

Whistleblowing in Audit Firms: Examining Individual Workplace Beliefs

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All that is necessary for the triumph of evil is that good men do nothing.

Edmund Burke (1729 - 1797)

Introduction

The auditing profession is unusual in its depth and breadth of authoritative standards, including the AICPA Code of Conduct, state ethics laws and regulations, professional auditing standards and firm-sponsored policies. Despite, or perhaps because of, this extensive set of guidelines, numerous accounts in the press as well as academic research indicate that auditors at times violate audit standards (Kaplan 1995; Lee 2002). Indeed, a study by Otley and Pierce (1996) found that a majority of audit seniors reported that their managers had asked them either directly or indirectly to underreport time. Moreover, Lord and DeZoort (2001) find that almost one-quarter of the auditors in their study reported the existence of either obedience or conformity pressures from someone within the firm. Other evidence suggests that such pressures and negative consequences occur at all levels and across accounting firms of all sizes (e.g., DeZoort and Lord 1994, SEC 1993).

Prior research has examined whistleblowing within corporate settings, but few have examined it within the auditing profession. Although auditors, by definition, report on the statements and disclosures of their clients, they do not typically direct this type of professional skepticism and independent disclosure toward their peers. However, audit quality, and ultimately firm reputation may suffer when auditors violate professional standards. Audit firms can potentially reduce unethical acts by encouraging auditors to report such behaviors. Indeed,

Miceli and Near (1994) note that "...costs of early detection are generally lower than those incurred when wrongdoing is not detected early."

The Sarbanes Oxley Act of 2002 (SOX) requires public companies to provide their employees with confidential reporting mechanisms, also known as whistleblower hotlines, for reporting illegal or unethical behavior. The purpose of providing such reporting mechanisms is to encourage employees to report wrongdoing within the company, and protect reporters from negative repercussions.¹ Although the Public Company Accounting Oversight Board (PCAOB) does not require registered audit firms to provide confidential reporting mechanisms, some firms have implemented them voluntarily.

Given the recent increased focus on audit firm quality control (see for example PCAOB 2004a, 2004b), we believe that exploration of auditor reporting antecedents is both timely and relevant. This study explores a unique set of workplace beliefs that may influence auditors' intentions to report unethical behavior.

We view the decision to report ethical violations as containing layers of influences. At the outermost layer is the profession. Highly committed auditors may be motivated to protect their profession by reporting, and therefore limiting, the ethical violations of other auditors. We expect professional identity to be positively associated with reporting intentions. Next are the firm (or organization) and the colleagues within that firm. In-group bias suggests that individuals cooperate with members of their group more than with non-group members (Hewstone et al. 2002). The question arises as to which group one feels most committed: the firm or the individuals in the firm. Given that unreported acts can cause future damage to the firm and reported acts can cause immediate damage to the individual who is the subject of the report, we expect those with greater organizational commitment to exhibit greater reporting intentions and

¹ We limit this study to internal whistleblowing only, which involves only reporting within the organization.

those with greater colleague commitment to demonstrate lower reporting intentions. Finally, at the center lies the ethical violation itself. The moral intensity of standards' violations varies with respect to such factors as likelihood of negative outcome, magnitude of consequences, and proximity of consequences (Jones 1991) and results in varying perceptions of seriousness of the act and responsibility to report the violation (Graham 1986). We expect auditors' considerations of moral intensity to be positively associated with reporting intentions.

In an experimental survey, we presented in-charge auditors with three vignettes and asked them to indicate their intention to report the violation described therein. Participants then completed scales measuring the moral intensity of each case, their individual professional identity and their individual locus of commitment (firm versus colleague).

In multivariate analyses, we find that professional identity, locus of commitment, and moral intensity are significant across three 'intention to report' measures (likelihood of reporting, perseverance in reporting, and support for peers who report). In evaluating the three measures of reporting intention separately, professional identity relates significantly to likelihood of reporting and support of peers, locus of commitment relates significantly to perseverance of reporting and support of peers and moral intensity significantly relates to all three indicators of reporting intentions.

This research contributes to the body of academic literature on ethics and whistleblowing in several ways. The first contribution relates to our measure of reporting. While many studies have measured 'intention to report' using questions about the likelihood that others would report the behavior, no studies to date have considered whether the individual *would support* the reporting intention of others. Social influence theory (Dezoort & Lord 1997) and the Theory of Planned Behavior (Ajzen 2001) suggest that the attitudes of others are a significant factor in

decision-making processes. Indeed, Dillard and Yuthas (2002) propose anticipated community response is an important input into ethical decisions. Thus, it is important to understand the circumstances in which social influence (attitudes toward others' behavior) develops in the midst of ethical dilemmas. Additionally, no research to date has addressed perseverance of reporting intentions. Because reports may be ignored initially or not arrive at the appropriate point in the organization (Miceli and Near 2002), perseverance may be an important characteristic of effective reporting. Repeated attempts may be necessary before an appropriate individual acts on the violation.

A second contribution of this study involves the consideration of moral intensity and whistleblowing. Curtis (2006) and others have found support for the impact of the separate components of moral intensity (defined here as seriousness and responsibility) on reporting intentions. However, these studies did not consider whether moral intensity influences the perseverance of reporting intentions or the support of others who may report.

Perhaps the greatest contribution this paper makes to whistleblower theory is the notion of layers of influence, in particular, the trade-off of firm versus colleague commitment. This perspective expands our current understanding of the antecedents of reporting intentions.

This research may also be informative to the practice community in understanding the likely behavior of their employees in similar situations, as well as the potential effectiveness of their internal policies regarding the reporting of unethical behavior.

Theory and hypothesis development

According to Miceli and Near (1984):

Whistleblowing relates to actions taken by current or former organizational members to report illegal, unethical, or illegitimate activities, which are under the

control of management, to persons who are willing and able to correct such misconduct.

Whistleblowing can be uncomfortable to discuss. First, it directly implies *ethical failure* and involves one person *judging* the ethical behavior of another (Hook et al. 1994); second, it implies wrongdoing on the part of a *peer or superior*. Third, whistleblowing implies that the wrongdoer has *intentionally* committed an unethical behavior, which will result in punishment if found out. Fourth, whistleblowing is often *anonymous*, depriving the reported-on individual the right to face his or her accuser. Finally, whistleblowing entails reporting *outside* of the established lines of communication and authority. Americans learn, from our earliest childhood experiences, that it is wrong to ‘tattle.’ This notion extends throughout our culture, even into the corporate hierarchy, as evidenced by the many cases of demotion, loss of job, increased stress, and negative media attention experienced by whistleblowers (Grant 2002). However, industry surveys (KPMG 2006) and academic research (Kaplan 1995; Miceli and Near 2002) support the contention that confidential reporting mechanisms aid in the identification of unethical behavior.

There are overlapping and intertwining influences on an individual’s decision to report an ethical violation (Figure 1). The first two influences are the profession to which they belong and the firm for which they work. One can be committed to the profession, but not to the firm; or, one can be committed to the firm, but not overly committed to the profession. Additionally, there are colleagues within that firm. Because of the trade-off between protecting one’s firm and one’s colleagues in ethics reporting situations, we consider the firm and colleague commitments to be on a continuum. Finally, at the center, is the violation itself. One may be committed to the profession as well as to the firm, but not feel that the core issue, the event, is critical enough to warrant reporting. Conversely, one may show evidence of low commitment to the profession or the firm, but the event may be so egregious that the individual feels he or she must act. Each of

these factors acts independently and in concert. Individuals must weigh all of these factors, cutting through the layers during their decision process, to arrive at their reporting intention. The following discussion addresses each of these factors.

<Figure 1 here>

Professional Identity

Professional identity, a component of a person's social identity, is the notion that individuals self-classify based on their profession.² Auditors identify with other auditors, as well as with the profession, regardless of organizational affiliation. Indeed, professional identity develops prior to and independent of organizational identification (Bamber & Iyer 2002). As professionals, auditors engage in impression management, acting in ways that communicate their membership in the profession (Kosmala & Herrbach 2006). Bamber and Iyer (2002) find that professional identity is positively associated with increased audit effectiveness, supporting the notion that professional identity is linked to adherence to professional standards, and therefore, to upholding those standards.

The AICPA Code of Conduct, state ethics laws and regulations, and firm-sponsored policies provide guidelines for auditors regarding acceptable behavior. Auditors become familiar with these guidelines throughout their careers: they learn of them in audit courses, they study them for licensure and renewal, and they read them when beginning employment at their firm. Douglas et al. (2001) find that the presence of a code of conduct is significantly positively associated with ethical judgments. Although we do not classify whistleblowing as an ethical or unethical judgment, according to Paine (1994), "...unethical business practice involves the tacit, if not explicit, cooperation of others..."(106). Therefore, the decision to remain silent or

² We use the term professional identity, although several studies also refer to this phenomenon as professional commitment. Jeffrey and Weatherholt (1996, 14) define commitment as "...the relative strength of identification with and involvement in a particular profession."

complicit after observing an unethical act enables unethical behavior. When considering reporting of unethical acts in audit firms, the fact that auditing has a strong code of ethics should increase auditors' propensity to report. Furthering this argument are results from Jeffrey and Weatherholt (1996). In a study of accountants and ethical development, they find that professional commitment is positively associated with rule observance attitudes.

Given that auditors develop professional identities and that the profession has pervasive guidelines, auditors should feel an obligation to avoid public disclosure of violations of those guidelines. Thus, auditors with strong professional identities may be inclined to expose these acts within the organization, both as a means of rooting out violators and of protecting their profession from possible public exposure of the violation. We propose the following hypothesis.

H1: Professional identity is positively associated with reporting intent.

Locus of Commitment

Unlike professional identity, which exists independent of organizational affiliation, firm and colleague commitment intertwine. Ray (2006) points to a "web of commitments" which results in conflicting needs of individuals in multiple relationships. While an organization might experience negative effects if standards' violations go unreported, a co-worker will undoubtedly suffer negative effects if others learn of his or her standard's violation. When contemplating making a report, an auditor might weigh the harm to the firm from not reporting against the harm to the colleague of reporting. Graham (1986) suggests that potential reporters must use loyalty prioritization during their decision making processes, contrasting the two polarizing influences of team loyalty and conscientious individualism. Thus, whistleblowing may be the prototypical example of "damned if you do, damned if you don't."

Public accounting firms have a strong organizational culture in which members are indoctrinated in a number of ways (Jenkins et al. 2007). Aranya and Ferris (1984, 3) define organizational commitment as "...the relative strength of identification with and involvement in a particular organization, as well as the willingness to exert effort and remain in the organization." Several studies have explored the relationship between organizational commitment and reporting intent. Near and Miceli (1985) suggest that internal reporters will demonstrate high levels of firm loyalty in their initial decision to report. Two studies test that theory: Mesmer-Magnus and Viswesvaran (2005) expect organizational commitment to be positively related to both reporting intent and actual reporting, and Sims and Keenan (1998) expect organizational commitment to be positively related to external reporting. While neither study finds significant results for organizational commitment, it is possible that this construct is relevant only in certain circumstances not previously explored. The unique nature of public accounting firm culture may offer the opportunity to observe the impact of organizational commitment on reporting behavior.

Since audit firms rely on reputation to remain successful in the long run (and perhaps in the short run), and one component of a firm's reputation is the public's perception of the firm's ethical behavior, it is reasonable to expect that audit firms rely on their employees to internally report observations of code violations. Evidence from practice indicates that several audit firms have implemented confidential hotlines and likely all have stated policies regarding procedures for reporting observed code violations. Thus, it is reasonable to assume that audit firms support internal reporting. As noted earlier, individuals with strong organizational commitment likely will act to preserve the firm; these acts include identifying and remedying situations that may

harm the firm's reputation. Reporting is one means auditors can use to show they are 'looking out for the firm.'

Although we expect organizational commitment to align with reporting intent in audit firms, feelings of colleague commitment also have the potential to affect reporting intent. Social identity theory proposes that group members will support and cooperate with each other (Tajfel 1981). In a discussion of anonymity in reporting, Elliston (1982) suggests that the presence of a social relationship between the violator and the reporter demands that the reporter first address his concerns with the violator. He continues, stating that the next step would be to report to a group leader, rather than to go public. A question arises as to how individuals react when the needs of the organization and of co-workers are in conflict.

In recognition of Ray's (2006) "web of commitments" and Graham's (1986) "loyalty prioritization," we define locus of commitment as the direction to which one's allegiances turn when an ethical dilemma pits organizational and colleague commitments against one another. We theorize that, when contemplating reporting, an individual will weigh the harm to the firm from not reporting against the harm to the colleague from reporting. The locus of their commitment will determine which potential harm is most influential in their reporting decision.

Based on the above arguments, we propose the following hypothesis:

H2: Organizational (colleague) commitment is positively (negatively) associated with reporting intent.

Moral Intensity

Jones (1991) suggests that individual behavior may be contingent on the moral decision at hand. He identifies six factors, that combined form a moral intensity construct: magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. The intensity of these factors will likely influence auditors' reporting

intent. Concerning layers of influences, one may view moral intensity as commitment to one's own ethical compass.

Graham (1986) asserts that, once an individual becomes aware of an "issue of principle," the individual must assess the context. She suggests that the positive contextual motivations toward reporting the unethical acts of others are a combination of the seriousness of an unethical behavior and the perceived responsibility to act on this behavior. These two factors possess a reciprocal relationship in that serious issues may generate increased feelings of responsibility to respond. Indeed, most studies measuring these individual constructs have found them to be highly correlated (Kaplan and Whitecotton 2001; Curtis 2006).

With respect to seriousness, Near and Miceli (1985) propose that the seriousness of the questionable activity will be positively related to reporting. Seriousness implies that others will also see the need for reporting and that violations that are more serious are likely to result in actions to correct the situation. Rothwell and Baldwin (2007) find that police officers are more likely to report serious violations and several studies involving accountants have found support for this relationship (Curtis 2006; Kaplan & Whitecotton 2001; Miceli et al. 1991).

Miceli and Near (1994) point out that individuals report because of their own morality – they feel a *responsibility* to report. In addition, the AICPA Code of Conduct creates responsibility by requiring auditors to report certain violations (namely, the knowledge of a client employment offer). Prior research has found a positive association between auditors' intent to report and feelings of personal responsibility (Kaplan & Whitecotton 2001; Schultz Jr. et al. 1993). Given the findings of prior research, we expect an auditor's feelings of personal responsibility to be positively associated with reporting intent.

Based on the above discussion, we combine the constructs of seriousness and responsibility into a single notion of moral intensity. This combined construct addresses the evaluation of a situation with respect to its seriousness and the related degree to which the individual feels they are morally required to respond. We propose the following hypotheses.

H3: Moral intensity is positively associated with reporting intent.

Method

Design

We tested the hypotheses using a quasi-experimental design in which auditors reacted to three vignettes describing the unethical behavior of their superiors. Independent measured variables include Professional Identity, Locus of Commitment, and Moral Intensity.

Sample

Participants were practicing audit seniors from an international public accounting firm. We provided no incentives for completion, although their firm encouraged participation.

Audit seniors have adequate experience and are sufficiently knowledgeable about professional standards to recognize the ethical violations embedded in our three experimental scenarios. At this level, they will also have adequate socialization into the public accounting profession such that their reactions to the scenario behaviors should be typical of public accountants at various levels in the firm.

Procedure

The research protocol called for proctors to begin the experimental session by introducing themselves and the exercise, and assuring the participants of their anonymity. Proctors distributed the paper-based survey and participants completed the materials at their own pace.

All completed the survey within one hour and none took an unreasonably short amount of time. Participants were able to refer back to any portion of the materials during the session. The authors and two assistants acted as proctors.

The research materials began with a short introduction to the hypothetical firm. Then participants read the three vignettes. Following each vignette, participants answered several questions regarding their intent to report the described incident. The materials ended with scales to measure independent variables and demographic characteristics.

Vignettes

The three vignettes represented various violations of the AICPA Code of Professional Conduct. In the first, the audit supervisor instructs the auditor to ‘sign-off’ on an uncompleted audit procedure as completed. In the second, the audit supervisor discloses a job offer from the current client (violating independence) and then personally performs audit procedures typically completed by a staff auditor. In the third scenario, during an audit of a car dealership, the auditor observes his supervisor driving a car from the client’s inventory. The supervisor discourages the auditor from performing certain audit steps completed in prior years.

Dependent Variables

After each vignette, auditors provided several measures of their reporting intentions, including likelihood of reporting, perseverance of reporting intent, and support of a peer who reports. Likelihood of Reporting is the average of four questions, each using a 0-100 point scale; endpoints are very unlikely and very likely. Perseverance is measured by one question using a 5 point scale, with options moving progressively higher through the organization, beginning with ‘would not tell anyone’ through ‘would pursue to as high a level as needed to get satisfactory action’. Support of Peer is one question addressing whether and to what extent they would

support a peer who reported the event. Choices include: ‘would not support’, ‘would remain neutral’, and ‘would openly support’.

Independent Variables

The two personal workplace beliefs were measured using scales based on prior literature; we include questions in Appendix A. For Professional Identity, we chose seven questions from a professional commitment scale used by both Aranya et al. (1981) and by Jeffrey and Weatherholt (1996) in studies of accountants. The five-point scale used strongly agree and strongly disagree as end-points, neutral was the center.

We also constructed a Locus of Commitment scale based on the general idea of the questions in the scales used by prior research (Aranya and Ferris 1984, Jeffrey and Weatherholt 1996). We designed questions to contrast the trade-off between organizational and colleague commitment in order to highlight the individual’s loyalties. Although it is certainly possible to exhibit high commitment to both the organization and to colleagues, the unique nature of whistleblowing requires that the individual choose one over the other (Graham 1986).

Participants responded to three items asserting commitment toward the firm over commitment to colleagues, each on a five-point scale with ends of strongly agree and strongly disagree.

The moral intensity of each vignette depends on the auditors’ perceptions of the seriousness of the unethical behavior and the auditor’s responsibility to report. Auditors indicated Seriousness and Responsibility on a scale of 0-100 where 0 is least serious or responsible and 100 is most serious or responsible. We combine these measures to generate a measure for moral intensity for each vignette.³

³ Combining these measures also resolves multicollinearity issues experienced in prior studies (Kaplan and Whitecotton 2001).

Results

Demographics

One hundred and twenty-three practicing senior auditors participated in the study. Three individuals provided incomplete answers, resulting in a sample of 120. The group was evenly split by gender and averaged 27 (s.d. 2.9) years of age and 3 (s.d. 0.34) years of professional auditing experience. Two-thirds had taken college courses with at least a module on profession ethics and 93% had received ethics training post-graduate. Only 5% of the participants had received no ethics training. Two-thirds of the participants were born in the U.S., although most were educated at universities in the U.S. One-third of the participants were CPAs. Finally, consistent with prior research, about one-third had previously experienced a situation similar to any described in the experimental scenarios.

Descriptive Statistics and Preliminary Analyses of Measures

We constructed variables as follows. First, we averaged responses to reporting intention questions across vignettes to arrive at three overall measures, one each for Intent, Perseverance, and Support. Next, we averaged the responses to the Seriousness and Responsibility questions, across vignettes, to generate an overall measure for Moral Intensity.

We performed confirmatory factor analysis on the individual questions representing the Professional Identity and Locus of Commitment scales, finding that all questions for each measure loaded on one factor per scale.⁴ Therefore, scale measures were the sum of all items for each scale. Table 1 includes descriptive statistics for these variables.

<Place Table 1 here>

⁴ Cronbach's alpha for Professional Identity is .79. All questions load on the same factor with the lowest loading of .65. Cronbach's alpha for Locus of Commitment is .69. All questions load on the same factor with the lowest loading of .78.

As depicted in Table 2, there is significant correlation among the dependent variables. In particular, Reporting Intent and Perseverance are highly correlated. Therefore, analyses of our hypotheses will begin with multiple analysis of variance (MANOVA), followed by individual univariate analysis (ANOVA) to identify unique patterns of relationships.

Correlations among the independent variables support the expected pattern of attitudes. Specifically, as moral intensity increases, so do professional identity and firm commitment as the locus of commitment. Significant correlations between the dependent and independent variables provide preliminary support for all hypotheses. The dependent variables of Likelihood of Reporting, Perseverance, and Peer Support demonstrate significant correlations with Moral Intensity, Professional Identification, and Locus of Commitment. The exception is the lack of association between Peer Support and Locus of Commitment.

<Place Table 2 here>

Tests of Hypotheses

As depicted in Table 3, multivariate analyses indicate that Moral Intensity, Professional Identity and Locus of Commitment significantly relate to Reporting Intent, supporting all three hypotheses. The only significant interaction, Moral Intensity and Locus of Commitment, was marginally significant and suggested the need for further evaluation of this relationship across the individual dependent variables.

In univariate analyses (reported in Table 3), Moral Intensity significantly relates to all three dependent variables: Likelihood of Reporting ($p=.03$), Perseverance ($p=.01$), and Peer Support ($p=.03$). Correlation analyses (reported in Table 2) support the direction of this relationship: as moral intensity increases, reporting intentions increase. In addition, as seen in

univariate analyses (Table 3), Professional Identification significantly relates to Likelihood of Reporting ($p=.01$) and Peer Support ($p=.02$) but not to Perseverance ($p=.30$). Correlation analysis support the hypothesized direction of this variable: as professional identity increases, reporting intentions increase. Finally, univariate analyses support the relationship of Locus of Commitment to Perseverance ($p=.05$) and Peer Support ($p=.03$), but not to Likelihood of Reporting ($p=.45$). Correlation analyses support the hypothesized direction of this relationship: as an individual's commitment moves toward the firm and away from colleagues, likelihood of reporting increases slightly and degree increases significantly. Additionally, bivariate correlations between Locus of Commitment and Likelihood of Reporting are significant. In summary, we find support for H1 with Likelihood of Reporting and Peer Support, we find support for H2 with Perseverance and Peer Support, with limited support for Likelihood of Reporting, and we find support for H3 with all three dependent measures of intent.

While we did not find a significant interaction between Moral Intensity and Locus of Commitment with respect to Likelihood of Reporting or Peer Support, we did find significance related to Perseverance. As the graph in Figure 2 depicts, it appears that locus of commitment does not affect degree of perseverance in instances of low moral intensity. However, in instances of high moral intensity, locus of commitment directed towards colleagues negatively impacts perseverance. The relatively high adjusted R^2 values reported in Table 3 suggest that a large amount of the overall variance in both Likelihood of Reporting (.43) and Perseverance (.34) is explained by this combination of independent variables, while a relatively small amount of the variance in Peer Support (.06) is explained by this set of determinants.

<Place Table 3 here>

Discussion

This study contributes to the existing literature by testing a theory of layers of influence. In light of recent regulations affecting public companies and proposed revisions of quality control standards for audit firms, it is worthwhile to examine factors that affect reporting behavior. Professional environments, such as public accounting, may be different from many of the contexts previously used to explore whistleblowing. We isolate the effect of various layers of influence that we believe help to explain this difference: namely professional identity, locus of commitment, and moral intensity. Finally, we consider reporting intentions in a broader context, including not only likelihood of reporting, but also perseverance in attempts to report observed unethical behavior as well as support for peers who report.

Results indicate that all three independent variables significantly relate to reporting intentions. Two specific exceptions to this general finding are noteworthy. First, professional identity and perseverance in auditor reporting behavior are not significantly related, although locus of commitment and perseverance are significantly related. Thus, while professional identity may influence auditors' initial reporting intentions, their commitment to their firm determines how far they will go in acting on those intentions. Second, univariate analyses and correlation analyses present differing patterns of the relationship between locus of commitment and the dependent variables. In univariate analyses, Locus of Commitment and Likelihood of Reporting demonstrated no significant relationship. However, Locus of Commitment and both Perseverance and Peer Support were related. In bivariate correlational analyses, we found that Locus of Commitment related to Likelihood and Perseverance, but demonstrated almost no correlation with Peer Support. Thus, locus of commitment appears to be consistent in its relationship with perseverance of reporting intentions. Additionally, correlation analyses suggest

that likelihood of reporting increases as one's locus of commitment moves toward the firm and away from colleagues. However, univariate analyses suggest, that in the presence of other factors, such as professional identity and moral intensity, this relationship is not strong.

The weak bivariate correlation between locus of commitment and peer support was the most surprising finding in this study. Although this relationship does prove significant in univariate analyses when other factors are considered, the lack of a direct correlation suggests that factors other than one's 'commitment to colleagues' impacts support for a peer who reports unethical behavior. Indeed, the low percentage of variance in Peer Support explained by the variables in these analyses suggests the need for further exploration of determinants of social influence in whistleblowing. Given the substantial body of literature attesting to the importance of peer attitudes (DeZoort and Lord 1997) in ethical decision-making, future research in this area is critical.

Undeniably, unethical behavior exists within audit firms; the challenge is to identify it when it occurs and stop it before it causes harm. Given the recent audit failures, the topic of reporting is relevant and timely. Research that explores effective ways to promote ethical behavior and discourage unethical behavior cannot only benefit firms, but can inform standards' setters as well.

Limitations

Participants, setting, and task can all limit experimental results. In certain studies, individuals may exhibit self-serving biases in order to avoid appearing unethical. The anonymity provided by this experiment should mitigate this bias. Individuals may have had prior experiences with whistleblowing, or with circumstances similar to those in the vignettes that

could influence their answers. However, we gathered data regarding past experience and analyses including this measure do not suggest that prior experiences with events such as those described in the vignettes influenced responses. Additionally, laboratory experiments create an artificial setting, thus potentially compromising results (Pedhazur & Schmelkin 1991). However, the study of ethical decision-making outside of such environments is particularly difficult. The benefit of involving experienced professionals as participants is that such individuals can add their own degree of realism to the vignettes that might be missing were the participants unfamiliar with the practice of public accounting. Absent incentives for performance, subjects may put forth inadequate effort, skewing results. While we eliminated the responses of three individuals due to incomplete answers, the remainder appeared to work the exercise diligently. Additionally, as the participants were attending a firm-sponsored training session, we assume they brought the same degree of attention to this task as to all other tasks during this time. Finally, the instructors for the class remained present in most of the rooms where we conducted the exercise.

Appendix A

Independent Measures

Professional Identity –

1. My values are similar to the audit profession's values.
2. I am proud to tell others that I am an auditor.
3. I am extremely glad that I chose to be an auditor.
4. I really care about the future of public accounting.
5. I feel a responsibility to uphold the standards of public accounting.
6. I will work to protect the reputation of the auditing profession.

Participants responded based on a 5-point scale:

1=Strongly-agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly-disagree

Locus of Commitment -

1. I am more committed to my firm than to the individuals with whom I work.
2. I am more responsible for the success of my firm than the personal success of my colleagues
3. I identify more with my company than with my co-workers.

Participants responded based on a 5-point scale:

1=Strongly-agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly-disagree

Moral Intensity -

Please rate the seriousness of the violations in each of the scenario on a scale of 0 to 100 where 0 is the least serious and 100 is the most serious.

1. Omitted Audit Procedure
2. Job Offer
3. Car Deal

Please rate your responsibility to report the violations in each of the scenarios on a scale of 0 to 100 where 0 is the least responsible 100 is the most responsible.

1. Omitted Audit Procedure
2. Job Offer
3. Car Deal

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Figure 1
Layers of Influence

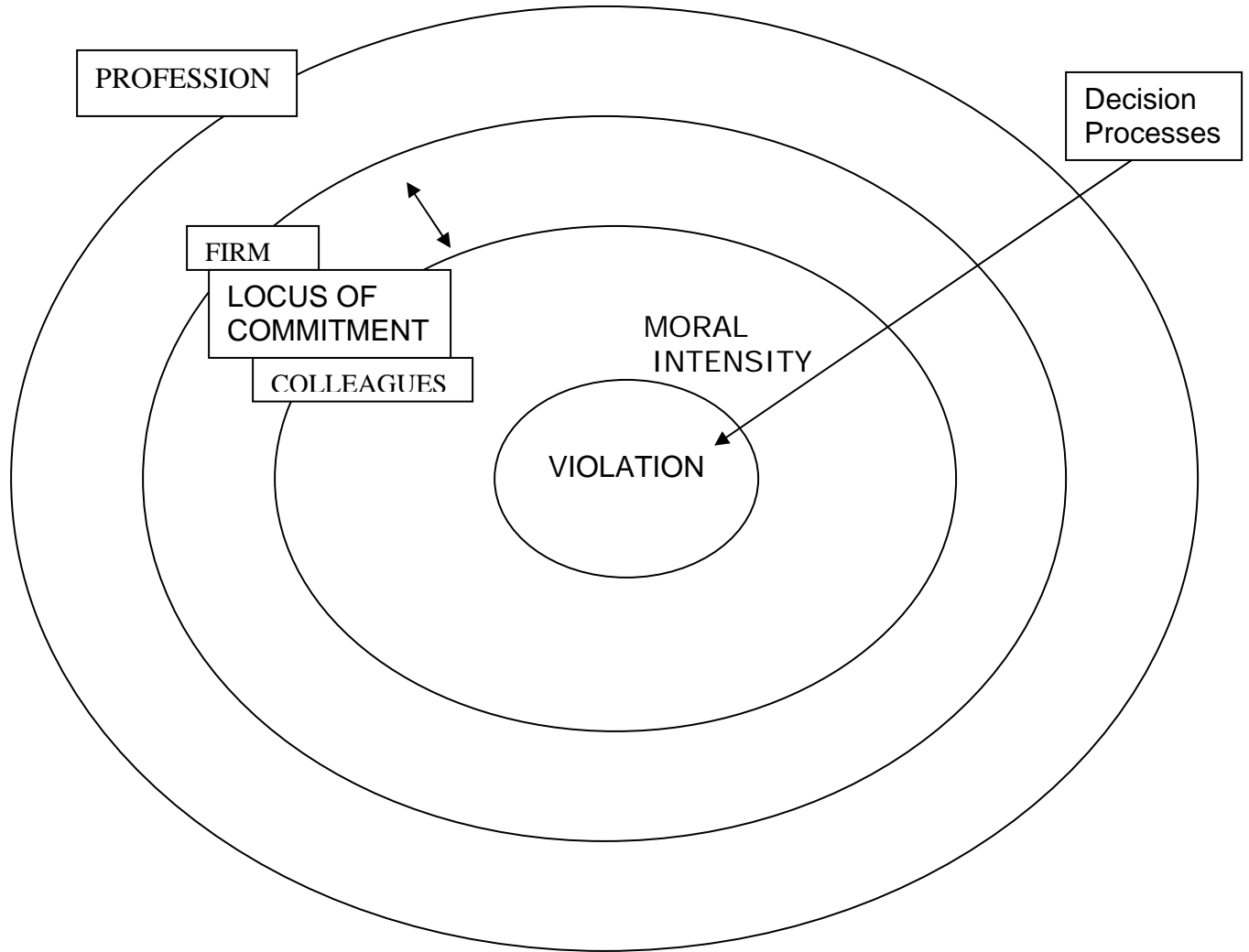


Figure 2
Interaction between Moral Intensity and Locus of Commitment on Degree of Perseverance

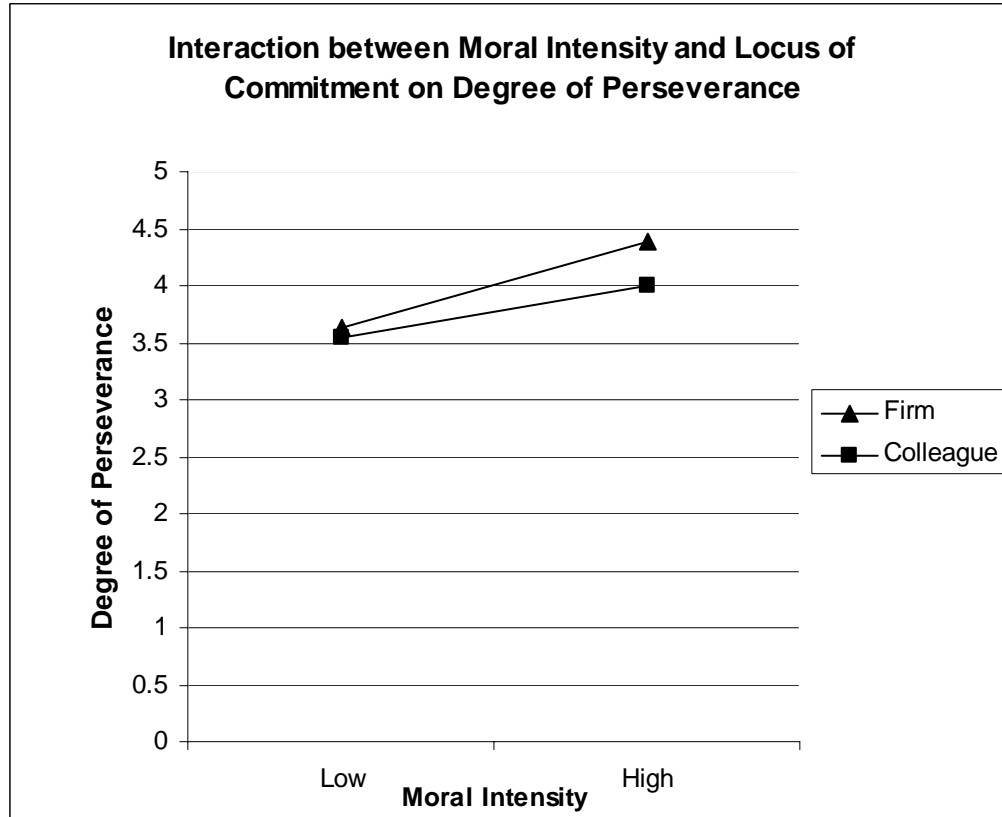


Table 1
Descriptive Statistics of Dependent and Independent Variables

	Minimum	Maximum	Mean	Std. Deviation
Likelihood	11.1	100	72.54	19.84
Perseverance	1.7	5	3.90	0.724
Peer Support	1	3	2.48	0.552
Moral Intensity	40	100	79.58	15.39
Professional Identity	6	23	13.81	3.62
Locus of Commitment	4	15	9.79	2.20

Legend:

Dependent variables: Reporting intentions:

Likelihood of Reporting: measured on a scale from 0 to 100%

Perseverance: 5-level measure from “would not tell anyone” to “would pursue to as high a level as necessary”

Peer Support: 3-level measure from “would not support” to “would remain neutral” to “would actively support”

Independent variables:

Professional Identification: scale measures extent to which one personally identifies with the accounting profession

Locus of Commitment: lower values indicate a greater commitment to the firm while higher values indicate a greater commitment to colleagues

Moral Intensity: combination of the seriousness of the event and the individual’s responsibility for reporting the event

Table 2
Correlation Analyses between Dependent and Independent Variables

	Likelihood of Reporting	Perseverance	Peer Support	Moral Intensity	Professional Identification
Perseverance	.680**				
Peer Support	.176*	.289**			
Moral Intensity	.642**	.572**	.147*		
Professional Identification	.370**	.251**	.217**	.332**	
Locus of Commitment	-.256**	-.267**	.006	-.316**	-.402**

Significance: ** p<.01; *p<.05; based on one-tailed test

Legend:

Dependent variables: Reporting intentions:

Likelihood of Reporting: measured on a scale from 0 to 100%

Perseverance: 5-level measure from “would not tell anyone” to “would pursue to as high a level as necessary”

Peer Support: 3-level measure from “would not support” to “would remain neutral” to “would actively support”

Independent variables:

Professional Identification: scale measures extent to which one personally identifies with the accounting profession

Locus of Commitment: lower values indicate a greater commitment to the firm while higher values indicate a greater commitment to colleagues

Moral Intensity: combination of the seriousness of the event and the individual’s responsibility for reporting the event

Table 3
Analyses of Moral Intensity, Professional Identification and Locus of Commitment on Reporting Intentions

Source	MANOVA		Likelihood of Reporting - ANCOVA		Perseverance - ANCOVA		Peer Support - ANCOVA	
	F	p-value	F	p-value	F	p-value	F	p-value
Professional Identification	3.74	0.01*	5.73	0.01**	0.27	0.30	4.79	0.02*
Locus of Commitment	2.00	0.03*	0.03	0.45	2.92	0.05*	3.91	0.03*
Moral Intensity	4.33	0.01**	3.79	0.03*	11.67	0.01**	3.86	0.03*
Moral Intensity x Locus of Commitment	2.08	0.10	0.02	0.88	3.86	0.05*	3.02	0.09
R ²			0.43		0.34		0.06	

Significance: ** p<.01; *p<.05; based on one-tailed test, except for interaction

Legend:

Dependent variables: Reporting intentions:

Likelihood of Reporting: measured on a scale from 0 to 100%

Perseverance: 5-level measure from “would not tell anyone” to “would pursue to as high a level as necessary”

Peer Support: 3-level measure from “would not support” to “would remain neutral” to “would actively support”

Independent variables:

Professional Identification: Scale measures extent to which one personally identifies with the accounting profession

Locus of Commitment: lower values indicate a greater commitment to the firm and higher values indicate a greater commitment to colleagues

Moral Intensity: combination of the seriousness of the event and the individual’s responsibility for reporting the event