

Examining the Effects of Motive and Potential Detection on the Anticipation of Consequences for Financial Statement Fraud

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INTRODUCTION

Evidence has shown that financial statement fraud is a thoughtfully conceived behavior that is highly influenced by potential perpetrators' attitudes about fraud (Carpenter and Reimers, 2005; Ugrin and Odom, 2010; Ugrin, Kovar, and Pearson, 2013). In the literature, attitudes are assumed to be developed through careful consideration of the benefits and consequences of fraudulent behavior (Carpenter and Reimers, 2005). Theorists have put forth that benefits and consequences should be particularly influential on fraud when the ethical nature underlying the fraud is unclear (Murphy and Dacin, 2011), and that situational factors such as whether or not the fraudulent behavior has a positive effect on others in addition to the fraudster influence perpetrators perceptions of the ethical nature of the behavior (Jones, 1991). This study aims to test if such situational factors influence potential fraudsters' expectations of consequences if they commit fraud. In other words, we expect that individuals will perceive a-priori, that consequences will not be imposed as severely by third parties if a fraud benefits more than just the perpetrator due to confusion as to whether or not the behavior is unethical. Specifically, it is proposed that potential fraudsters expect that consequences - like jail time, financial consequences such as fines and professional censure, or termination - will not be expected to be imposed as severely when a fraudulent act benefits other people in addition to the fraudster.

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That argument also is supported by evidence that show that consequences for deviant behavior are in fact less likely to be imposed by external parties (e.g. jurors) when a deviant act is committed with the intent of benefiting others (Myers, Lynn, and Arbuthnot, 2002). However research has not examined if that outcome is anticipated by criminals or potential fraudsters *a-priori*.

An experiment with two treatments was conducted to test our proposition. Graduate accounting students and professionals in charge of financial reporting were presented with (1) a scenario describing a financial statement fraud scheme committed solely for self-interest or (2) a scenario describing a fraud scheme committed with both self-interest and the benefit of others in mind. A questionnaire was then used to determine what consequences participants expected to be leveled in each treatment. A broad range of consequences were examined including jail, fines, termination, and professional censorship, along with two emotional consequences, guilt and shame. The results show that the participants anticipated significantly less severe consequences if they were to commit financial statement fraud in a situation where both they and others benefit from the fraud as compared to a situation where only they benefit. The findings should be of interest to both academics and the accounting profession at large. The findings contribute to the literature on financial statement fraud by showing that when the ethical nature of a behavior is unclear, potential consequences are discounted in the minds of potential perpetrators. This factor is important considering that consequences are a critical facet of fraud deterrence.

In the remainder of this article a discussion of related literature on consequences, fraud, and motive are presented and hypotheses are put forth. Then the research design is presented

along with an analysis of the results. Finally, the paper is concluded by discussing limitations and potential contributions.

HYPOTHESES DEVELOPMENT

The Effects of Consequences on Attitudes

Theorists contend that before engaging in financial statement fraud people weigh risks and think through costs and benefits, particularly in states of uncertain morality (Murphy and Dacin, 2011). The Theory of Planned Behavior (TPB) (Carpenter and Reimers, 2005) and General Deterrence Theory (GDT) (Ugrin and Odom, 2010; Ugrin et al., 2013) have been used as frameworks for illustrating how individuals approach fraud from a cost benefit perspective incorporating potential consequences.

The TPB, for example, puts forth that behavioral intentions are “based on the assumptions that human beings are usually quite rational and ... people consider the implications of their actions before they decide to engage or not engage in a given behavior” (Ajzen and Fishbein, 1980, pg. 5). Carpenter and Reimers (2005) illustrated that the TPB can, at least in part, be used to explain accountants’ intentions to fraudulently report financial data. They show that attitudes have a significant influence on behavioral intentions where attitudes, as defined by the TPB, are “a person’s general feeling of favorableness or unfavorableness for that behavior” (Ajzen and Fishbein, 1980, pg. 6). An attitude toward an act or behavior is the sum of an individual’s feelings and beliefs about the costs and benefits of an act. In that way, attitudes are a function of expected outcomes including expected consequences (Figure 1).

GDT is a widely-used utility based criminal justice theory that suggests that illicit activity can be deterred by sanctions (Beccaria, 1963; Becker, 1968). GDT is based on a rational choice model where individuals make risk/reward decisions based on expected gratification from taking

advantage of opportunities versus expected likelihood and severity of potential consequences. GDT "...starts from the simple premise that individuals are willing to commit crimes if the expected benefits of the crime exceed the expected benefits of engaging in lawful activity. In other words, the decision to commit a crime is simply another type of decision-making under conditions of uncertainty, the same kind of calculus that a rational utility-maximizing individual will apply to the decision to engage in any activity. In this model, penalties are necessary for prohibited activities so that individuals internalize the cost of those activities," (Perino, 2002, Pg. 675). According to GDT, when sanctions are imminent they are more effectual. Thus, factors like detection and historical enforcement, both of which influence perceptions of imminence, can make sanctions more effectual (Figure 1).

As mentioned, Ugrin and Odom (2010) and Ugrin *et al.* (2013) used GDT to analyze the effects of consequences on fraud. Specifically those studies examined the effects of the formal sanctions legislated by the Sarbanes-Oxley act of 2002 (SOX) and the Ontario/Canadian Securities Commission Bill 198 (CSOX) on attitudes. Ugrin and Odom (2010) examined the threat of jail time finding that it was only effective to the extent that it was expected to be imposed and consequently incorporated into one's beliefs. Ugrin *et al.* (2013) examined the relative effects of a number of potential consequences such as jail time, fines, and professional censorship that have been put in place through legislation. They found that as consequences are expected to be more certain and severe, the consequences become more salient in the formulation of attitudes with professional censorship being the most salient factor. Together with Carpenter and Reimers (2005), those studies support Murphy and Dacin's (2011) argument that cost benefit analyses that include consequences influence fraudulent financial reporting.

Although not necessarily grounded in GDT, other studies have explored the perceived imminence of consequences and business peoples' and accountants' perceptions that questionable acts are improper and formal penalties will be imposed (Ketchand, Morris, and Shafer, 1999; 2001; Shafer and Morris, 2004). While others have explored the effects of formal penalties on a host of judgments that accountants can face (e.g. Falk et al., 1999; Sweeney and Roberts, 1997). The effect of sanctions and consequences have also been tested in other contexts where, for example, Klepper and Nagin (1989) found that the threat of formal punishment reduced intentions to commit tax fraud and Simpson and Koper (1992) showed, in an historical analysis, that increased penalties and enforcement related positively with lower incidences of white collar crime. One conclusion that can be drawn from the literature is that sanctions and consequences matter. People consider the effects of consequences in the formulation of their attitudes about committing fraud and their intentions to act.

Given the importance of consequences, this study examines factors that affect potential perpetrators expectations of feeling consequences. Specifically, this study looks at the effect of motivational factors-altruism versus greed-on expectations of six types of consequences. The first three consequences are jail time, fines, and professional censorship, all of which are formal sanctions included in recent legislation (e.g. SOX and CSOX). The consequence of potential termination along with two consequential emotions that have been shown to affect illicit behavior in a number of settings; feelings of guilt and shame (Diekhoff et al., 1999; Grasmick and Bursik, 1990; Grasmick, Bursik and Arneklev, 1993; Grasmick, Bursik and Kinsey, 1991), were also examined.

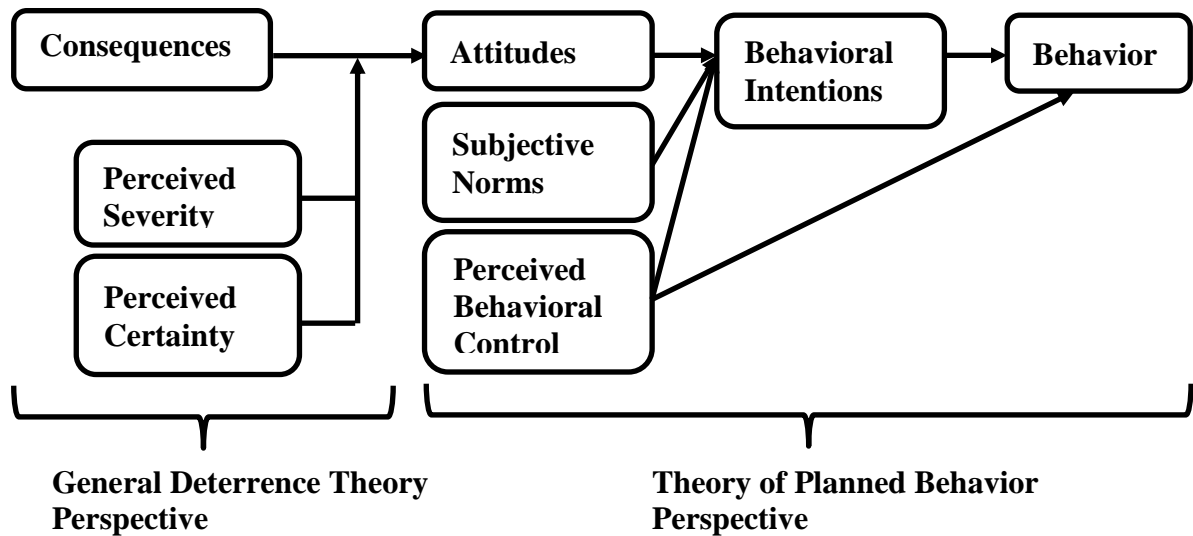


Figure 1: Theoretical Models

How Motive Influences Expected Consequences

Individuals have a robust capacity to distinguish the harm caused by transgressions. A primary factor that delineates the severity of the harm caused by a transgression is harm to a victim (Nichols, 2002). It has been shown that *without* a clear victim, regulating an illegal action can require formal laws and sanctions. *With* a clear victim, individuals are less likely to engage in illicit behavior and self-regulate out of concern for the victim. This can make formal laws and sanctions less impactful (Nichols, 2002). Literature in philosophy, cognitive psychology, and criminal justice tends to focus on violations and transgressions that result in physical harm and undeniably suggest that people are averse towards harming others (e.g., Blair, 1995). But a lingering question is, “are people as averse towards harming others when the harm is financial?” In the case of financial statement fraud it seems questionable, considering financial statement fraud’s pervasiveness.

One explanation may be that individuals fail to make the connection between fraud and the eventual effect on victims; or, they understand that fraud has victims but competing “issue-

contingent” factors such as positive effects for oneself or others make it unclear as to whether or not the fraud should be committed (Jones, 1991). An understanding of this issue can be drawn from other literature that has shown that with money at stake, individuals tend to be concerned for others by being less willing to lie for money when others lose money. However, that altruistic nature tends to fade because as the size of the gain for lying increases concern for others’ decreases (Gneezy, 2005). Gneezy (2005) shows that when confronted with a dilemma where if an individual (sender) tells a lie to another (receiver) the sender will profit while the receiver will lose money. Gneezy’s findings show that when holding the loss to the receiver constant, senders are more willing to lie when their potential profit increases indicating that the deterrent effect of a loss to the receiver has a diminishing influence. In Gneezy’s study, however, other consequences faced by the sender beyond the monetary loss to the receiver are not measured directly. For instance, we do not fully understand the effects of externally imposed consequences and sanctions that may come about if the lie is detected nor do we completely understand internal consequences such as post- lie feelings of guilt and shame (consequential emotions).

One way that consequences are considered - following Gneezy’s rationale - is they are summed in a form of mental calculus where the positive and negative effects directly caused by the lie or illicit act are weighed against each other. For example, a bonus that an executive might receive if he or she reports false financial information would be weighed against feelings of guilt and shame. Externally imposed consequences are also considered by potential perpetrators and the likelihood and severity of consequences are influenced by the motive behind the behavior. For example, Jones (1991, pg. 373) states, “One of the functions of penalties in criminal law is

retribution, and the extent of retribution is often proportional to the evil perpetrated. Thus, the range of sentences for murder is more severe than the range of sentences for petty larceny.”

In addition to ex-post analyses of crimes by judges and juries, research in psychology has shown that potential perpetrators consider eventual legal ramifications *prior* to committing an illicit act. For example, in their research that examines the conflict between self-interest and the common good, Batson *et al.*, (1999) have shown that individuals do not expect that formal sanctions will be leveled as severely if they feel their actions are committed with the benefit of others in mind. As a result the altruistic nature of behavior, even if it is illegal, can become the justification. Their reactions can be conceptualized through the theory of cognitive dissonance (Festinger, 1957). Cognitive dissonance is an uneasiness caused by conflicting intuitions. Individuals typically deal with the conflict by changing the conditions surrounding the intuitions or by changing beliefs about various elements or conditions. Individuals considering committing financial statement fraud may realize that consequences could arise from action, but the consequences conflict with the pressures motivating the fraud (e.g., a bonus). To alleviate the conflict, individuals may look for other justifications that allow them to discount the consequences. A level of altruism alters the situation, eases conflicting intuitions, and offers a means of rationalization. We expect the effect of altruism to be similarly observed in the context of financial fraud and across a wide range of consequences - including externally imposed legal consequences and consequential emotions. We propose that when financial statement fraud is committed in a situation that benefits others, individuals will expect that negative consequences will not be as severe as when the fraud is committed with only self-interest in mind.

H1: Individuals will expect less severe consequences when financial statement fraud benefits others relative to when it does not.

How Motive Moderates the Effectiveness of Detection at Deterring Fraud

Given that consequences for financial statement fraud are more effectual when they are perceived to be more certain (Ugrin *et al.*, 2013); individuals should be influenced by consequences to the extent they expect to get caught. Studies grounded in GDT typically use the likelihood of getting caught as a proxy for certainty, but that assumes if perpetrators are caught they are also prosecuted and convicted. A primary tenet of literature in the accounting field is that it is trusted that perceived certainty of detection equals prevention which is consistent with GDT. For example, Matsumura and Tucker (1992) find evidence that increased testing by auditors and stronger internal controls, both of which increase the likelihood of detection, result in a reduced propensity for managers to commit fraud. Consistent with that, the accounting profession has ratcheted up requirements for fraud detection due to the pervasiveness of fraud. For example, in effort to deter fraudulent financial reporting, the Statement on Auditing Standards 99 (SAS 99) was introduced by the Auditing Standards Board of the American Institute of Certified Public Accountants (AICPA) in October 2002. SAS 99 increases the amount of procedures auditors must perform in effort to detect fraud, presumably influencing perceptions of the certainty of detection and eventually resulting in fewer instances of fraud. Examples of fraud detection include Benford analysis, ratio analysis, and analytical procedures.

Despite the relationship between detection and prevention, if we assume H1 is true, the effect of perceived certainty of detection will be attenuated when the morality or ethical nature of the fraud is considered concurrently. Following that logic, actual detection is more likely to result in negative consequences when the behavior is highly unethical. In that respect and assuming that illicit actions that benefit others are morally superior to actions that do not, individuals will not expect to be punished as severely when a fraud benefits others - *even if they*

get caught - as compared to frauds that do not benefit others. Thus perceptions of the certainty of detection, through mechanisms like those included in an audit will be less effective at deterring behaviors that benefit others. It is proposed that a higher likelihood of detection will result in a stronger feeling of certainty in regards to feeling potential consequences but that feeling will be moderated by the extent to which the fraud benefits others.

H2: In a situation where financial statement fraud is more certain to be detected, individuals will anticipate more severe consequences.

H3: Given hypotheses one and two, expected detection of altruistic frauds will result in the anticipation of less severe consequences than the expected detection of greedy frauds.

The hypothesized relationships are presented in Figure 2.

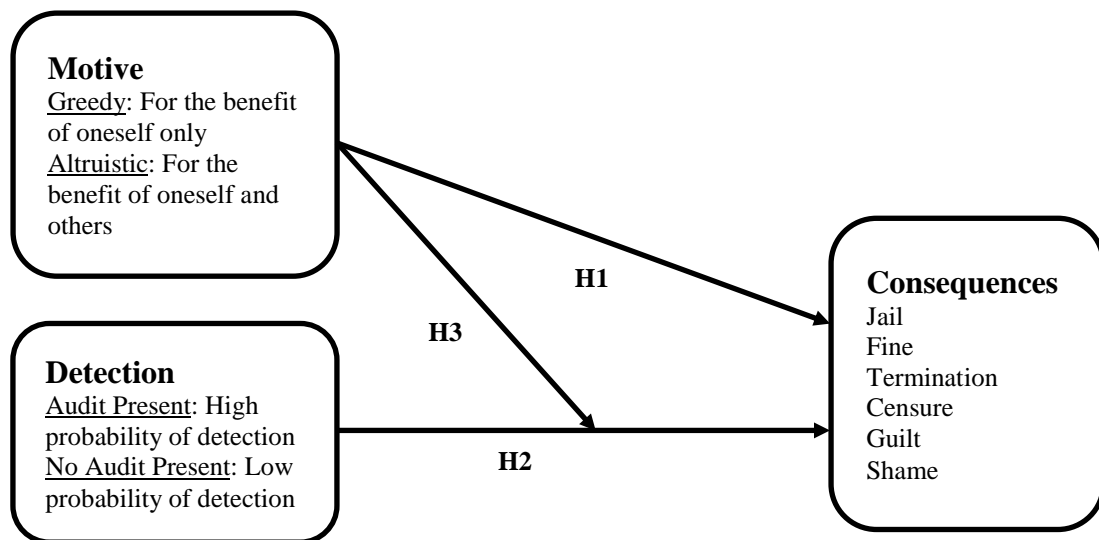


Figure 2: Hypothesized Relationships

METHODOLOGY

Sample and Sampling Procedure

Two samples were collected. The first consisted of 80 graduate accounting students. Data was collected in class with extra credit provided to those that participated. Data from four student participants was eliminated due to failure to accurately respond to manipulation check items (see discussion of data screening below) resulting in 76 usable sets of responses. Graduate students have been shown to be reliable proxies for professionals in other ethics studies (Cohen, Pant, and Sharp, 2001; Carpenter and Reimers, 2005; Ugrin and Odom, 2010). The second sample was collected from 54 professional accountants working in diverse industries. Professional participants were primarily made up of college advisory board members and professionals identified through access of a state CPA society member's in industry database. Participation was voluntary. Data provided by two professional participants was eliminated due to failure to accurately respond to manipulation check items and data for four professional participants was eliminated for failure to complete the instrument resulting in 48 usable sets of responses. The professional group was particularly relevant because 31 were currently serving in a management position that has an influence over financial reporting and individuals in those types of roles are the primary force behind financial manipulation (Jiang, Petroni, and Wang, 2010)¹.

Design

The study used an experiment with a 2 x 2 (altruistic fraud versus greedy fraud x high certainty of detection versus low certainty of detection) between subjects factorial design. A scenario was developed where intentionally falsifying financial statements hypothetically

¹ SOX attempts to place more emphasis on the responsibilities of the Board of Directors but literature has shown that management's influence over financial reporting is central (Cohen, Krishnamoorthy, and Wright, 2008).

benefited participants by allowing the participants to keep a bonus (a greedy motive) but could also benefit participants' co-workers by keeping them employed when they would otherwise have to be laid off (an altruistic motive). The altruistic component of the scenario was manipulated through inclusion of the information about the benefit to co-workers. The altruistic manipulation provided participants with either a scenario that was solely for self-interest (or greedy), or a scenario that for was for both self-interest and altruistic reasons. Detection was also manipulated as certain or uncertain via information about an audit. After reading the scenario, participants answered manipulation check items, items measuring the severity in which they expected to feel consequences in the situation, additional items measuring potential control variables and/or explanatory factors, and finally demographic information. The measurement of the dependent variables, independent variables, and other data collected are discussed in more detail below.

Measures

Dependent Variables: Anticipated Consequences

Six types of potential consequences were examined. They were potential incarceration (JAIL), fines (FINES), professional censorship (CENSURE), the potential to get fired (TERMINATION), and two self-imposed emotional consequences, feelings of SHAME and GUILT. JAIL, FINES and CENSURE are components of existing legislation aimed at deterring financial statement fraud, while TERMINATION has been shown to affect attitudes in other literature (Ugrin and Odom, 2010), and SHAME and GUILT have been shown to be determinants of illicit activity in general (e.g. Batson et al., 1995). Data for JAIL, FINES, TERMINATION, and CENSURE were collected via single seven point Likert scaled items measuring if participants expected that sanctions would be imposed and how severely. Data for

the emotional consequences of SHAME and GUILT were collected using three items scales from Izard's (1991) Discriminating Emotions Set and measured how participants expected to feel after committing fraud. All measures and results for tests of reliability for the multi-item measures are presented in Table 1.

Independent Variables: Motive and Potential Detection

The independent variables were controlled through use of four fraud scenarios that manipulated the motive behind the financial statement fraud scheme (altruistic versus greedy) and the likelihood of detection via the presence or absence of an audit procedure aimed at testing the validity of the accounts in which the financial statement fraud would be executed. The core of each scenario involved a misstatement of a supplies expense which was taken from Carpenter and Reimers (2005), Ugrin and Odom (2010), and Ugrin *et al.* (2013) lending a clear link to those studies. However, in those studies the situation motivating the behavior was not changed, participants were motivated by a bonus (a greedy motive). In this experiment, an altruistic motive was added by giving individuals information about other employees who would lose their jobs if the financial data was not intentionally misrepresented. Additionally, information about an audit was introduced to manipulate the likelihood of detection. In the high detection condition the manipulation stated that the company's audit firm would be performing inventory tests. In the low detection condition the manipulation stated that the audit firm relies on periodic cycle counting and all inventory tests have been completed for the year. The situations are presented below:

The Core Scenario:

Place yourself in the position of the general manager of the company in the following scenario:

The company has a net income target of \$1.5 million. You, acting as the general manager of the company, are authorized to sign off on any financial reporting decisions made within the company. You are faced with the following situation:

On December 15, the company ordered \$150,000 worth of supplies in anticipation for the seasonal rush. These supplies were delivered on the evening of December 29 and you expect to use all of the supplies by the end of the year. It is a violation of generally accepted accounting principles (GAAP) not to record the expense upon use, which you expect.

If you record that supplies expense before year end, net income will be \$1.45 million and the company will not meet the earnings target of \$1.5 million. If the company does not meet the earnings target:

The Motive Manipulations (1 = Greedy Motive; 0 = Altruistic Motive)

1. *You, serving as general manager, will not receive your bonus of \$25,000 that you had worked hard for. No others within the firm will be affected by the failure to meet the earnings target.*

or

2. *You, serving as general manager, will not receive your bonus of \$25,000 that you had worked hard for. In addition, the firm will be in default on an operating line of credit that will not be renewed by the lender. As a result, the company will have to cease operations at one facility and lay off 200 workers.*

The Detection Manipulations (1 = High Certainty of Detection; 0 = Low Certainty of Detection)

With the above scenario in mind, also consider the following information:

1. *The company's audit firm will be performing detailed supplies inventory tests.*

or

2. *The company's audit firm uses periodic cycle count information to test supplies inventory. All supplies inventory tests have been completed for this year's audit. No further tests are anticipated.*

Other Measures

To better understand our participants, data was collected for three inherent factors that could systematically influence the results; participants' ethical orientation (ETHIC),

preconceived notions about denying responsibility (RD), and the participants' inherent social desirability (SD). To assess ETHIC, Froelich and Kottke's (1991) 10-item scale that measures perceptions about organizational activities that are inconsistent with commonly accepted ethical norms was used. This scale has been used in many other studies on ethics (e.g. Cole and Smith's (1996) study of business students and business professionals' beliefs about business ethics) and is particularly relevant in this case since it measures individuals' propensity to ignore societal values in order to achieve a business objective (Sharon and Mudrack, 1996). Responsibility denial is relevant because individuals that rate high in responsibility denial tend to depersonalize illicit acts and place responsibility on others. Responsibility denial was measured by a 28-item, five-point Likert type scale developed by Schwartz (1973, 1977), validated by Harrington (1996), and shown to have consistency and reliability by Ugrin and Odom (2010). Finally, we tested for tendencies to report in socially desirable ways by collecting individuals' propensity for desirable responding using the 40-item, seven-point Likert type scaled Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1988). The BIDR has been shown to have high reliability and high convergent correlations with other measures of social desirability (Paulhus, 1988; Stober, Dette, and Musch, 2002). Controlling for social desirability across treatment groups is important because, those who rate high in social desirability measures like the BIDR are less likely to self-report anti-social (bad) behavior (Mills and Kroner, 2005) and may be more altruistic. The BIDR measures two facets of social desirability, self-deception positivity, and impression management. However, the 40 items are often summed to give an overall measure of socially desirable responding.

The main variables utilized in the primary analyses and their measures are presented in Table 1.

Table 1: Main Variables and Measures

	Variable	Facet(s) Measured	Measurement Source
Independent Variables	<i>MOTIVE</i>	(1) Greedy (0) Altruistic	Scenario Manipulation
	<i>DETECTION</i>	(1) Audit Detection (0) No Audit Detection	Scenario Manipulation
Dependent Variables	<i>JAIL</i>	... if you acting as the general manager intentionally fail to record supplies correctly, do you feel the decision will result in you going to jail?	Newly Created 1 Item (0) No Jail Time (7) Long Jail Time
	<i>FINES</i>	... if you acting as the general manager intentionally fail to record supplies correctly, do you feel the decision will result in you getting fined?	Newly Created 1 Item (0) No Fine (7) Large Fine
	<i>TERMINATION</i>	... if you acting as the general manager intentionally fail to record supplies correctly, do you feel the decision will result in you getting fired?	Newly Created 1 Item (0) Not Likely (7) Highly Likely
	<i>CENSURE</i>	... if you acting as the general manager intentionally fail to record supplies correctly, do you feel the decision will result in you getting censured by your profession?	Newly Created 1 Item (0) Not Censured (7) Severely Censured
	<i>GUILT</i>	(1) Guilty (2) Blameworthy (3) Repentant	Izard (1991) DES-II 3 Items Cronbach's alpha = .850
	<i>SHAME</i>	(1) Ashamed (2) Embarrassed (3) Humiliated	Izard (1991) DES-II 3 Items Cronbach's alpha = .934
	Control Variables	<i>ETHIC</i>	Scale Measuring Ethical Orientation
<i>RD</i>		Scale Measuring Responsibility Denial	Schwartz (1973) 28 Items Cronbach's alpha = .858
<i>SD</i>		Scale Measuring Social Desirability	Paulhus (1988) 40 Items Cronbach's alpha = .799

RESULTS

Data Screening and Tests of Randomization

To screen the data, several questionnaire items were used to test manipulations and underlying assumptions. To ensure that individuals read the scenario and manipulation information diligently and understood it, they were asked if they would receive a bonus and were asked if others in the firm would be affected if recording of the supplies expense was delayed. They were also asked if the supplies would be checked by an audit. Data for four students and two professionals was eliminated for failure to accurately understand the information in the scenario. Additional questions assessed underlying assumptions within the manipulations by asking participants if the misstatement would be uncovered by the audit and if delaying the supplies expense is a departure from generally accepted accounting principles. All remaining participants answered these items correctly. To test underlying assumptions about the motivational treatments, individuals were asked if the motive was altruistic and if an ethical dilemma existed in the scenario. These factors were highly correlated with the treatment where individuals felt that the altruistic treatment was indeed more altruistic and represented a greater ethical dilemma thus this data was not utilized in further analyses. Finally, data for four professionals were removed from further analyses due to failure to complete the instrument.

To test for randomization, a preliminary analysis was performed to test for differences in the sample sizes, important demographic factors, and the control variables (ETHIC, RD, SD) across treatment conditions and between the student and professional groups. The comparisons show no significant differences in the sample sizes, the demographic factors, or the control variables across treatment conditions (all $p > .05$) suggesting the sample is randomized. Thus, the demographic factors and the control variables should not influence the hypotheses tests of

Table 2: Sample Characteristics

Variable	Professional Group					Student Group				
	Altruistic NoAudit	Greedy NoAudit	Altruistic Audit	Greedy Audit	Group Diff.	Altruistic NoAudit	Greedy NoAudit	Altruistic Audit	Greedy Audit	Group Diff.
N =	10	12	13	13		18	20	20	18	
Demographics										
Age ^(a)	45.4 (7.1)	45.6 (5.5)	44.1 (5.5)	47.2 (6.4)	> .10 ^(g)	23.2 (3.1)	22.2 (0.9)	24.1 (5.5)	22.9 (2.5)	> .10 ^(g)
Gender – Male (Female)	5 (5)	8 (4)	8 (5)	6 (7)	> .10 ^(h)	12 (6)	11 (9)	12 (8)	10 (8)	> .10 ^(h)
Employed – Yes (No)	10 (0)	12 (0)	13 (0)	13 (0)	> .10 ^(h)	15 (3)	16 (4)	13 (7)	15 (3)	> .10 ^(h)
Work as an CEO, CFO, Controller or equivalent – Yes (No)	5 (5)	7 (6)	10 (3)	9 (4)	> .10 ^(h)	NA	NA	NA	NA	NA
Consequences										
JAIL ^{(a)(b)}	2.1 (0.7)	2.2 (0.7)	2.0 (0.9)	2.4 (0.8)	> .10 ^(g)	2.3 (1.1)	2.2 (1.2)	2.3 (1.0)	2.6 (1.4)	> .10 ^(g)
FINES ^{(a)(b)}	2.5 (0.7)	2.3 (0.9)	3.6 (0.7)	3.7 (0.9)	< .05 ^(g)	2.9 (1.1)	3.2 (1.5)	3.1 (1.6)	4.4 (1.3)	< .05 ^(g)
TERMINATION ^{(a)(b)}	3.0 (0.5)	3.1 (0.8)	4.0 (1.2)	5.3 (1.2)	< .05 ^(g)	3.7 (1.0)	4.0 (1.4)	3.9 (1.8)	6.4 (0.5)	< .05 ^(g)
CENSURE ^{(a)(b)}	3.3 (0.6)	3.4 (1.4)	3.9 (1.2)	5.3 (1.3)	< .05 ^(g)	4.1 (1.6)	4.5 (1.7)	4.0 (1.6)	6.3 (0.7)	< .05 ^(g)
GUILT ^{(a)(c)}	12.1 (3.8)	11.9 (3.7)	12.1 (2.3)	13.8 (3.5)	> .10 ^(g)	12.6 (3.0)	13.4 (3.3)	13.6 (3.7)	14.8 (1.9)	> .10 ^(g)
SHAME ^{(a)(c)}	12.5 (4.0)	11.6 (2.9)	12.7 (2.4)	15.5 (3.4)	< .05 ^(g)	10.6 (3.4)	10.9 (3.0)	14.4 (3.9)	17.2 (2.5)	< .05 ^(g)
Control Variables										
ETHIC ^{(a)(d)}	24.4 (7.2)	25.1 (8.7)	18.8 (6.7)	24.2 (6.1)	> .10 ^(g)	23.0 (8.7)	21.7 (4.5)	23.7 (8.1)	25.1 (9.9)	> .10 ^(g)
RD ^{(a)(e)}	76.8 (13.8)	78.8 (10.6)	73.9 (15.8)	77.0 (16.8)	> .10 ^(g)	74.6 (18.3)	74.5 (13.7)	70.9 (12.5)	70.4 (14.5)	> .10 ^(g)
SD ^{(a)(f)}	202.1 (15.2)	197.0 (21.9)	196.2 (24.8)	189.0 (28.4)	> .10 ^(g)	196.6 (32.5)	202.6 (25.5)	205.5 (23.0)	206.1 (30.1)	> .10 ^(g)

^(a) Mean (Std. Dev.)

^(b) Scale: Min = 1 (Not Imposed); Max = 7 (Severely Imposed)

^(c) Scale: Min = 3 (Weaker Feelings); Max = 18 (Stronger Feelings)

^(d) Scale: Min = 10 (Ethical); Max = 60 (Unethical)

^(e) Scale: Min = 28 (Low Responsibility Denial); Max = 140 (High Responsibility Denial)

^(f) Scale: Min = 40 (Low Social Desirability); Max = 280 (High Social Desirability)

^(g) ANOVA mean difference between treatment groups (p value)

^(h) Chi-Square frequency difference between treatment groups (p value)

differences between the treatment conditions. Participants' responses to the control variable measures and the results of their responses to the dependent measures were also not significantly different between the students or professionals suggesting both groups responded similarly to the treatments (all $p > .10$). A summary of the descriptive statistics for the variables across treatment groups and split between student and professional groups is presented in Table 2. For parsimony and statistical power, the remaining hypotheses tests are performed with combined data.

Hypotheses Tests

The means and standard deviations for participants' anticipated consequences across treatment groups are presented in Table 3 and a graphical representation is presented in Figure 3. A MANOVA was performed to further test for significance and is presented in Table 4.

Hypothesis one (H1) predicted that individuals will expect less severe consequences when financial statement fraud benefits others relative to when it does not. In other words MOTIVE should relate significantly with JAIL, FINES, TERMINATION, CENSURE, GUILT and SHAME. The mean scores for participants' anticipated consequences were higher in the greedy motive condition as compared to the altruistic motive condition for all types of consequences (Table 3). The univariate tests in Table 4, Panel B for MOTIVE show that the differences were significant ($p < .05$) for all consequences except for JAIL and feelings of GUILT ($p > .10$). This provides support for H1.

Hypothesis two (H2) predicted that individuals will expect more severe consequences when detection of financial statement fraud is perceived to be more certain. The mean scores for participants' anticipated consequences were higher in the high certainty of DETECTION (audit) condition as compared to the low certainty of DETECTION (no audit) condition for all types of consequences (Table 3). The univariate tests in Table 4, Panel B show that the differences were

significant (GUILT $p < .10$, all other $p < .05$) for all consequences except for JAIL ($p > .10$).

This provides support for H2.

Hypothesis three (H3) predicted that motive will moderate the effect seen in H2 where individuals will expect more severe consequences when financial statement fraud is detected if the fraud is motivated by greed alone with no positive effects on others. The mean scores for participants' anticipated consequences were highest in the high certainty of DETECTION x (greedy) MOTIVE condition for all types of consequences (Table 3). The univariate tests in Table 4, Panel B show significant moderation for all types of consequences ($p < .05$) except JAIL and GUILT ($p > .10$), providing support for H3.

Table 3: Anticipated Consequences by Treatment Condition

		Jail			Fine			Fired		
		Detection		Main Effect	Detection		Main Effect	Detection		Main Effect
		No Audit	Audit		No Audit	Audit		No Audit	Audit	
Motive	Greedy	2.186 (.998) {32}	2.516 (1.151) {31}	2.349 (1.080) {63}	2.844 (1.322) {32}	4.097 (1.193) {31}	3.460 (1.401) {63}	3.656 (1.310) {32}	5.936 (.998) {31}	4.778 (1.631) {63}
	Altruistic	2.214 (.956) {28}	2.152 (.972) {33}	2.180 (.957) {61}	2.750 (.967) {28}	2.879 (1.317) {33}	2.820 (1.162) {61}	3.464 (.881) {28}	3.909 (1.548) {33}	3.705 (1.295) {61}
	Main Effect	2.200 (.970) {60}	2.328 (1.070) {64}	2.266 (1.021) {124}	2.800 (1.162) {60}	3.469 (1.391) {64}	3.145 (1.323) {124}	3.567 (1.125) {60}	4.891 (1.605) {64}	4.250 (1.565) {124}

		Censured			Guilt			Shame		
		Detection		Main Effect	Detection		Main Effect	Detection		Main Effect
		No Audit	Audit		No Audit	Audit		No Audit	Audit	
Motive	Greedy	4.063 (1.664) {32}	5.903 (.998) {31}	4.968 (1.685) {63}	12.813 (3.468) {32}	14.419 (2.718) {31}	13.603 (3.201) {63}	11.188 (2.956) {32}	16.452 (3.009) {31}	13.779 (3.973) {63}
	Altruistic	3.821 (1.389) {28}	3.939 (1.413) {33}	3.885 (1.392) {61}	12.428 (3.282) {28}	12.970 (3.283) {33}	12.721 (3.266) {61}	11.286 (3.670) {28}	13.727 (3.448) {33}	12.607 (3.730) {61}
	Main Effect	3.950 (1.534) {60}	4.890 (1.605) {64}	4.436 (1.634) {124}	12.633 (3.360) {60}	13.671 (3.086) {64}	13.169 (3.250) {124}	11.233 (3.280) {60}	15.047 (3.500) {64}	13.202 (3.884) {124}

(a) Means (std. errors) {n} across treatment conditions

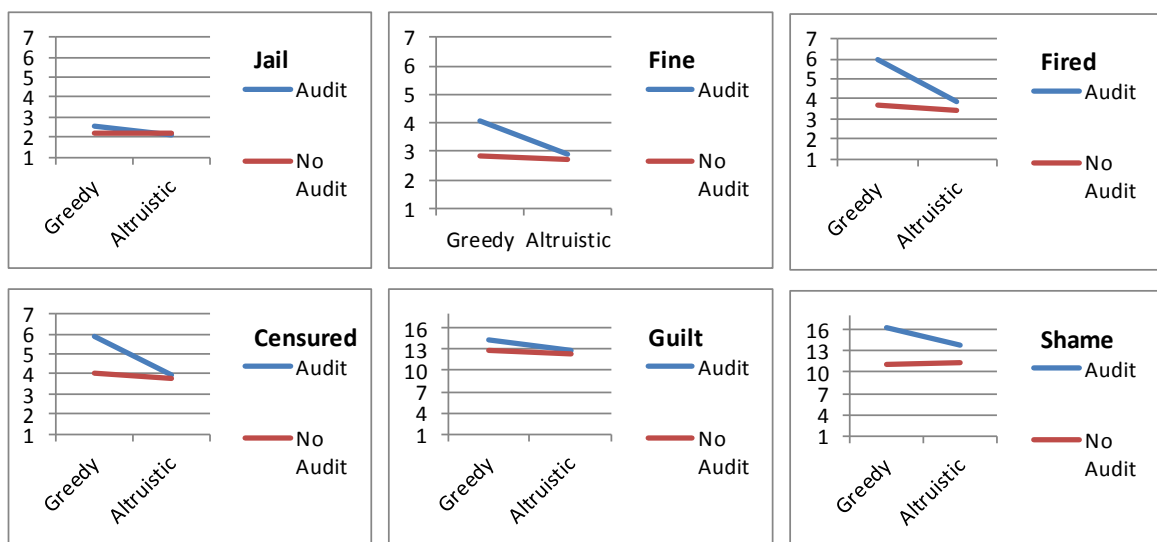


Figure 3: Graphs of the table 3 means across treatment conditions

Table 4: MANOVA Results for Anticipated Consequences

Panel A: Multivariate Tests		Value	F	df	Error df	Sig.	Partial Eta Squared	Observed Power ^a
<i>MOTIVE (M)</i>	Wilks' Lambda	.799	4.807	6	115.000	.000	.201	.988
<i>DETECTION (D)</i>	Wilks' Lambda	.618	11.828	6	115.000	.000	.382	1.000
<i>M x D</i>	Wilks' Lambda	.845	3.519	6	115.000	.003	.155	.940

a. Computed using alpha = .05

b. Computed on combined student and professional data. Results are not substantially different when the data is split between the groups.

Panel B: Univariate Tests of Between-Subjects Effects (Model & Intercept Omitted)

Effect	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power ^a
<i>MOTIVE (M)</i>	Jail ^(b)	.881	1	.881	.842	.361	.007	.149
	Fine ^(c)	13.284	1	13.284	8.971	.003	.070	.844
	Fired ^(d)	37.993	1	37.993	25.219	.000	.174	.999
	Censured ^(e)	37.534	1	37.534	18.879	.000	.136	.991
	Guilt ^(f)	25.957	1	25.957	2.532	.114	.021	.352
	Shame ^(g)	53.245	1	53.245	4.965	.028	.040	.599
	<i>DETECTION (D)</i>	Jail ^(b)	.546	1	.546	.521	.472	.004
Fine ^(c)		14.742	1	14.742	9.955	.002	.077	.879
Fired ^(d)		57.289	1	57.289	38.028	.000	.241	1.000
Censured ^(e)		29.619	1	29.619	14.898	.000	.110	.969
Guilt ^(f)		35.621	1	35.621	3.475	.065	.028	.456
Shame ^(g)		458.423	1	458.423	42.750	.000	.263	1.000
<i>M x D</i>		Jail ^(b)	1.183	1	1.183	1.130	.290	.009
	Fine ^(c)	9.758	1	9.758	6.590	.011	.052	.721
	Fired ^(d)	25.980	1	25.980	17.245	.000	.126	.985
	Censured ^(e)	22.914	1	22.914	11.525	.001	.088	.920
	Guilt ^(f)	8.769	1	8.769	.855	.357	.007	.151
	Shame ^(g)	61.508	1	61.508	5.736	.018	.046	.661

a. Computed using alpha = .05

b. R Squared = .021 (Adjusted R Squared = .004)

c. R Squared = .175 (Adjusted R Squared = .154)

d. R Squared = .400 (Adjusted R Squared = .385)

e. R Squared = .274 (Adjusted R Squared = .256)

f. R Squared = .053 (Adjusted R Squared = .030)

g. R Squared = .307 (Adjusted R Squared = .289)

h. Computed on combined student and professional data. Results are not substantially different when the data is split between the groups.

i. The results for MANOVAs controlling for the demographic factors and control variables presented in Table 2 do not change significantly from the results presented in Tables 3 and 4. The raw means without controlling for the variables in Table 2 are presented in Table 3 and MANOVA results in Table 4 are based on the means in Table 3.

DISCUSSION, LIMITATIONS, AND CONCLUSION

The findings show that although consequences are an essential component of fraud deterrence, consequences are expected to be enforced less severely when the fraud benefits others. The participants anticipated significantly less formal sanctions and reduced feelings of consequential emotions when their motives had an altruistic component. Considering participants recognized that the fraud in the scenario was a GAAP departure, it seems fair to conclude that regardless of legality, participants followed their own instincts to help their coworkers and they assumed that others would be lenient when assigning blame and judgment. This should be both interesting and concerning to the business community and particularly to the accounting community considering that the fraud scheme presented to participants equally violates laws and codes of ethics for the accounting profession under either the greedy or altruistic condition. Additionally, the interaction between motive and detection is problematic to the accounting profession considering that it suggests that individuals expect less severe consequences for altruistic frauds even if they get caught.

The findings show that the effects of perceived certainty of detection on anticipated sanctions and perceived certainty of detection on feelings of shame were significantly less when the fraud benefited others. This result does not bode well for legislation like the Sarbanes-Oxley Act and standards like SAS No. 99 considering that other studies have shown that legislated consequences are more salient in the formulation of attitudes when they are perceived to be more certain and severe. Perhaps solace can be taken from participants' feelings of guilt and shame. Guilty and shameful feelings were well into the upper end of the scales in all treatment conditions and as Murphy and Dacin (2011) point out, "affect laden intuitions" may influence and perhaps even stop fraud before externally imposed consequences are considered.

The study has limitations that should be pointed out and readers should use caution when generalizing the results. The primary limitations of this study lie in the use of a scenario. Although scenarios are commonly used in ethics literature, there is still the possibility that individuals will respond differently in real situations. Future researchers could attempt to test some of the propositions made here with archival data (although getting at motive or perceptions would be difficult) or through qualitative research techniques like interviewing convicted white collar criminals. A combination of experimental, archival, and qualitative analysis would provide a rich understanding of financial statement fraud, the motivations behind it, and deterrence. The second limitation of the scenario is that it is limited to a relatively small fraud (a misstatement of \$150,000) and small outcomes (a direct effect on only 200 people). However, evidence shows that misstatements tend to start small and grow over time (Schrand and Zechman, 2011). Thus, understanding how people react at early stages is paramount. Perhaps studying small scale frauds like the one presented in the scenario here is at least as important as studying large ones considering that intervention may be most effective at early stages, before people start down the slippery slope. However, it would still be interesting to test if the relationships hold with a larger scale scheme and is an opportunity for future research.

In summary, the study brings together literature on fraud, ethics, moral judgment, and altruism. The findings add to the recent literature on financial statement fraud by exploring the effects of a primary determinant of consequence anticipation and examining how individuals behave when deviance is not clear. In doing so, the study shows that expected consequences are contingent on how a fraud impacts others. The findings illustrate that accountants do not expect to be severely punished in all instances of fraud which is problematic to the accounting profession considering it allows for rationalization for committing financial statement fraud. We

recommend that the profession combat fraud through education and enforcement. Educating on the larger effects of financial fraud on the economy and society may influence accountants' ability to define financial manipulation as an ethical dilemma and influence attitudes.

Enforcement of potential consequences, particularly publicizing severe enforcement of potential consequences, may influence attitudes as well.

Financial statement fraud is still a pervasive problem despite legislative efforts and this study helps identify how fraud is rationalized, when consequences are anticipated, and why deterrence has been relatively ineffectual. The study fits within recent literature by Murphy and Dacin (2011) and extends our understanding of the rational perspective of financial fraud presented by Carpenter and Reimers (2005), Ugrin and Odom (2010), and Ugrin *et al.* (2013).

Appendix A (Correlation Matrix)

		Motive	Detection	Jail	Fine	Termination	Censure	Guilt	Shame	Ethic	RD	SD
Motive	Pearson Corr. Sig. (2-tailed)	1										
Detection	Pearson Corr. Sig. (2-tailed)	-.049 .589	1									
Jail	Pearson Corr. Sig. (2-tailed)	.083 .359	.063 .487	1								
Fine	Pearson Corr. Sig. (2-tailed)	.243* .007	.254* .004	.086 .345	1							
Termination	Pearson Corr. Sig. (2-tailed)	.344 .000*	.424* .000	.207* .021	.583* .000	1						
Censure	Pearson Corr. Sig. (2-tailed)	.333 .000*	.289* .001	.271* .002	.369* .000	.784* .000	1					
Guilt	Pearson Corr. Sig. (2-tailed)	.136 .131	.160** .075	.150** .095	.189* .036	.243* .007	.185* .040	1				
Shame	Pearson Corr. Sig. (2-tailed)	.151** .093	.493* .000	.179* .047	.206* .022	.425* .000	.366* .000	.451* .000	1			
Ethic	Pearson Corr. Sig. (2-tailed)	.082 .362	.000 .999	.012 .893	.055 .544	-.002 .984	-.004 .967	-.129 .152	.004 .963	1		
RD (responsibility denial)	Pearson Corr. Sig. (2-tailed)	.037 .682	-.108 .234	.034 .706	-.117 .195	-.073 .423	-.131 .148	-.219* .014	-.125 .166	.286* .001	1	
SD (social desirability)	Pearson Corr. Sig. (2-tailed)	-.011 .904	.015 .867	-.035 .698	-.025 .784	-.003 .975	.046 .611	.088 .330	.051 .573	.090 .323	-.166** .065	1

(*) Correlation is significant at the 0.05 level (2-tailed).

(**) Correlation is significant at the 0.10 level (2-tailed).

(a) N = 124

(b) Motive: Experimentally manipulated item coded (0) = altruistic; (1) = greedy

(c) Detection: Experimentally manipulated item coded (0) = low detection; (1) = high detection

(d) Jail: Single likert scaled item coded (0) = no jail time; (1) = long jail time

(e) Fine: Single likert scaled item coded (0) = no fine; (1) = large fine

(f) Termination: Single likert scaled item coded (0) = being fired is not likely; (1) = being fired is highly likely

(g) Censure: Single likert scaled item coded (0) = no censorship is likely; (1) = severe censorship is likely

(h) Guilt: 3 item likert scale coded (3) = weak feelings of guilt; (21) = strong feelings of guilt

(i) Shame: 3 item likert scale coded (3) = weak feelings of shame; (21) = strong feelings of shame

(j) Ethic: 10 item likert scale coded (10) = ethical; (60) = unethical

(k) RD: 28 item likert scale coded (28) = low denial; (140) = high denial

(l) SD: 40 item likert scale (40) = low propensity to be socially desirable; (280) = high propensity to be socially desirable

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