that whistleblowers be required to provide their name when whistleblowing with the whistleblower's report, communications, and identity being protected by an evidentiary privilege (Alternative 3).

We hypothesize that whistleblowers entitled to the benefit of an evidentiary privilege will perceive that the personal cost of reporting is less (Hypothesis 1c), and will be more likely to report (Hypothesis 1d), than whistleblowers without the benefit of an evidentiary privilege. We predict the opposite relationship when a whistleblower is required to disclose his/her name to the reporting hotline (Hypothesis 2c and 2d, respectively). This raises interesting questions regarding the interaction between the existence (nonexistence) of a whistleblower evidentiary privilege and the whistleblower providing (not providing) his/her name to the employee hotline on the perceived personal cost of reporting and the likelihood that an employee will report the wrongful act.

The relevant inquiry for our study is the impact on the perceived personal cost of reporting and the likelihood of reporting between a reporting system in which (i) the whistleblower provides his/her name without the benefit of an evidentiary privilege (Alternative 1 – current law) versus with the benefit of an evidentiary privilege (Alternative 3 – proposed law), and (ii) the whistleblower does not disclose his/her name and is not entitled to the benefit an evidentiary privilege (Alternative 2 – current law) versus the whistleblower discloses his/her name and is entitled to the benefit an evidentiary privilege (Alternative 3 – proposed law). Given the preceding discussion relating to Hypotheses 1, we expect the perceived personal cost of reporting will be less, and the likelihood of reporting will be greater, when whistleblowers providing their name to the employee hotline are protected by a whistleblower evidentiary privilege (Alternative 1 vs. Alternative 3). In this situation extending an evidentiary privilege to one providing his/her name to the employee hotline benefits the whistleblower without any additional personal costs being incurred (e.g. Keil et al., 2010). Therefore, we predict a decrease in the

perceived personal cost of reporting and an increase in the likelihood of reporting.

The preceding discussion leads to the following hypotheses and research questions:

- H5a** *The perceived personal cost of reporting will be less (more) when the identity of the whistleblower is provided to the hotline and a whistleblower evidentiary privilege exists (does not exist).*
- H5b** *The likelihood of reporting will be more (less) when the identity of the whistleblower is provided to the hotline and a whistleblower evidentiary privilege exists (does not exist).*

When a whistleblower privilege is granted to obtain the name of a whistleblower (Alternative 2 vs. Alternative 3), the interactive effect is uncertain. The whistleblower must balance the cost of providing his/her name to the employee hotline (i.e. risk of identity being discovered by management, risk of adverse job action, risk of being shunned by co-workers, and potential impact on career) with the benefits to the whistleblower of the evidentiary privilege (i.e. protection of report, communications, and identity of whistleblower in administrative and judicial proceedings and prohibition against disclosure to management). At issue is whether the privilege is sufficient to overcome or neutralize the whistleblower's perceived risk of providing his/her name to the hotline. Because this is an exploratory study we are unable to predict the interactive effect of name and privilege on the perceived personal cost and likelihood of reporting. Instead, we pose two research questions relating to this issue.

- RQ5c** *What impact will a whistleblower evidentiary privilege in exchange for the name of the*

whistleblower being provided to the hotline have on the perceived personal cost of whistleblowing?

RQ5d *What impact will a whistleblower evidentiary privilege in exchange for the name of the whistleblower being provided to the hotline have on the likelihood of reporting?*

METHODOLOGY

Design

A 2 x 2 design with the following between-subject variables was used in this study: disclosure of identity by whistleblower (2 levels) and existence of evidentiary privilege (2 levels). In the first condition, the whistleblower was assigned either to a group in which (i) his/her name is provided, or (ii) his/her name or any other identifying information is not provided to the SOX-mandated reporting hotline. In the condition where an employee must provide his/her name, the participant was told that the identity of the employee would be kept confidential by the company managing the hotline, the members of the company's audit committee, and the employees of the company's internal audit department.

The evidentiary privilege condition also had two levels. In one level, participants were advised that if litigation ensued related to the subject matter of the report that parties to the litigation may obtain a copy of the report by subpoena. Participants were further advised that if the identity of the whistleblower becomes known that he/she may be required to give a deposition or to testify. In the other level, participants were advised that the Whistle-Blower Protection Act of 2009 ("WB-PA") prohibits members of the

company's audit committee, the security firm that manages the hotline, and any employee of the company's internal audit department from disclosing to anyone the whistleblower's report, the information provided by the whistleblower, or the whistleblower's identity. In addition, WB-PA grants an evidentiary privilege to anyone that reports an accounting irregularity or act relating to fraud against shareholders of a listed company to the SOX-mandated reporting hotline. Participants were further informed that any person that violates WB-PA, including any person employed by the third-party hotline manager, any member of the audit committee, or any employee of the company's internal audit department, would be subject to civil fines (i.e. up to \$250,000 per violation) and criminal sanctions (i.e. up to seven years in prison per violation). In addition, any person violating WB-PA would be responsible for all damages sustained by the whistleblower.⁴

Participants

Undergraduate accounting students taking a senior level course at a major university in the southeastern part of the U.S. were recruited to participate in the study. They were selected as proxies for in-house accountants. Approval of the Institutional Review Board was obtained prior to any data being collected. A total of 306 surveys were collected, of which 252 usable responses were retained. Forty-six responses were removed because of the failure of the participants to correctly respond to questions regarding whether the whistleblower was required to provide his/her name when reporting to the hotline or about the existence of a whistleblower evidentiary privilege. Eight responses were removed because they failed to answer questions required to conduct the statistical analysis. Table 1 sets forth the demographic data of the participants in our study.

⁴ The Whistle-Blower Protection Act of 2009 is a fictitious act used to test our hypotheses. Participants are informed at the conclusion of the survey that it is a fictitious act created solely for the purpose of the study.

Effective randomization among the four treatment groups was successful as measured by demographic variables. Neither analysis of variance applied to age ($F=.87$, $p=.46$), years of work experience ($F=.45$, $p=.72$), and years of work experience in accounting ($F=.94$, $p=.42$), nor the Kruskal-Wallis test applied to gender (Chi-Square=1.90, $p=.59$), marital status (Chi-Square=2.02, $p=.57$), stock ownership (Chi-Square=3.16, $p=.37$), or real estate ownership (Chi-Square=2.61, $p=.46$) revealed any statistically significant differences among the groups.

Materials and Procedure

Participants were provided with materials containing general instructions and background information about a hypothetical company. The case was developed based on an incident reported in the press and an examination of documents generated in litigation. In addition, the President of an independent oil and gas company was consulted to confirm that the method for determining and reporting oil and gas reserves as stated in the case was representative of a method that would be used in practice. Finally, once the case was written several graduate accounting students provided feedback regarding any unclear, vague or ambiguous items.

The hypothetical company in the case was a publicly-traded independent oil and gas company. Accounting Standards Codification 932 requires publicly-traded companies with significant oil and gas activities to disclose proved oil and gas reserve quantities as part of their financial statements. These disclosures are also required in SEC filings. The case contained a description of the reporting requirements.

In the case, the company employed two in-house reservoir engineers to assist in estimating its proved oil and gas reserves. In addition, the company hired an engineering firm with expertise in evaluating oil and gas reserves. The President and CEO of the company, a reservoir engineer, determined the company's reported oil and gas reserves for financial reporting purposes after evaluating the analysis of the internal reservoir engineers and

outside consultants. A senior accountant of the company learns that the oil and gas reserves as stated in its financial statements are significantly greater than estimated by the company's internal reservoir engineers and outside consultants.

The senior accountant reads in the employee handbook that SOX requires the company's audit committee to establish a method for employees to anonymously and confidentially report any accounting irregularity or act relating to fraud against shareholders. All reports are forwarded by the hotline manager to the audit committee, and company policy prohibits the company's management being provided a copy. The employee handbook states that the identity of whistleblowers will be kept confidential by the audit committee, the internal audit department, and the outside firm.

The case was administered using an online survey instrument accessed by participants through a hyperlink provided in an electronic mail communication. The electronic mail message was sent by the instructor of the course in which participants were enrolled and invited students to voluntarily take part in the survey. Students that participated were given nominal extra credit. If the students elected to participate, the link brought them to a landing page introducing the study. Students were randomly assigned to the four conditions.

Participants were asked to read the hypothetical scenario at their own pace. After the participants completed reading the case, they were asked to indicate the likelihood that the senior accountant would report the overstatement of oil and gas reserves ("Likelihood to Report") using an eleven-point Likert scale with end points of "never" (0) and "always" (10). Participants were also asked to indicate the risk that the person reporting the act would be discovered by management ("Identity Discovery"), the risk that management would fire, demote, or take other adverse action against the employee ("Job Threat"), and the employee's personal cost of reporting the questionable act ("Personal Cost"). Identity Discovery, Job Threat and Personal Cost were measured using a

nine-point Likert scale with end points of “low” (1) and “high” (9). After participants completed this portion of the instrument, they were asked to respond to additional questions that included demographic information, manipulation checks, and other variables of interest. After a participant completed reading the case and providing responses to a section of the instrument, he/she was not permitted to return to the case or a previous section of the instrument.

Dependent Variables

There are four dependent variables in this study: Likelihood to Report, Identity Discovery, Job Threat, and Personal Cost. Prior research indicates that an individual’s desire to maintain a positive self-image may result in a self-evaluation that is more favorable than an evaluation of others (Brown, 1986; Duck et al., 1995; GunthMooneyer and Thorson, 1992). A third-person perspective is used in this study in an effort to obtain forthright responses from participants. The instrument in this study examines intention to whistleblow on the basis that behavioral intentions are related to actual behavior (Fishbein and Ajzen, 1975; Victor et al., 1993).

Independent Variables

Two independent variables of interest are the disclosure by the whistleblower of his/her identity (name required to be provided vs. name not required to be provided) and the existence of an evidentiary privilege protecting the whistleblower’s report, identity, and communications (no evidentiary privilege vs. evidentiary privilege). These were coded as dummy variables. The disclosure of identity variable (NAME) is coded “1” if the whistleblower is required to provide his/her name and “0” if not required to provide his/her name to the hotline. The privilege variable (PRIVILEGE) is coded “1” if a whistleblower evidentiary privilege exists and “0” if it does not. Both variables were manipulated between subjects. The third independent variable is an interaction variable between NAME and PRIVILEGE.

Control Variables

General and Social Self-Efficacy. MacNab and Worthley (2008) found that general self-efficacy is positively related to the likelihood that an observer of wrongdoing will blow the whistle reasoning that an individual with a high level of self-efficacy will be better able to endure the stressful and difficult situation presented by whistleblowing. Consistent with this finding, Chiu (2003) found that Chinese managers believing that success depends on hard work (internal locus of control) rather than on fate (external locus of control) were more likely to blow the whistle when they encountered wrongdoing.

We control for self-efficacy of the participants using questions from Sherer et al. (1982)'s self-efficacy scale that includes subscales measuring general self-efficacy ("General Self-Efficacy" or "GSE") and social self-efficacy ("Social Self-Efficacy" or "SSE"). The general self-efficacy subscale measures the confidence in one's ability to achieve an outcome while the social self-efficacy subscale measures one's confidence in his/her social skills. See Appendix for questions included in each scale with Cronbach's alpha and Eigen-values.

Personal Idealism. Whistleblowers generally feel compelled to report either morally or by the responsibilities of their job (Miceli and Near, 1994; Miceli et al., 1991; Taylor and Curtis, 2010). It has been demonstrated that the higher one's level of moral reasoning the greater the likelihood that he/she will report wrongdoing (Brabeck, 1984; Mesmer-Magnus and Viswesvaran, 2005). An idealistic person may experience stress due to the violation of his/her ethical principles if he/she fails to blow the whistle when an act of wrongdoing is observed (Loeb and Cory, 1989; MacNab and Worthley, 2008). Barnett et al. (1996) established that idealism will be positively associated with the intention to report a peer's unethical behavior. To control for personal idealism we use five questions of the idealism subscale developed in Forsyth (1980) ("Personal Idealism" or "PI"). See Appendix for questions included to measure PI with Cronbach's alpha and Eigen-values.

Attitude Towards Punishment. Prior research demonstrates that anger about the motivation for a wrongdoer's action can influence an observer's decision to report (Dworkin and Baucus, 1998; Gundlach et al., 2008; Miceli et al., 1991). Consistent with that finding, a whistleblower that feels that the wrongdoer should be punished for his/her wrongdoing is more likely to report the act despite the fear of retaliation for reporting the wrongdoing. To control for the participants' attitude towards punishment, we use a five question scale drafted for this study ("Attitude Towards Punishment" or "ATP"). See Appendix for questions included to measure ATP with Cronbach's alpha and Eigen-values.

Figure 1 is a diagram our hypothesized model with the control variables.

RESULTS

MANCOVA Comparison of Means

To test whether our conditions worked, we ran a multivariate analysis of covariance (MANCOVA) with General Self-Efficacy, Social Self-Efficacy, Personal Idealism, and Attitude Towards Punishment as covariates. As shown in Table 2, there are significant multivariate main effects for NAME (Wilk's lambda = .913, $F = 5.74$, $p < .01$) and PRIVILEGE (Wilk's lambda = .832, $F = 12.18$, $p < .01$). There is no significant interaction between NAME and PRIVILEGE (Wilk's lambda = .997, $F = 0.21$, $p < .93$). These findings clearly establish that our manipulations were successful and our dependent variables were affected accordingly. Our covariates of Personal Idealism and Attitude Towards Punishment were also highly significant.

Next we examined the impact of NAME and PRIVILEGE on the three personal cost variables (Identity Discovery, Job Threat, and Personal Cost) and Likelihood to Report. Results for each dependent variable are in line with the overall model. Except

for Job Threat, all main effects of NAME and PRIVILEGE were highly significant. For Job Threat, the main effect for PRIVILEGE was highly significant ($F = 8.30$, $p < 0.01$) while the main effect for NAME barely missed the significance threshold ($F = 2.63$, $p < .107$). The interaction effect between NAME and PRIVILEGE was not significant for any of the dependent variables. In addition, the covariate of Personal Idealism was highly significant ($p < .01$) for all dependent variables except Identity Discovery ($F = 1.99$, $p < .233$). Attitude towards Punishment was significant for Likelihood to Report ($F = 10.52$) and Personal Cost ($F = 9.56$) at $p < .01$. Finally, neither Social Self-Efficacy nor General Self-Efficacy was significant for any of the dependent variables.

Our finding that PRIVILEGE does not moderate NAME is explained by the cost – benefit analysis undertaken by an observer of wrongdoing in deciding whether to whistleblow. Requiring a whistleblower to provide his/her name in exchange for the privilege should have opposite effects on the personal cost variables and Likelihood to Report. Instead of having an interactive effect, the exchange of the whistleblower's name for the privilege has a neutralizing effect on the personal cost variables and Likelihood to Report. Consequently we focus only on the main effects in our model.

Path Analysis Results

As illustrated in Figure 1, the study's hypothesized relationships are interconnected. Thus we used path analysis to simultaneously test all of the hypotheses and evaluate both the direct and indirect relationships among the personal cost variables and Likelihood to Report.

The study's model is estimated with structural equation modeling (SEM) using maximum likelihood estimation via AMOS software. SEM is used instead of the Baron and Kenny (1986) regression analysis method because it is superior in terms of controlling for measurement error (Holmbeck, 1997; Hoyle and Kenny, 1999; Kline, 1998). SEM also enables exploring the mediation effects in terms of bootstrapping (Preacher and Hayes,

2004, Kline, 1998, Hoyle and Kenny, 1999) which does not assume normality (Efron and Tibshirani, 1993; Mooney and Duval, 1993) and allows for a more powerful test (Preacher and Hayes, 2004).

Our initial model (Figure 1) exhibits acceptable model fit. Model fit is assessed using common fit indices including the Chi-square test statistic (χ^2), comparative fit index (CFI), and the root square error of approximation (RMSEA). The model has a good fit to the data ($\chi^2 = 13.00$, $p = .224$; CMIN/df = 1.30; CFI = .990; RMSEA = 0.035). The conclusion of good fit is derived on the basis that the χ^2 statistic is insignificant (Joreskog 1969), the CMIN/df ratio is less than five (Wheaton et al., 1977), the CFI exceeds the recommended threshold of 0.90 (Bentler and Bonnett, 1980), and RMSEA is less than 0.06 (Hu and Bentler, 1999; Kaplan, 2000). The results of the path analysis of the model depicted in Figure 1 are set forth in Table 3.

Control Variable Results. General Self-Efficacy and Personal-Self Efficacy were not significantly related to Identity Discovery or Personal Cost. Personal Idealism was negatively related to Job Threat ($b = -.30$, $p < .001$) and Personal Cost ($b = -.27$, $p < .05$), respectively. A statistically significant positive relationship was established between Personal Idealism and Likelihood to Report ($b = .20$, $p < .05$). Finally, a statistically significant positive relationship exists between Attitude Towards Punishment and Personal Cost ($b = .42$, $p < .05$) and Likelihood to Report ($b = .49$, $p < .001$).

Hypotheses 1 Path Analysis. The results establish a statistically significant negative relationship between PRIVILEGE and Identity Discovery ($b = -1.59$, $p < .001$) and Personal Cost ($b = -1.12$, $p < .001$), respectively. A statistically significant positive relationship exists between PRIVILEGE and Likelihood to Report ($b = .55$, $p < .05$). There is no statistically significant relationship between PRIVILEGE and Job Threat ($b = -.27$, $p < .33$). The data supports Hypotheses 1a, 1c, and 1d, but does not support Hypothesis 1b.

Hypotheses 2 Path Analysis. A statistically significant positive relationship is established between NAME and Identity Discovery ($b=1.17$, $p<.001$) and Personal Cost ($b=.54$, $p<.10$), respectively. Additionally, a statistically significant negative relationship between NAME and Likelihood to Report ($b=-.50$, $p<.05$) is established. There is no statistically significant relationship between NAME and Job Threat ($b=.06$, $p<.839$). The data supports Hypotheses 2a, 2c, and 2d, but does not support Hypothesis 2b.

Hypotheses 3 and 4 Path Analysis. The data establishes a statistically significant positive relationship between Identity Discovery and Job Threat ($b=.34$, $p<.001$) and Personal Cost ($b=.13$, $p<.05$), respectively, and between Job Threat and Personal Cost ($b=.33$, $p<.001$). A statistically significant negative relationship is also established between Personal Cost and Likelihood to Report ($b=-.18$, $p<.001$). Based on the foregoing, the data supports Hypothesis 3a, 3b, 3c, and 4.

Revised Model. In testing the fully hypothesized model, some of the NAME/PRIVILEGE condition effects and self-efficacy paths are statistically insignificant. Thus we eliminate these statistically insignificant paths in order to develop a model that better describes the relationships among our model variables (Schumacker and Lomax, 2004). Figure 2 depicts the model of relationships after deleting the statistically insignificant paths. The overall fit remains acceptable ($\chi^2 = 4.48$, $p = .152$; CMIN/df = 1.45; CFI = .984; RMSEA = 0.042), and thus is a good fit for the data.

Impact of Privilege on Personal Cost and Likelihood of Reporting (Hypotheses and Research Questions 5)

Because current law does not provide an evidentiary privilege to protect the report, communications, and identity of whistleblowers in the event of litigation, a whistleblower's options are: (i) to disclose his/her name without the benefit of an evidentiary privilege (Alternative 1), or (ii) not to disclose his/her

name with no benefit of an evidentiary privilege (Alternative 2). With the introduction of an evidentiary privilege, a third option is introduced. The whistleblower could be required to provide his/her name when whistleblowing in exchange for an evidentiary privilege covering his/her report, communications, and identity (Alternative 3). This is the reporting regime that we propose warrants consideration. We do not include in our analysis the fourth possible option, the granting of an evidentiary privilege when the employee does not provide his/her name. The reason for granting the evidentiary privilege would be for the audit committee to have the name of the whistleblower to ask follow-up questions and obtain additional information to assist in its investigation. It would be non-sensual to grant a privilege to a whistleblower whose identity remains unavailable to the audit committee. For that reason, this condition is not included in our post-hoc comparison of means.

Table 4 reports the Personal Cost and Likelihood characteristics for the three alternatives. Multiple analysis of variance was used to detect whether the cells were distinctly different in the means of the dependent variables. The simultaneous analysis of between-groups variability for the dependent variables indicated distinct differences between Alternative 1 (Name/No-Privilege), Alternative 2 (No-Name/No-Privilege), and Alternative 3 (Name/Privilege) (Wilk's lamda = .874, $F = 3.132$, $p < .002$).

Hypotheses 5a and 5b and Research Questions 5c and 5d were analyzed by testing the between groups variance of Likelihood to Report and Personal Cost. We then analyzed the differences between groups by applying the Duncan multiple range test. Regarding Likelihood to Report, Alternative 1 (Name/No-Privilege: 7.39) was significantly less than both Alternative 2 (No-Name/No-Privilege: 8.19) and Alternative 3 (Name/Privilege: 8.46), respectively, at $p < .05$ (see Table 4 and Figure 3). As expected, the mean of Personal Cost for Alternative 1 (Name/No Privilege: 7.27) was significantly higher than Alternative 2 (No-

Name/No-Privilege: 6.63) and Alternative 3 (Name/Privilege: 5.79). For our purposes, the relevant comparison is whether granting a privilege to a whistleblower that provides his/her name to the reporting hotline (Alternative 1 vs. Alternative 3) decreases the personal cost of reporting and increases the likelihood of reporting as predicted in Hypothesis 5a and 5b, respectively. The data supports both hypotheses.

A comparison between Alternative 2 (No-Name/No-Privilege) and Alternative 3 (Name/Privilege) also supports the merits of an evidentiary privilege. While the Likelihood to Report is higher (8.46 v. 8.19) and Personal Cost is lower (5.79 v. 6.63) for Alternative 3 as compared to Alternative 2, the differences are not statistically significant. In exchange for obtaining the name of the whistleblower, which should improve the ability of the audit committee to investigate the allegations made by the whistleblower, an evidentiary privilege is granted to the whistleblower. This should improve the ability of the audit committee to investigate allegations of wrongdoing without sacrificing the likelihood that an observer of corporate wrongdoing will report to the employee hotline.

DISCUSSION, CONCLUSION AND LIMITATIONS

Under current law, SOX requires audit committees of publicly-traded companies to provide a method for employees to anonymously and confidentially report accounting or auditing irregularities. Many commentators and academicians have interpreted this provision as requiring that employees be allowed to submit whistleblowing reports without providing their name. An audit committee investigating a whistleblower's report cannot seek clarification of the report or ask follow-up questions when it does not have the name of the whistleblower. We question whether granting employee-whistleblowers to Section 301 SOX-mandated employee hotlines the protection of an evidentiary privilege would

increase the likelihood of reporting of questionable accounting or auditing matters.

This study establishes that a whistleblower evidentiary privilege will decrease the perceived personal cost of whistleblowing and increase the likelihood of reporting. The perceived personal cost of reporting is significantly less, and the likelihood of reporting is significantly greater, when an evidentiary privilege protects whistleblowers when the name of the whistleblower is provided to the reporting hotline.

Of greater practical importance, we establish that by granting an evidentiary privilege to whistleblowers audit committees may obtain the name of the whistleblower without significantly decreasing the likelihood that whistleblowers will report. When an evidentiary privilege is granted to a whistleblower that provides his/her name when filing a report with an employee hotline (as we propose), the perceived personal cost of reporting and likelihood of reporting are not significantly different than when a whistleblower that does not provide his name is not entitled to an evidentiary privilege (as under current law). The exchange of the privilege for the whistleblower's name puts the audit committee in a better position to investigate alleged wrongdoing without sacrificing the likelihood of reporting. Based on the foregoing, further investigation and discussion is warranted by the academic community and policymakers regarding whether the cost of the privilege (i.e. the inability to use the whistleblower report, communications of the whistleblower with the employee hotline, and the identity of the whistleblower in litigation) justifies the potential benefits of obtaining the name of the whistleblower.

Our study establishes that a whistleblower evidentiary privilege directly increases the likelihood of reporting. It also operates to increase the likelihood of reporting indirectly by decreasing the perceived personal cost of reporting. Requiring a whistleblower to disclose his/her name has the opposite effect by increasing the perceived personal cost of reporting and decreasing the likelihood of reporting. In order for the evidentiary privilege to

improve the ability of the audit committee to investigate alleged acts of wrongdoing, the audit committee must know the identity of the whistleblower. This will improve the audit committee's ability to investigate the alleged wrongdoing by seeking clarification of the whistleblower's report and asking follow-up questions. There would be no purpose of granting an evidentiary privilege to a whistleblower that does not provide his/her name when submitting their whistleblower report.

The risk that management will discover the identity of the whistleblower is shown to have a significant impact on the decision to whistleblow. The risk of identity discovery by management is positively related both to the perceived risk of adverse job action and the perceived personal cost of reporting. The risk of management discovering the whistleblower's identity is positively related to the whistleblower providing his/her name to the hotline and negatively related to the existence of a whistleblower evidentiary privilege. As previously discussed, the granting of a whistleblower privilege to an observer of wrongdoing will increase the likelihood of reporting when the name of the whistleblower must be provided.

Given the findings of this study, additional research is warranted regarding the impact of the adoption of a whistleblower evidentiary privilege. First, research should be undertaken regarding the impact that an evidentiary privilege would have on the truth-finding process in litigation. Second, the impact that a whistleblower evidentiary privilege would have on investor confidence in financial statements should be explored. Another area of research would be to assess whether having the name of the whistleblower would improve the ability of audit committees to investigate the alleged wrongdoing. Along this line, research is also warranted to investigate whether a whistleblower is likely to be more forthcoming with more details and richer information when protected by an evidentiary privilege.

The results of this study are subject to several limitations. First, discovering a fraudulent act in an actual work environment

may elicit a different response than a hypothetical incident in an experiment. Emotional factors, such as fear, anger, employee loyalty, and anticipated reaction of co-employees, that may enter into the decision making process are likely to play a diminished role in a hypothetical scenario. Nevertheless, experiments have been used extensively to explore reporting intentions for wrongful acts within an organizational setting (Ayers and Kaplan, 2005; Curtis and Taylor, 2009; Kaplan et al., 2009a, 2009b; Kaplan and Schultz, 2007; Kaplan and Whitecotton, 2001; King, 1997, 2001; Taylor and Curtis, 2010; Zhuang et al., 2005).

A second limitation relates to the use of undergraduate accounting students as participants. While undergraduate accounting students are working on the credentials required for an in-house accounting position, they have not yet completed their education and have less work experience than someone already in the workforce. To address this concern, we utilize undergraduate students taking a senior level accounting course. In addition, as indicated by the demographic data the participants did have some work experience as is common for many four year universities in an urban setting. The undergraduate students in our survey averaged 7.25 years of work experience and their average age was 26.9 years of age. Participants had an average of 1.54 years of work experience as an accountant.

A third limitation relates to the type of fraudulent act used in the study. The hypothetical case involves the misstatement of oil and gas reserves. This factual pattern was selected because it was generally based on a case reported in the popular press and involved an accounting standard with a clear set of requirements. While there is no reason to question the generalizability of the findings to other acts of accounting irregularity, this is left to further research.

Finally, the participants in the study were from different organizational settings. This made it difficult to control for extraneous factors such as job characteristics, employee satisfaction, ethical environment, and so on.

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TABLE 1
Demographic Data for Participants

Panel A: Continuous Measures

<u>Attribute</u>	<u>Scale</u>	<u>Mean</u>	<u>SD</u>	<u>Min</u>	<u>Max</u>
Age	Years	26.85	6.42	19	53
Work Experience	Years	7.25	4.95	0	32
Work Experience – Acct	Years	1.54	2.55	0	16

Panel B: Dichotomous and Categorical Measures

<u>Attribute</u>	<u>Count</u>	<u>Percent</u>
Gender:		
Male	113	45%
Female	139	55%
Marital Status:		
Married	63	25%
Single, Never Married	154	60%
Separated or Divorced	24	10%
Living with Partner	12	5%
Employment:		
Full-time (31 hours or more per week)	110	44%
Part-time (30 hours or less per week)	81	32%
Not employed	61	24%
Household Income:		
Less than \$20,000	45	18%
\$20,000 to \$59,999	113	45%
\$60,000 to \$99,999	60	24%
\$100,000 and greater	31	12%
Not provided	3	1%
Currently Own Stock:		
Yes	86	34%
No	166	66%
Currently Own Real Estate:		
Yes	73	71%
No	179	29%

Panel A: Main Variables

Model Paths for Main Variables			β Estimate	Hyp	Predicted Sign
Name Condition	➔	Identity Discovery	1.17 ***	H2a	(+)
Privilege Condition	➔	Identity Discovery	-1.59 ***	H1a	(-)
Name Condition	➔	Job Threat	0.06	H2b	(+)
Privilege Condition	➔	Job Threat	-0.27	H1b	(-)
Name Condition	➔	Personal Cost	0.54 *	H2c	(+)
Privilege Condition	➔	Personal Cost	-1.12 ***	H1c	(-)
Name Condition	➔	Likelihood to Report	-0.50 **	H2d	(-)
Privilege Condition	➔	Likelihood to Report	0.55 **	H1d	(+)
Identity Discovery	➔	Job Threat	0.34 ***	H3a	(+)
Identity Discovery	➔	Personal Cost	0.13 **	H3b	(+)
Job Threat	➔	Personal Cost	0.33 ***	H3c	(+)
Personal Cost	➔	Likelihood to Report	-0.18 ***	H4	(-)

Model Paths for Control Variables			β Estimate	Predicted Sign
Personal Self-Efficacy	➔	Identity Discovery	-0.15	(-)
Social Self-Efficacy	➔	Identity Discovery	-0.09	(-)
Personal Self-Efficacy	➔	Personal Cost	0.16	(-)
Personal Idealism	➔	Job Threat	-0.30 ***	(-)
Personal Idealism	➔	Personal Cost	-0.27 **	(-)
Personal Idealism	➔	Likelihood to Report	0.20 **	(+)
Attitude - Punishment	➔	Personal Cost	0.42 **	(-)
Attitude - Punishment	➔	Likelihood to Report	0.49 ***	(+)

***p<.01; **p<.05; and *p<.10

Table 4 Post-hoc comparison of means for likelihood to report and personal cost variables				
	Whistleblower Situations a)			
	Alternative 1:	Alternative 2:	Alternative 3:	
	Name/ No-Privilege	No-Name/ No-Privilege	Name/ Privilege	
Likelihood to Report	7.39 <i>0.27</i>	8.19 <i>0.28</i>	8.46 <i>0.27</i>	
Personal Cost	7.27 <i>0.30</i>	6.63 <i>0.31</i>	5.79 <i>0.30</i>	
Duncan Multiple Range Tests				
	Alt 1 vs. Alt 2	Alt 1 vs. Alt 3	Alt 2 vs. Alt 3	ANOVA F-Value
Likelihood to Report	.05	.05	n.s.	4.17*
Personal Cost	.05	.05	n.s.	6.22**
Notes: a) Means are reported; <i>standard deviation in italics</i> * $p < .05$ ** $p < .01$				

Figure 1: Model of Hypothesized Relationships

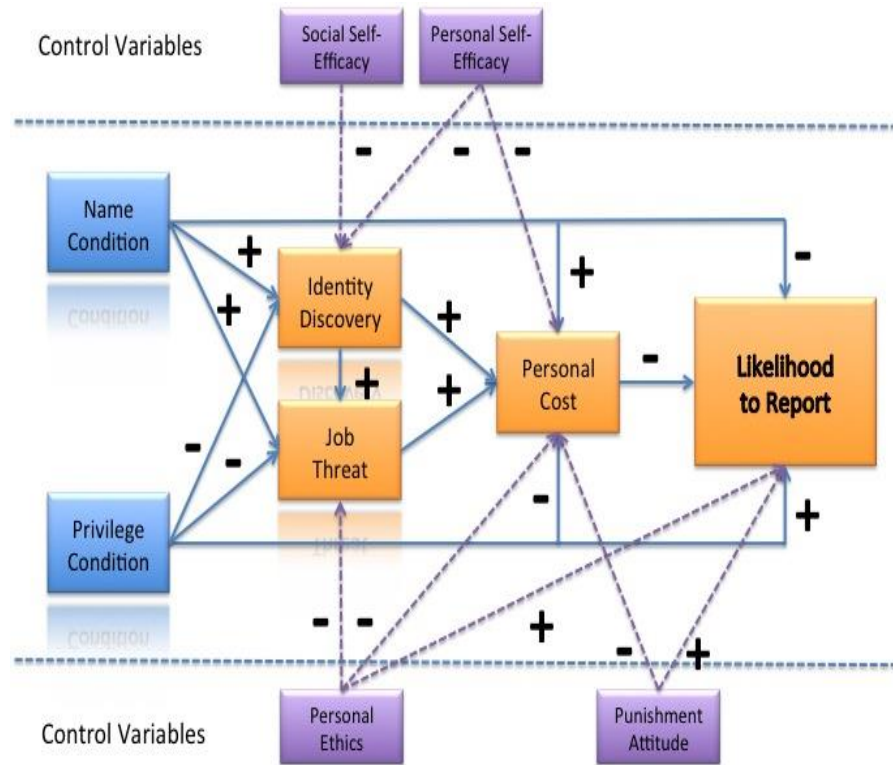


Figure 2: Standardized Path Coefficients for Mediation Model after Removal of Insignificant Paths

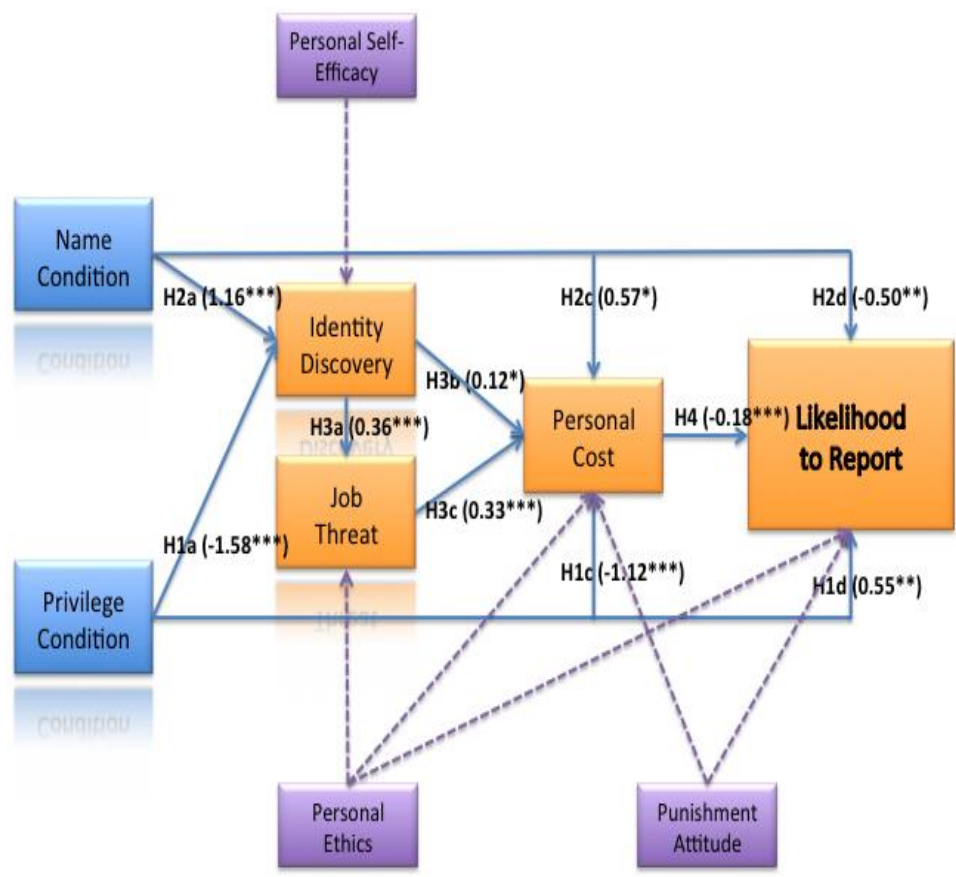
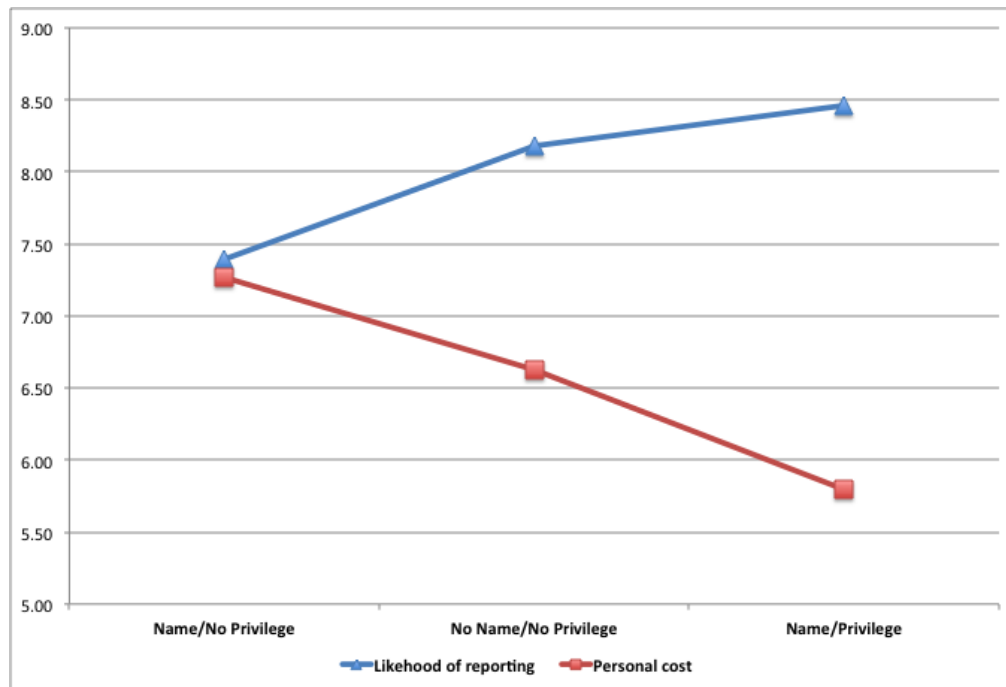


Figure 3: Post-hoc comparison of means for likelihood to report and personal cost variables



Appendix – Factor Analysis

	Component			
	PI	SSE	GSE	ATP
Employees that participated in the questionable act should not get away with it.				.611
Participants in any wrongdoing should be punished.				.832
Employees that participate in accounting irregularities should be disciplined.				.761
Participants in the wrongful act should be answerable for their actions.				.630
When I make plans I am certain I can make them work			.731	
If I can't do a job the first time, I keep trying until I can			.703	
When I have something unpleasant to do, I stick with it until I finish			.648	
When I decide to do something, I go right to work on it			.759	
It is difficult for me to make new friends (reverse scored)		.817		
If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me		.719		
When I'm trying to become friends with someone who seems uninterested at first, I don't give up easily		.555		
I do not handle myself well in social gatherings (reverse scored)		.644		
I have acquired my friends through my personal abilities at making friends		.669		
A person should make certain that their actions never intentionally harm another even to a small degree	.601			
The existence of potential harm to others is always wrong, irrespective of the benefits to be gained	.749			
One should never psychologically or physically harm another person	.800			
One should not perform an action which might in any way threaten the dignity and welfare of another individual	.816			
If an action could harm an innocent other, then it should not be done	.838			
Eigen-values	3.14	2.48	2.25	2.21
Cronbach's alpha	0.84	0.73	0.72	0.73