Whistleblowing on Fraud for Pay: Can I Trust You?

Cynthia P. Guthrie
Bucknell University

Eileen Z. Taylor
North Carolina State University

ABSTRACT: The SEC whistleblower bounty program’s effectiveness in increasing external reports of illegal acts suggests that employers might increase internal whistleblowing by offering monetary awards. We propose and test a model that explores how monetary incentives affect trust, and ultimately whistleblowing intent, in both high and low retaliation threat environments. Results of a 2 (high/low retaliation threat) × 2 (money/no money) experimental study of 295 U.S. adults confirm that low (high) retaliation threat positively (negatively) relates to whistleblowing intent, mediated by trust. Monetary incentives moderate the relationship between retaliation threat and trust such that when retaliation threat is low, money increases organizational trust, leading to higher whistleblowing intent, but when retaliation threat is high, monetary incentives do not significantly influence trust. We also find that in a high retaliation threat environment with monetary incentives present, intrinsically motivated individuals report significantly lower levels of trust compared to trust levels reported by extrinsically motivated individuals. Our findings help managers understand how and when monetary incentives may be effective in increasing internal whistleblowing.

Keywords: whistleblowing; corporate governance; retaliation threat; monetary incentives; fraud.

Data Availability: Data are available from the first author.

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INTRODUCTION

Detecting occupational fraud (i.e., asset misappropriation, corruption, and fraudulent financial reporting) is a key accounting control function. According to the most recent industry data on fraud (Association of Certified Fraud Examiners [ACFE] 2016), whistleblowing, or reporting of suspected or observed misconduct, is the method for detecting the greatest percentage of occupational frauds (39.1 percent) and these tips (51.5 percent) most often come from company employees. Audit committees are increasingly involved in investigating whistleblowing reports (Whitehouse 2014) and often task chief internal auditors with receiving and researching them (Guthrie, Norman, and Rose 2012), placing whistleblowing policy and investigations squarely under accountants’ purviews. Accounting professionals on audit committees, in executive management positions, and in internal and external audit functions should also be especially attentive to practices that increase internal fraud detection and reporting, as they are the parties responsible for developing, implementing, and testing internal controls.

Because whistleblowing is such an important control, it has become part of the regulatory landscape. In the U.S. in particular, the SEC’s Office of the Whistleblower (OWB) initiated a bounty program that pays monetary incentives to those who provide information about illegal acts committed by public registrants. The OWB has seen a significant response to its bounty program, indicating that monetary incentives are effective in increasing external whistleblowing reports. However, the existence of monetary incentives for external reporting poses a challenge to managers, since the potential for a large payout from the SEC may increase the likelihood that employees will report their suspicions of misconduct externally, rather than internally. Companies should prefer internal to external reporting, as internal reporting allows management and the board of directors to address misconduct early on, lowers the threat of reputational damage, and minimizes regulatory enforcement (e.g., fines, debarments, and other restrictions), making internal reporting far less costly than external reporting (Braithwaite 2013). In light of these costs, it is worthwhile for managers to consider how they can use monetary incentives to increase internal whistleblowing.

Whistleblowing antecedents relate to organizational, individual, and situational factors (Dozier and Miceli 1985). The organizational factor of prime interest in this study is the provision of monetary incentives. Prior literature on monetary incentives for whistleblowing in the context of occupational fraud is mixed and sparse. Some studies find a positive association (Berger, Perreault, and Wainberg 2015; Boo, Ng, and Shankar 2016), while others find no direct effect (Brink, Lowe, and Victoravich 2013), suggesting that the relationship between monetary incentives and whistleblowing intent is influenced by multiple factors. In the time since the SEC launched its bounty program, the number of firms offering monetary incentives for internal whistleblowing has risen, from 8.6 percent in 2010 to 12.1 percent in 2016 (ACFE 2016). Given the increase in the use of rewards and the mixed findings in the prior literature, it is important to explore how these incentives work and whether and how they interact with other known organizational and individual factors to influence whistleblowing.

For this study, we focus on the organizational factor (retaliation threat) and the individual factor (perceptions of organizational trust). Because of retaliation threat’s well-established

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2 The effectiveness of monetary rewards is suggested by the 20 percent increase in the number of reports submitted to the SEC’s OWB after it enacted a bounty program (SEC 2014).
relationship with whistleblowing, and because this is a factor largely under management’s control, we explore how monetary incentives influence whistleblowing intent in the presence/absence of retaliation threat. The other relevant factor in our study is organizational trust. Extant research shows that employee trust in an organization plays a crucial role in extra-role behaviors such as whistleblowing (Colquitt, Conlon, Wesson, Ng, and Porter 2001). Further, retaliation threat influences perceptions of organizational justice, which works through trust, to influence whistleblowing (Seifert, Stammerjohan, and Martin 2014). We focus on trust in the organization, rather than trust in an immediate supervisor, based on findings that trust in the organization overall mediates the relationship between organizational justice and internal whistleblowing (Seifert et al. 2014). We therefore include trust as a mediator in our study.

Our experiment with 295 U.S. adult participants investigates how retaliation threat, trust, and monetary incentives work together to influence employees’ intent to whistleblow via a company’s ethics hotline after discovering a false billing fraud. We find that trust fully mediates the relationship between retaliation threat and whistleblowing intent. Additionally, monetary incentives moderate the relationship between retaliation threat and trust, increasing trust only when retaliation threat is low. We posit that this effect is due to consistent positive messaging; the organization expects whistleblowing, supports whistleblowers (by protecting them from retaliation), and values whistleblowing (by paying an award). In cases where the organization sends inconsistent messages (i.e., an initial negative message of allowing retaliation, followed by a positive message of offering monetary incentives), we find that trust levels are lower than when no money is offered, but not significantly. Our results suggest that in some circumstances, monetary incentives act in concert with other organizational and individual factors to influence whistleblowing intent. Managers should be aware of the effects of consistent and inconsistent messaging when implementing bounty programs, as bounty programs may be ineffective in the presence of retaliation threat.

The remainder of this paper is as follows: we provide a literature review and development of hypotheses, followed by the method, and then analysis and results. We conclude with a discussion of our findings, recommendations for practice, study limitations, and suggestions for future research.

**LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES**

**Retaliation Threat**

An important provision (Section 301) of the Sarbanes-Oxley Act of 2002 (SOX, U.S. House of Representatives 2002) requires the audit committee of public companies to provide would-be whistleblowers with a reporting channel. Moreover, Section 806 of SOX prohibits retaliation against whistleblowers who report fraud (U.S. House of Representatives 2002). Nonetheless, fear of retaliation remains one of the greatest concerns among potential whistleblowers (Near and Miceli 2006). 3 Forty-seven percent of companies with hotlines receive whistleblowing tips compared to only 28 percent of companies without hotlines (ACFE 2016).

Fear of retaliation is an individual perception of an organizational factor. Retaliation takes many forms, ranging from extreme actions, such as firing or demotion, to lesser actions, such as denial of raises or promotions, or exclusion from decisions or projects (Ethics Resource Center 2010). Traceable actions (those that leave evidence such as physical harm, online harassment, harassment at home, job shift, demotion, and cuts to hours or pay) are also on the rise, increasing 27 percent from 2009 to 2011.
1995; Ethics Resource Center 2010); thus, we include this important factor in our study. This threat faces many internal whistleblowers (employees), who, according to the ACFE’s (2016) Report to the Nations, make up the largest single group (51.5 percent) of occupational fraud whistleblowers. According to a 2011 business survey, “Nearly half (46 percent) of those who choose not to report observed misconduct cite fear of retaliation as the cause” (Ethics Resource Center 2005; 5; emphasis added). Prior research also finds negative effects of retaliation on whistleblowing, primarily through its characterization as a perceived cost (Curtis 2006; Kaplan and Whitecotton 2001). In a meta-analysis of 21 articles, Mesmer-Magnus and Viswesvaran (2005) find a strong negative correlation between retaliation threat and whistleblowing intent. A number of organizational factors are linked to both retaliation threat and whistleblowing intent, including organizational culture (Berry 2004), management’s ethical tone (Mayer, Nurmohamed, Treviño, Shapiro, and Schminke 2013), employee perceptions of organizational justice (Seifert, Sweeney, Joireman, and Thornton 2010), and organizational response (Taylor and Curtis 2013). In the current study, we focus on organizational trust as a mediator of retaliation threat, because trust is important in promoting organizational citizenship behaviors (OCB), as we discuss below.

Organizational Trust

In general, trust provides conditions under which positive organizational outcomes such as cooperation and higher performance are more likely to occur (Dirks and Ferrin 2001). Trust develops through positively valenced dimensions such as integrity, consistency, competence, loyalty, concern, and openness (e.g., Mishra 1996; Keyton and Smith 2009). Research has consistently revealed positive relationships between perceived levels of procedural and distributive justice, trust, and outcomes such as OCB (Colquitt et al. 2001; Cohen-Charash and Spector 2001). More recently, social exchange theory has been integrated to capture the obligatory dynamics between perceptions of justice and reciprocative behaviors such as whistleblowing. In a meta-analysis of justice studies, Colquitt et al. (2013) find that social exchange quality (including trust) mediates the relationship between justice and reciprocative behaviors such as OCB and task performance.

Seifert et al. (2014) specifically examine trust in a whistleblowing context and find that trust in the organization mediates the relationship between three types of organizational justice (procedural, distributive, and interactional) and whistleblowing intent. With regard to whistleblowing, procedural justice indicates an employee’s level of satisfaction that the procedure for dealing with reporting wrongdoing is fairly administered; distributive justice is an employee’s satisfaction with the outcome (the wrongdoing is stopped and the whistleblower does not encounter retaliation) (Near, Dworkin, and Miceli 1993); and interactional justice is the perception that the whistleblower is treated respectfully and with dignity. Thus, in addition to implementing a policy that establishes the expectation that employees will blow the whistle, managers who reduce retaliation threat by developing and implementing a protective policy for whistleblowers are acting with integrity and concern, which builds organizational trust. Conversely, managers who allow retaliation communicate that they do not support whistleblowers, and thus create a culture lacking in trust, which can have a significant negative influence on an employee’s choice to report wrongdoing (Hubbs and Kniesche 2016). Based on this, we propose our first set of hypotheses:

H1a: Low (high) retaliation threat increases (decreases) whistleblowing intent.

H1b: Trust mediates the relationship between retaliation threat and whistleblowing intent.
Monetary incentives have proven effective in increasing the number of external reports to the OWB but, in general, research provides mixed results for the effect of extrinsic motivations (e.g., money) on prosocial behaviors, such as whistleblowing. Priming individuals with an economic focus (e.g., providing monetary incentives) leads to more selfish and less prosocial behavior (Gino and Mogilner 2014; Molinsky, Grant, and Margolis 2012; Stout 2014; Vohs, Mead, and Goode 2006), suggesting that monetary awards may discourage prosocial individuals (i.e., those who are internally motivated) from reporting. Feldman and Lobel (2010) state that monetary rewards are the least effective motivators for whistleblowing because they commoditize reporting and substitute extrinsic motivation (i.e., personal gain), crowding out intrinsic motivation (e.g., helping others), also known as “motivational crowding” (Berger et al. 2015; Brink et al. 2013). Individuals who have a prosocial value orientation may react differently to monetary incentives than those with a pro-self-orientation (Boone, Declerck, and Kiyonari 2010). In this context, while monetary incentives might encourage pro-self-employees who would not otherwise whistleblow to report (Carson, Verdu, and Wokutch 2007), incentives might also reduce reporting by prosocial whistleblowers who would have reported in their absence, reducing whistleblowing overall. Organizations employ both prosocial and pro-self-individuals, yet must offer consistent policies and incentives. Accordingly, understanding the overall effect of monetary incentives is important.\footnote{Management could introduce monetary incentives in a number of ways. Accordingly, we explore two possible incentive framings—compensation (stated as a percentage of salary) and reward (stated as a percentage of the fraud). (See Appendix A for language and context.) We do not hypothesize how these framings might influence participants’ responses, but we include framing in our analysis as a covariate.}

The limited research examining the relationship between monetary incentives and internal whistleblowing, specifically, has mixed results. Berger et al. (2015) find a significant positive relationship between financial incentives and internal whistleblowing, although only when the fraud is large enough for the whistleblower to qualify for the reward. Xu and Ziegenfuss (2008) find that cash rewards are positively associated with internal reporting intent among internal auditors; however, this effect is greater for internal auditors with lower levels of moral reasoning, indicating that monetary incentive effectiveness depends on individual factors.

Because trust is such an important factor in OCB (Cohen-Charash and Spector 2001; Colquitt et al. 2001), and because we expect that trust mediates the effect of retaliation threat on whistleblowing intent, we now explore how the provision of monetary incentives may moderate the threat-trust relationship. Trust implies belief in another person or entity; distrust implies fear of the other and a tendency to attribute sinister intentions to the other (Lewicki and Weithoff 2000). While there is disagreement as to whether distrust is the same as low levels of trust, violated trust, or is a separate but linked construct, it is clear that distrust or a lack of trust can impede desired organizational outcomes (Keyton and Smith 2009). Behavior that is opposite of trust building (lacking integrity, being inconsistent, incompetent, unconcerned, disloyal, and closed) destroys trust. Inconsistent messaging can quickly damage trust and create significant repercussions to the organization (Galford and Drapeau 2003). In this study, we explore how the consistency or inconsistency of the message sent by providing monetary incentives influences employees’ organizational trust and, thus, their internal whistleblowing intent.

In an environment of low retaliation, where management has indicated that it supports whistleblowers by offering protection for them, the addition of monetary incentives furthers that
positive message by directly valuing whistleblowers’ reports. The consistent communication of
support and value for whistleblowing should increase organizational trust. Conversely, in an
environment of high retaliation, where management has communicated that it does not support
whistleblowers (a negative message), employees may perceive the subsequent offering of monetary
incentives (a seemingly positive message) as inconsistent, and thus the offer of money may reduce
trust. Whistleblowers may believe that the company is “buying their silence” rather than paying for
useful information, especially if the report exposes wrongdoing that seemingly benefits the
organization or top management, such as fraudulent financial reporting or corruption. Employees
may also believe that management is paying to discover fraudulent behavior that harms the bottom
line, but that it does not care about the whistleblower’s welfare once the report has been “purchased,”
a reasonable assumption given the inaction on the part of management to protect the source of that
tip. Further, in a high retaliation threat situation, offering extrinsic incentives in the form of money may
backfire, causing potential whistleblowers to fear retaliation not just from reporting, but also from
reporting on a colleague for profit, as Boo, Ng, and Shankar (2016) suggest.

When management does not provide protection against retaliation for whistleblowers but offers a
monetary incentive to report wrongdoing, it is sending inconsistent messages about not only the
importance and value of whistleblowing, but also about its integrity and concern for the whistleblowers
themselves. Moreover, management is violating the SOX Sec. 806 mandate to protect
whistleblowers. Although some employees may not be aware of this requirement and, therefore,
the violation, it nevertheless reflects poorly on management integrity and tone at the top. This
inconsistent messaging is likely to decrease trust in management and the organization. We posit that
potential whistleblowers will be more trusting of management that sends consistent messages by
showing support (through protection from retaliation) and by valuing whistleblower reports (through
offering monetary incentives) and less trusting of management that sends inconsistent messages:
offering monetary incentives, but not protecting whistleblowers. Thus, we offer the following
hypothesis about the relationship of retaliation threat, trust, and monetary incentives:

\textbf{H2}: Monetary incentives increase (decrease) trust when offered in a low (high) retaliation
threat environment.

Our research model appears in Figure 1.
METHOD

Participants

The fraud event in our study involves asset misappropriation, the most frequently reported occupational fraud, and the one most likely to be committed by employees (versus management or owners) (ACFE 2016). Accordingly, appropriate participants are individuals with current or prior work experience. We obtained participants through online recruiting services,6 which randomly assigned them to one of six7 experimental conditions. Participants self-selected into our study after seeing a brief description of the type of person we were seeking (individuals over age 18 with work experience) and an estimate of the time to complete the study. We concluded that the use of online participants fit our experimental parameters and, based on current research, was not likely to lead to significantly different results than traditional survey collection methods.8

Experimental Task and Independent Variables

We conducted an online experiment9 with a $2 \times 2$ between-subjects design manipulating retaliation threat ($R_{\text{Threat}}$) as low or high and monetary incentive ($\text{Money}$) as present or absent. We used a vignette to elicit participants’ perceptions of how they would respond to a particular discovery of fraud. We employed a fraud involving a shell company billing scheme, as these schemes are one of the most common methods of asset misappropriation (ACFE 2016) and appear in previous whistleblowing studies (e.g., Kaplan, Pany, Samuels, and Zhang 2009). Moreover, cases involving theft are more likely to be reported than are financial statement frauds (Robinson, Robertson, and Curtis 2012; Kaplan et al. 2009), possibly because it is easier to assign responsibility for and judge the seriousness of the fraud. Following Mudrack and Mason’s (2013) suggestions, we included specific details in the scenario to help ensure that participants would clearly picture, and therefore respond to, the same circumstances and not fill in substantially different details from their imaginations. Similar to Kaplan et al. (2009), in order to hold the concept of fraud constant across the manipulations, our case stated, “you are almost certain that the invoices and subsequent payments to E & R are fraudulent and that Ed is embezzling money from the company.”

All versions of the case begin by asking participants to imagine that they are the assistant purchasing manager, with an annual salary of $80,000, of Dunbar, Inc., a publicly traded company.10 The participant becomes aware of $400,000 in payments for questionable invoices

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6 Per Brandon, Long, Loraas, Mueller-Phillips, and Vansant (2014), behavioral accounting researchers are increasingly relying on data collected via SurveyMonkey and other online survey sites. Specifically, we used SurveyMonkey and Amazon Mechanical Turk.

7 Our experiment used two framings for monetary incentives: compensation and reward. The compensation framing calculated the incentive as 20 percent of the whistleblower’s income, and the reward framing calculated the incentive as 5 percent of the fraud. Both were equal to $20,000. We found no differences between the two treatments, and merged them for our analysis.

8 Goodman, Cryder, and Cheema (2013) find that responses collected using Mechanical Turk, an online survey tool, are, with respect to standard decision-making biases, consistent with results from traditional collection methods.

9 The Institutional Review Boards of our universities approved the study.

10 Because our study is motivated by the availability of external SEC bounty payments, which apply only to public company registrants, we chose to use a public company in this scenario.
issued by a consulting firm whose address is a local post office box and whose initials are the same as those of the purchasing manager. Furthermore, an online search fails to locate a website or any other information on the firm. Participants in all treatments then read an excerpt from Dunbar, Inc.’s Code of Conduct that encourages the reporting of wrongdoing (see Appendix A).

The act of whistleblowing includes both the report and the situations that emerge from the act of reporting (Avakian and Roberts 2012). Between internal and external reporting, differences are likely regarding the organization’s response, insiders’ opinions about the whistleblower (including judgments about motives), and repercussions to the whistleblower. External reporting also involves, at least eventually, the media and public opinion. Moreover, treating internal and external whistleblowing as one phenomenon limits the understanding of the contextual stimuli associated with each (Kaptein 2011). Because retaliation and incentives likely have different effects on internal versus external reporting, we limited our investigation to reporting to an internal hotline.11

Prior research has found interaction effects between monetary incentives and other independent variables including severity (Feldman and Lobel 2010) and closeness of working relationship (Boo et al. 2016). In the current study, we hold both of these variables constant and manipulate retaliation threat because of its well-established effect on whistleblowing intent. Participants in all conditions receive a Code of Conduct passage that encourages whistleblowing. For participants in the Low RThreat group, the Code of Conduct is followed by an anti-retaliation policy and the employee’s observational evidence that Dunbar, Inc. enforces this policy (see Appendix A). Participants in the High RThreat group do not receive the anti-retaliation policy, but they receive text indicating that Dunbar, Inc. has allowed retaliation to occur. In the money treatment, participants see text that offers a monetary payment of $20,000; the participants in the no money treatment do not receive this text.

**Dependent Variables**

Participants indicated the likelihood of their reporting the misconduct to the company’s ethics hotline (RptLike) and then answered additional questions including measures of perceived severity of the wrongdoing (Severity), fear of various retaliation types (Fear), and trust in the organization (Trust) to carry out its policies. Participants then completed questions related to demographics and background.

**ANALYSIS AND RESULTS**

**Demographics**

We received 359 complete responses and excluded 64 who failed to answer correctly the manipulation check questions. As a result, our analysis includes 295 participants. Of these, 49.8 percent are male and 50.2 percent are female. Seventy-five percent indicated that they had earned at least an associate’s degree. The participants have mean work experience of 19.5 years (range 1 to 52 years). Only two participants reported less than two years of work experience and four

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11 We do not offer an anonymous reporting channel because the cash payment manipulation prohibits anonymity. We do not expect this factor to be influential since prior research suggests that anonymity may have no effect on reporting intentions (Pope and Lee 2013) and has found no significant difference in whistleblowing likelihood between protected and anonymous identity (Taylor and Curtis 2010).
declined to provide this information. Participants at some level of management constitute 49.2 percent of the pool, 20.7 percent are salaried, not in management, and 28.8 percent are hourly (four did not answer). Fifty percent (50.2 percent) reported a moderate or higher amount of authority over purchasing decisions in their organization. These demographics (see Table 1)

12 Our results are unaffected when we exclude these six participants, and we retain them in the analyses.
support our conclusion that our participants are representative of working adults who may be in a position to witness occupational fraud.

**Efficacy of Experimental Design**

Prior studies show that the severity of the wrongdoing can have a significant influence on whistleblowing likelihood (e.g., Near and Miceli 1995; Ayers and Kaplan 2005; Taylor and Curtis 2013). Our intention was to hold the severity of the wrongdoing portrayed in the scenario constant across all conditions. The three questions measuring severity ask about the participants’ perception of the wrongdoer’s responsibility for the fraudulent payments, the seriousness of the payments, and the participants’ level of concern over the payments.\(^{13}\) Responses were on a scale from 0 to 100, where 0 represented “not at all concerned” and 100 represented “extremely concerned.” The mean of these three scores is our perceived severity measure. The Cronbach’s alpha measure of reliability is 0.83 for the scale. Including severity as a covariate in our model to control for any perceived differences among the experimental conditions does not change the direction or significance of any of the reported results for our hypothesized model.

We measured participants’ perceptions of retaliation threat including fear of loss of promotion, fear of job loss, and fear of loss of on-the-job status. Those in the low threat condition indicate significantly lower levels of fear than those in the high threat condition for all three measures (promotion loss = 47.46M\(_{LT}\), 64.45M\(_{HT}\), \(p < 0.001\); job loss = 44.53M\(_{LT}\), 61.57M\(_{HT}\), \(p < 0.001\); job status = 62.97M\(_{LT}\), 72.99M\(_{HT}\), \(p = 0.003\); one-tailed tests). Thus, the experimental scenarios create a sufficient differential in perceived retaliation risk between the low and high retaliation threat conditions.

Table 2 includes correlations of the continuous variables (Panel A) and ordinal variables (Panel B). We examine possible relationships between whistleblowing intent and participants’ age, annual compensation, job level, and purchasing authority. Purchasing authority is the only demographic variable significantly correlated to reporting likelihood and trust; additionally, it is significantly related to annual compensation and job level. Accordingly, we consider purchasing authority as a covariate in our supplemental analysis.

**Tests of Hypotheses**

The means of RptLike in the four experimental conditions appear in Table 3. The main effect of RThreat on RptLike (86.91M\(_{LT}\), 75.23M\(_{HT}\)) is significant at \(p < 0.001\) and clearly shows that low (high) retaliation threat has a positive (negative) relationship with reporting intention. This outcome supports H1a. Table 4 shows the means of Trust in the four experimental conditions and Figure 2 provides a graph of these relationships. Trust is significantly higher for those in the Money/Low RThreat condition than those in the Money/High RThreat condition (86.32M\(_{LT}\), 56.97M\(_{HT}\), \(p < 0.001\)) and for those in the Money/Low RThreat condition versus those in the No Money/Low RThreat condition (86.32M\(_{ML}\), 75.48M\(_{NM}\); \(p < 0.002\)). Although Trust is lowest for those in the Money/High RThreat condition (56.97), it is not significantly different from Trust for those in the No Money/High RThreat condition (60.98).

\(^{13}\) We created the severity measure based on Feldman and Lobel (2010), who measured participants’ evaluation of misconduct using the items moral outrage, perception of risk to the public, legitimacy, and acceptability. We modified their items to fit our context of asset misappropriation in a public company.
We use PROCESS to incorporate 10,000 bootstrap samples for bias-corrected confidence intervals (at 95 percent) to test the hypothesized model of moderated mediation (Darlington and Hayes 2017; Hayes 2013). Table 5, Panel A shows regression results first with Trust as the dependent variable. The constant of 75.48 represents the level of Trust for those in the Low RThreat/No Money condition. Being in the High RThreat/No Money condition decreases Trust by 14.50 to 60.98. The offer of money increases Trust by 10.84, from 75.48 to 86.32, for those in the Low RThreat condition. However, the offer of money in the High RThreat condition decreases

** TABLE 2 **
Correlation Matrices

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>Pearson Correlations</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1. Reporting Likelihood</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>2. Severity</td>
<td>0.401**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Trust</td>
<td>0.450**</td>
<td>0.251**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>4. Fear</td>
<td>-0.170**</td>
<td>0.163**</td>
<td>-0.162**</td>
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<td></td>
<td></td>
<td></td>
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<td>Spearman Rho Correlations</td>
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<td></td>
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<td>5. Age</td>
<td>0.086</td>
<td>0.113</td>
<td>-0.110</td>
<td>-0.003</td>
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<td></td>
<td></td>
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<tr>
<td>6. Annual Compensation</td>
<td>-0.064</td>
<td>-0.177**</td>
<td>0.049</td>
<td>-0.001</td>
<td>-0.011</td>
<td></td>
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<tr>
<td>7. Job Level</td>
<td>-0.109</td>
<td>-0.103</td>
<td>-0.016</td>
<td>0.042</td>
<td>0.066</td>
<td>0.457**</td>
<td></td>
</tr>
<tr>
<td>8. Authority over Purchasing</td>
<td>-0.159**</td>
<td>-0.159**</td>
<td>0.021</td>
<td>0.102</td>
<td>0.039</td>
<td>0.383**</td>
<td>0.660**</td>
</tr>
</tbody>
</table>

** Indicates the correlation is significant at the 0.01 level (two-tailed).

n = 295 for all variables except Annual Compensation where n = 294, and Age where n = 288.

Variable measures: Reporting Likelihood, Severity, Trust, and Fear are measured by responses of 0 to 100 for one or more questions. Age is reported age in years. Annual Compensation is measured on an ordinal scale with six ranges. Job Level is measured on an ordinal scale with seven possible responses. Authority over Purchasing is measured on an ordinal scale with five possible responses.

We use PROCESS to incorporate 10,000 bootstrap samples for bias-corrected confidence intervals (at 95 percent) to test the hypothesized model of moderated mediation (Darlington and Hayes 2017; Hayes 2013). Table 5, Panel A shows regression results first with Trust as the dependent variable. The constant of 75.48 represents the level of Trust for those in the Low RThreat/No Money condition. Being in the High RThreat/No Money condition decreases Trust by 14.50 to 60.98. The offer of money increases Trust by 10.84, from 75.48 to 86.32, for those in the Low RThreat condition. However, the offer of money in the High RThreat condition decreases

** TABLE 3 **
Likelihood of Reporting by Retaliation Threat and Monetary Offering

<table>
<thead>
<tr>
<th>Retaliation Threat</th>
<th>Low</th>
<th></th>
<th>High</th>
<th></th>
<th></th>
<th>Main Effect: Money</th>
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</thead>
<tbody>
<tr>
<td>Money</td>
<td>89.92</td>
<td></td>
<td>72.95</td>
<td></td>
<td>81.05</td>
<td></td>
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<tr>
<td></td>
<td>(14.68)</td>
<td></td>
<td>(26.95)</td>
<td></td>
<td>(23.50)</td>
<td></td>
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<tr>
<td></td>
<td>{84}</td>
<td></td>
<td>{92}</td>
<td></td>
<td>{176}</td>
<td></td>
</tr>
<tr>
<td>No Money</td>
<td>83.08</td>
<td></td>
<td>79.21</td>
<td></td>
<td>81.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(20.84)</td>
<td></td>
<td>(25.99)</td>
<td></td>
<td>(23.25)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>{66}</td>
<td></td>
<td>{53}</td>
<td></td>
<td>{119}</td>
<td></td>
</tr>
<tr>
<td>Main Effect:</td>
<td>86.91</td>
<td></td>
<td>75.23</td>
<td></td>
<td>81.17</td>
<td></td>
</tr>
<tr>
<td>Retaliation</td>
<td>(17.92)</td>
<td></td>
<td>(26.68)</td>
<td></td>
<td>(23.36)</td>
<td></td>
</tr>
<tr>
<td>Threat</td>
<td>{150}</td>
<td></td>
<td>{145}</td>
<td></td>
<td>{295}</td>
<td></td>
</tr>
</tbody>
</table>

Mean (Standard Deviation) (Sample Size). Cell means represent likelihood of reporting the wrongdoing based on a scale of 0 to 100, where 0 represents “definitely would not report” and 100 represents “definitely would report.”
TABLE 4
Level of Trust in the Organization by Retaliation Threat and Monetary Offering

<table>
<thead>
<tr>
<th>Retaliation Threat</th>
<th>Money</th>
<th>No Money</th>
<th>Main Effect: Money</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Money</td>
<td>86.32</td>
<td>56.97</td>
<td>70.98</td>
</tr>
<tr>
<td></td>
<td>(18.00)</td>
<td>(25.58)</td>
<td>(26.65)</td>
</tr>
<tr>
<td></td>
<td>{84}</td>
<td>{92}</td>
<td>{176}</td>
</tr>
<tr>
<td>No Money</td>
<td>75.48</td>
<td>60.98</td>
<td>69.03</td>
</tr>
<tr>
<td></td>
<td>(23.58)</td>
<td>(30.30)</td>
<td>(27.63)</td>
</tr>
<tr>
<td></td>
<td>{66}</td>
<td>{53}</td>
<td>{119}</td>
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<tr>
<td>Main Effect:</td>
<td>81.55</td>
<td>58.43</td>
<td>70.19</td>
</tr>
<tr>
<td>Retaliation Threat</td>
<td>(21.27)</td>
<td>(27.36)</td>
<td>(27.02)</td>
</tr>
<tr>
<td>Threat</td>
<td>{150}</td>
<td>{145}</td>
<td>{295}</td>
</tr>
</tbody>
</table>

Mean (Standard Deviation) (Sample Size). Cell means represent the level of trust in the organization based on a scale of 0 to 100, where 0 represents “do not trust at all” and 100 represents “totally trust.”

Trust by 4.01 (14.85 – 10.84) from 60.98 to 56.97. RThreat is significant at p = 0.001 and the interaction of RThreat and Money is significant at p = 0.011. This portion of the analysis demonstrates that Money moderates the relationship between RThreat and Trust by increasing Trust when there is Low RThreat and decreasing Trust when there is High RThreat. However, it does not include the ultimate dependent variable of RptLike. Accordingly, we need additional

FIGURE 2
The Effects of Retaliation Threat and Monetary Payment on Trust
analysis to test H2’s conjecture that this moderation holds when Trust mediates between RThreat and RptLike.

The right-hand portion of Table 5, Panel A shows the regression results when RptLike is the dependent variable. Trust is significant at p < 0.001 and RThreat is no longer significant. High RThreat has a negative coefficient (−3.27) and, thus, is associated with decreased RptLike. Since RThreat becomes nonsignificant when Trust is included in the model (the confidence level includes 0), we conclude that Trust fully mediates the relationship between RThreat and RptLike. These results support H1b, which predicts that trust mediates the relationship between retaliation threat and whistleblowing intent.

Table 5, Panel B demonstrates that the conditional indirect effects of RThreat on Trust at the two levels of Money are significant. In the Money condition, the effect of higher threat is greater (coefficient of −10.67) than in the No Money condition (coefficient of −5.27). Panel C shows that the index of moderated mediation is significant (the confidence interval does not include 0). H2 states that monetary incentives increase (decrease) trust when offered in a low (high) retaliation
threat environment. Results show that money is a significant moderator. Tests of means show that monetary payments significantly increase trust when retaliation threat is low; however, monetary incentives do not significantly decrease trust when \( R\text{Threat} \) is high. Thus, H2 is partially supported, and our overall model of moderated mediation is supported.

**Supplemental Analysis—Covariates**

We used two different framings for monetary incentives: compensation and reward. This covariate is not significant. To control for possible differences associated with variables other than \( R\text{Threat}, \text{Money}, \) and \( \text{Trust} \) we also ran our model of moderated mediation with four covariates (in addition to severity, mentioned earlier, and framing). Based on extant research, we included gender (it has mixed results in prior research) and age (prior research has shown a positive relationship to whistleblowing intent) (see Liyanarachchi and Adler 2011; Near and Miceli 1996). Because purchasing authority experience could influence participants’ understanding of our hypothetical situation, and was correlated with reporting likelihood, we also include purchasing authority as a covariate. Further, we asked participants their occupations and created a variable to identify those who may be more likely to whistleblow (those in accounting, finance, auditing, or legal professions) versus others. The inclusion of these covariates in our model changes neither the significance nor the directions of our results.

**Supplemental Analysis—Motivation as a Moderator**

To explore how individuals' motivation interacted with trust in the presence of monetary incentives, we asked the 176 participants in the \( \text{Money} \) conditions, “How important is the cash compensation [reward] in your decision about reporting the questionable invoices?” The response scale was from 0 (not at all important) to 100 (extremely important). The median split for these reported scores is 65. We designated participants with a score of 65 or above (money is more important) as being extrinsically motivated and those with scores equal to or less than 64.9 (money is less important) as intrinsically motivated. Of these, 85 are in the intrinsically motivated group (36 \( \text{Low RThreat} \) and 49 \( \text{High RThreat} \)) and 91 are in the extrinsically motivated group (48 \( \text{Low RThreat} \) and 43 \( \text{High RThreat} \)). Using the same methods as for the test of H2, we examined a model with \( \text{Motivation} \) (in place of monetary award) as the moderator.

Results (not tabulated) show that the interaction of \( R\text{Threat} \) and \( \text{Motivation} \) is significant at \( p = 0.007 \). Intrinsics in the \( \text{Low RThreat} \) condition indicate a mean \( \text{Trust} \) level of 87.86. Being in the \( \text{High RThreat} \) condition decreases \( \text{Trust} \) for Intrinsics by 37.96 to 49.90. Extrinsics in the \( \text{Low RThreat} \) condition indicate mean a \( \text{Trust} \) level of 85.17. The mean \( \text{Trust} \) level decreases to 65.02 for Extrinsics in the \( \text{High RThreat} \) condition. While \( \text{Trust} \) levels are not significantly different for Intrinsics and Extrinsics in the \( \text{Low RThreat} \) condition (87.86 versus 85.17, respectively; \( p = 0.501 \)), \( \text{Trust} \) is significantly lower for Intrinsics compared to Extrinsics in the \( \text{High RThreat} \) condition (49.90 versus 65.02, respectively; \( p = 0.004 \)). \( \text{Trust} \) mediates the relationship between \( R\text{Threat} \) and \( \text{RptLike} \) (\( R\text{Threat}'s \) significance decreases from \( p < 0.001 \) to \( p = 0.034 \)). The index of moderated mediation is significant, indicating that, in the presence of monetary incentives, a higher threat level will undermine the trust of intrinsically motivated individuals more than that of extrinsically motivated individuals.

**DISCUSSION AND CONCLUSION**

Dozier and Miceli (1985) opined over three decades ago that an individual’s decision to report observed wrongdoing is a complex phenomenon that is based on organizational, individual, and situational factors. The introduction of monetary incentives further complicates these interactions.
Our study provides insight as to how the organizational factors of company-provided monetary incentives and enforcement of anti-retaliation policies, and the individual factor of the perception of organizational trust influence employees’ internal whistleblowing intent. Generally, low retaliation threat leads to higher whistleblowing intention. Trust fully mediates the relationship between retaliation threat and reporting intention. We also find evidence that monetary incentives affect trust, supporting our predicted relationship of moderated mediation. Compared to no monetary payment, the presence of a payment significantly increases trust when retaliation threat is low, making these payments an effective booster to organizational trust resulting from a supportive environment for whistleblowers. However, in a high retaliation threat situation, we find no significant influence of monetary incentives on trust.

We do find some evidence that individual motivation plays a role. Intrinsically motivated employees who are offered money may be especially distrusting of an organization that allows retaliation, compared to extrinsically motivated employees. Although our analysis cannot isolate the effect of monetary incentives directly (as we have no way to measure the importance of money to participants in the no money treatment), our supplemental analysis does indicate that monetary awards may affect employees’ trust levels differently, based on their individual motivation. Accordingly, management must be cautious before assuming that the offer of a monetary incentive for internal whistleblowing will necessarily increase reporting. It may be very difficult for management to predict employees’ perceptions of trust and, therefore, predict the effect that a monetary payment will have on whistleblowing intent. Further, companies must implement policies across the board. Management cannot offer different policies based on employees’ individual motivations.

Based on our findings, it is imperative to have and enforce policies to protect whistleblowers from retaliation; only then might monetary incentives be effective. Management can increase employee trust with respect to whistleblowing by attending to perceptions of organizational justice (Near et al. 1993; Seifert et al. 2014), being consistent, and demonstrating concern. As whistleblowing becomes more publicized and acceptable in U.S. companies, employees may view it as a job responsibility. In addition, as programs such as the OWB bounty program become better known, more companies may offer whistleblowing incentives. Thus, employees’ perceptions of and reactions to reporting wrongdoing may change. Nevertheless, management must continue to weigh the ethical and practical tradeoffs inherent in a decision to pay for reporting. Paying employees for whistleblowing reports to reduce fraud may make financial sense. However, given that employee trust is significantly related to whistleblowing and other OCB behaviors, it is crucial that management implement such payments in a way that supports an ethical culture.

We designed an experiment using one of the most common asset misappropriation schemes, which participants judged to have high severity. Nevertheless, our reporting likelihood measurement may not predict what individuals will actually do in a real-world situation. We limited reporting options to one internal channel (a hotline) and offered a scenario in which the organization would likely be interested in detecting and correcting the misconduct. Future studies could examine whether other factors, which we did not address here, influence the effect of monetary incentives on whistleblowing. Individual factors might include organizational commitment, ethical style, and personality traits. We suggest variations on organizational factors below. The hypothetical organization in our study is a public company subject to the anti-retaliation provisions of SOX. If employees are aware of these provisions, then the violation in the high retaliation threat scenario may have affected their trust in management. Accordingly, future studies could compare responses from employees in public versus private entities. Additional topics for
study include incentives and reporting likelihoods to both internal and external channels and in misconduct scenarios in which the organization may be unsupportive of whistleblowing, such as dumping waste in defiance of environmental regulations or avoiding a prolonged work stoppage to fix a quality control issue. Future research may also investigate award framing and its effects by developing and comparing other bounty schemes to the ones in this study, or to other framings, such as flat rate payments.

REFERENCES


**APPENDIX A**

**Excerpts from Experimental Instrument**

**Company Code of Conduct**

Dunbar, Inc. is committed to maintaining a culture that promotes the prevention, detection, and resolution of misconduct. Each employee has an obligation to report observed or suspected misconduct. Examples of misconduct may include fraud, theft, workplace violence, discrimination, harassment, misuse of company resources, conflicts of interest, information breaches, overriding accounting controls, improper purchasing arrangements, and other unethical behaviors. Employees should report directly to management or by calling the company’s Ethics Hotline. The Hotline is staffed by trained representatives in our human resources department. The representative will refer calls to internal audit or legal as appropriate. Your identity will not be disclosed without your express permission.14

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14 This policy integrates text from large U.S. corporations’ policies on reporting misconduct.
**Low Retaliation Threat Condition**

Dunbar, Inc. will not tolerate retaliation in any form. Disciplinary action will be taken against anyone who retaliates directly or indirectly against any employee who participates in an investigation or reports an actual or suspected violation of our company’s policies or Code of Conduct.\(^{15}\)

The company has demonstrated that it stands behind this policy. For example, you are personally aware of a situation in the last year when the company disciplined a supervisor from another department after he reduced the responsibilities of an individual who reported on him for seeking reimbursement for personal expenses.

**High Retaliation Threat Condition**

While Dunbar, Inc. encourages internal reporting of observed or suspected misconduct, you have seen company management retaliate against individuals who have reported. For example, you are personally aware of a situation in the last year when a supervisor from another department reduced the responsibilities of an individual who reported on him for seeking reimbursement for personal expenses. The company took no action against the supervisor.

**Reward Scenario**

Dunbar, Inc. considers the reporting of misconduct to benefit the organization and its stakeholders by reducing costs and maintaining its reputation as an ethical company. Accordingly, Dunbar will provide a cash reward of 5 percent of the cost to the company of the wrongful act to employees who report serious misconduct and cooperate in the following investigation.

The cost of the fraud is $400,000; accordingly, you would receive a $20,000 reward in the current case.

**Compensation Scenario**

Dunbar, Inc. considers the reporting of misconduct to benefit the organization and its stakeholders by reducing costs and maintaining its reputation as an ethical company. Accordingly, Dunbar will provide cash compensation of 25 percent of the employee’s annual salary (i.e., three months’ pay) to employees who report serious misconduct and cooperate in the following investigation.

Your annual salary is $80,000; accordingly, you would receive $20,000 in compensation in the current case.

\(^{15}\) This policy integrates text from several large U.S. corporations’ anti-retaliation policies. It is representative of a typical anti-retaliation policy (e.g., [http://www.gm.com/content/dam/gm/en_us/english/Group4/InvestorsPDFDocuments/WWI.pdf](http://www.gm.com/content/dam/gm/en_us/english/Group4/InvestorsPDFDocuments/WWI.pdf)).