

Psychological Pathways to Fraud: Understanding and Preventing Fraud in Organizations

*Pamela R. Murphy
M. Tina Dacin*

ABSTRACT. In response to calls for more research on how to prevent or detect fraud (ACAP, Final Report of the Advisory Committee on the Auditing Profession, United States Department of the Treasury, Washington, DC, 2008; AICPA, SAS No. 99: Consideration of Fraud in a Financial Statement Audit, New York, NY, 2002; Carcello et al., Working Paper, University of Tennessee, Bentley University and Kennesaw State University, 2008; Wells, Journal of Accountancy, 2004), we develop a framework that identifies three psychological pathways to fraud, supported by multiple theories relating to moral intuition and disengagement, rationalization, and the role played by negative affect. The purpose of developing the framework is twofold: (1) to draw attention to important yet under-researched aspects of ethical decision-making, and (2) to increase our understanding of the psychology of committing fraud. Our framework builds on the existing fraud triangle (PCAOB, Consideration of fraud in a financial statement audit. AU Section 316, www.pcaobus.org, 2005) which is used by auditors to assess fraud risk. The fraud triangle is composed of three factors that, together, predict the likelihood of fraud within an organization: opportunity, incentive/pressure, and attitude/rationalization. We find that, when faced with the opportunity and incentive/pressure, there are three psychological pathways to fraud nestled within attitude/rationalization: (1) lack of awareness, (2) intuition coupled with rationalization, and (3) reasoning. These distinctions are important for fraud prevention because each of these paths is driven by a different psychological mechanism. This framework is useful in a number of ways. First, it identifies certain insidious situational factors in which individuals commit fraud without recognizing it. Second, it extends our knowledge of rationalization by theorizing that individuals use rationalization to avoid or reduce the negative affect that accompanies performing an unethical behavior. Negative affect is important because individuals wish to avoid it. Third, it identifies several other methods fraudsters use to reduce negative affect,

each of which could serve as potential “psychological red flags” and helps predict future fraudulent behavior. Finally, our framework can be used as a theoretical foundation to explore several interventions designed to prevent fraud.

KEY WORDS: fraud, fraud triangle, rationalization, negative affect, normalization, moral intuition

Introduction

In recent years, increasing attention is being devoted to examining fraud in organizational settings (Ashforth and Anand, 2003; Collins et al., 2009; Palmer, 2008; Zahra et al., 2005). According to a study of organizations worldwide, 30% of companies were victims of an economic crime – fraud – in the last year (PricewaterhouseCoopers, 2009). Many calls have been made for a better understanding of fraud prevention and detection. The U.S. Treasury’s Advisory Committee on the Auditing Profession recommends the creation of a national fraud center for the purpose of sharing fraud prevention and detection experiences, practices, and innovation (ACAP, 2008; Carcello and Hermanson, 2008; Carcello et al., 2008).

We break down the “slippery slope” to fraud into three distinct paths, to provide a greater understanding of how and under what circumstances individuals are more (less) likely to commit fraud. In doing so, we draw implications for better understanding both the process and prevention of fraud. Our ideas build on the fraud triangle (PCAOB, 2005). As part of the Statement of Auditing Standards 99 (PCAOB, 2005), the fraud triangle consists

of the following three factors that, if all are present, predict the presence of fraud within an organization: opportunity, incentive/pressure, and attitude/rationalization. The first two – opportunity and incentive/pressure – are relatively accepted as being associated with fraud (AICPA, 2002; Erickson et al., 2004; Graham et al., 2005; Murphy, 1999; Wells, 2001). However, little is known about attitude/rationalization (Carcello and Hermanson, 2008; Hogan et al., 2008; Wells, 2004). Our fraud framework describes an individual's decision-making process when faced with both the opportunity and motivation to commit fraud.

We describe the psychological pathways to fraud for individuals (who believe that committing fraud is wrong). In this way, we address the majority of the population and ignore individuals who are predisposed to commit fraud.¹ In our view, there are three distinct pathways to fraud: (1) **lack of awareness**, (2) **intuition coupled with rationalization**, and (3) **reasoning**. The first – lack of awareness – is due to overpowering situations or contexts in which the individual makes a decision.² This path is based on literature from organizational theory (Ashforth and Anand, 2003; Victor and Cullen, 1988) and social psychology (Aquino et al., 2009; Milgram, 1974; Zimbardo, 2007), describing certain overwhelming situational factors that can generate deviant behavior. We describe **three** situational factors that can, separately or together, produce fraudulent behavior. The second path – intuition coupled with rationalization – occurs when the individual is aware the behavior in question is fraudulent. The individual goes through an affect-driven intuition process that culminates in a gut level, immediate decision. The individual either decides to refrain from committing fraud due to the experience of negative affect (feelings), or decides to commit fraud due to his/her ability to immediately think of a rationalization to justify the act and, in doing so, **avoid negative affect**.³ Literature from social psychology (Haidt, 2001, 2007, 2008) and neuroscience (Damasio, 2003, 2007; Greene et al., 2001; Hotz, 2007) support the vital link between ethical decision making and affect or emotion. The third path to fraud occurs only when the individual is aware that the act is fraudulent and the intuition is conflicting or unclear. In this situation, the individual applies reasoning, most likely using some form of a **cost benefit analysis**

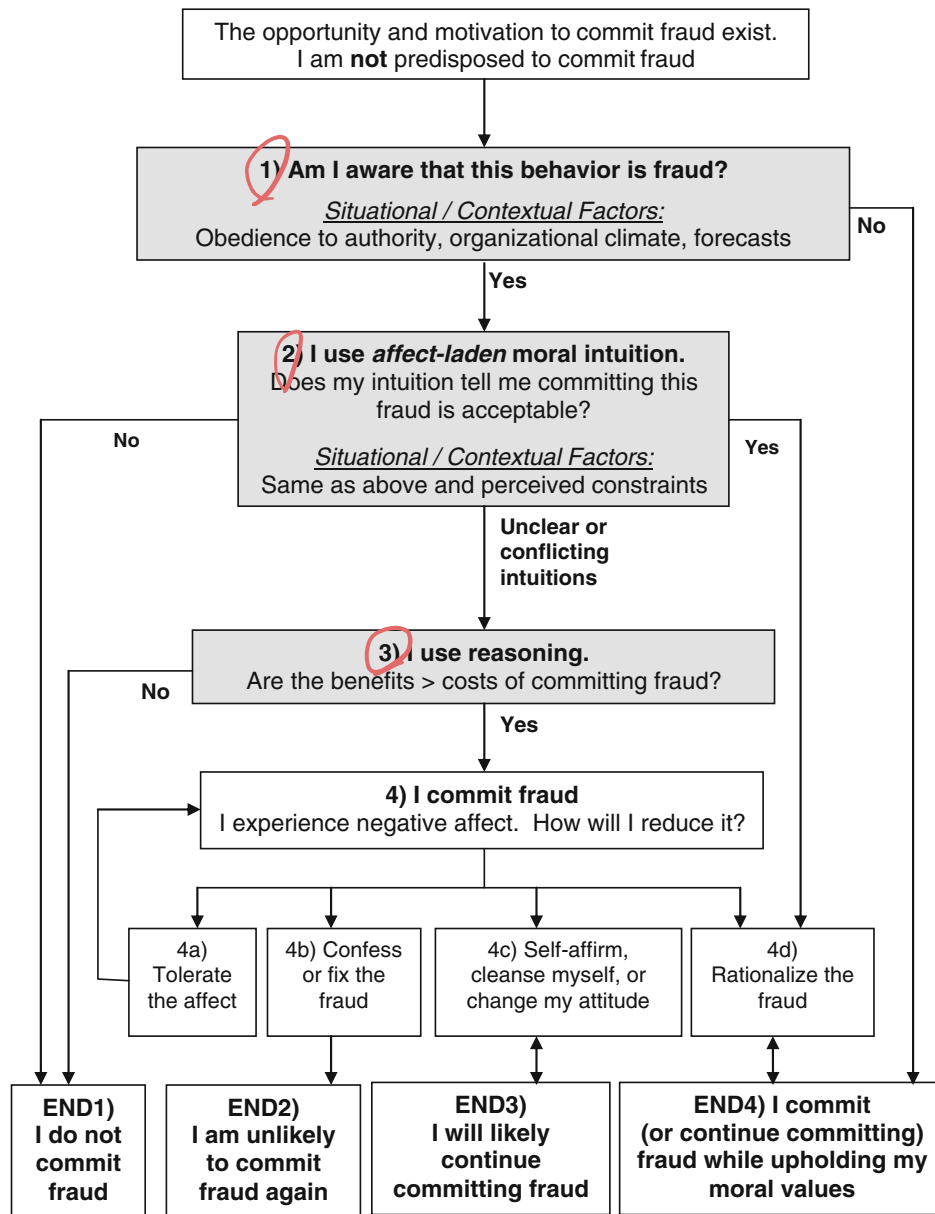
(Hannan et al., 2006; Tsang, 2002). If the individual perceives that the **benefits** of committing fraud **outweigh the costs**, then the individual will commit fraud. When the individual commits fraud, s/he will experience negative affect along with the motivation to reduce it (Bandura, 1991, 1999; Festinger, 1957; Sykes and Matza, 1957). We discuss many ways individuals reduce their negative affect, along with implications for future fraudulent behavior.

This article contributes to the accounting, management, and fraud literatures in four ways. First, it identifies certain insidious situational factors in which individuals commit fraud without recognizing it. Second, it extends our knowledge of rationalization by identifying it as a mechanism used to avoid or reduce the negative affect that accompanies performing an unethical behavior. We identify seven specific categories of rationalization. In doing so, we answer calls for research on rationalization (Hermanson, 2009), as well as provide insight into rationalization categories that are helpful for auditors.⁴ Third, it identifies many other methods fraudsters use to reduce negative affect, each of which could serve as potential “psychological red flags” and helps predict future fraudulent behavior. Together, the second and third contribution extend our understanding of the attitude/rationalization side of the fraud triangle while elaborating on the important role of negative affect in decisions to commit fraud. Finally, our framework can be used as a theoretical basis to explore several interventions designed to deter or prevent fraud.

The remainder of this article follows the path in Figure 1. Each decision point or action is represented by a numbered box. We discuss the supporting theory and literature for each, as well as the outcomes of each decision point. The final section discusses future research possibilities based on this framework.

The framework: psychological pathways to fraud

The framework in Figure 1 begins with an individual who is *not* predisposed toward fraud and has not knowingly committed fraud before, facing both the opportunity and motivation to commit fraud. It ends with current and/or future behavior relative to



The grayed boxes indicate key decision or process points. Interventions can be designed to prevent fraud at each of these points.

Figure 1. The framework: psychological pathways to fraud.

fraud (boxes labeled END1 through END4), with increasing insidiousness. Though the framework is theoretically applicable to all types of fraud, we focus our examples and discussion on significant fraud, not acts such as shirking or taking a pen from the office. We define fraud as an intentional act, considered illegal or highly unethical, committed within the course of one’s employment. Usually a fraud benefits the perpetrator, though that is not a necessary con-

dition. Types of fraud include corruption, asset misappropriation, and fraudulent financial reporting.

One key assumption underlies the second and third pathways in our framework. We assume that individuals view a decision to commit fraud as an ethical decision. In other words, when individuals are aware that the behavior is fraudulent, they will process it within an ethical or moral context.⁵ The three decisions or process points representing

pathways to fraud are highlighted in gray-shaded boxes in Figure 1. Our discussion follows the numbered boxes and links.

Starting point: opportunity and motivation to commit fraud and non-predisposition

A necessary condition for gaining a better understanding of the attitude/rationalization side of the fraud triangle is the presence of both the opportunity and motivation to commit fraud. The US audit standard defines opportunity as, "...circumstances exist – for example, the absence of controls, ineffective controls, or the ability of management to override controls – that provide an *opportunity* for a fraud to be perpetrated" (PCAOB, 2005, AU 316.07). We define opportunity as the perceived opportunity that one can perpetrate the fraud while not getting caught, arguing that if individuals believe they would be caught, they are not likely to perpetrate the fraud. We define motivation to be the perceived motivation; examples include financial (e.g., money), pressure (e.g., pressure to retain their job), or social (e.g., the desire to retain or gain respect or enhance their self-esteem and status) motivation. This part of the fraud triangle is referred to as incentive/pressure in the US audit standard, and described as, "...management or other employees have an *incentive* or are under *pressure*, which provides a reason to commit fraud" (PCAOB, 2005, AU 316.07). We refer to this element as "motivation" and use a broader definition to capture social pressures such as how individuals wish to be seen by others.

A non-predisposition toward fraud is a central tenet in the fraud framework. If people were predisposed to fraud, then they would commit fraud when both the opportunity and motivation are present. Agency theory, the driving theory for much accounting literature, argues that individuals act in rational and self-interested ways (Cohen et al., 2007). Thus, in the presence of opportunity and motivation, and under the perception of not getting caught, agency theory suggests that individuals will commit fraud. However, prior accounting literature has shown that individuals act more honestly than agency theory would predict (Evans et al., 2001; Salterio and Webb, 2006), suggesting that other influences impact individuals' decisions.

Box 1: Am I aware that this behavior is fraud?

In order for individuals to resist committing fraud, they first need to be aware that the behavior in question is indeed fraudulent. We argue there are some situations in which individuals do not recognize that the behavior they are considering is fraudulent or unethical (Tsang, 2002). This step within a fraud context is critical because it leads directly to fraudulent behavior with no reasoning, no negative affect, and no attempts to reduce negative affect. These situations lead individuals to continuously commit fraud with their moral values intact. Though one might reasonably expect such insidious situations to be rare, there is evidence that they exist.

Scholars such as Milgram (1974) and Zimbardo (2007) suggest that the situation plays a far more important role in eliciting "evil" or unethical behavior than previously thought. More recently, Zimbardo (2007) and others (Fiske et al., 2004) highlight the role of social contexts and incrementalism in leading to unethical conduct. Indeed, many researchers pay disproportionate attention to dispositions (attitudes, character traits, etc.) than to situational factors (the context, task, social dynamics, etc.). Kay et al. (2004) find that priming individuals with simple business-related objects leads individuals to behave in a more competitive manner. Aquino et al. (2009) argue that one's moral identity (a values-based predisposition, defined by Aquino and Reed (2002) as a mental representation or schema of the self as a moral being) can be neutralized by situational factors. Using the social-cognitive view of the self, they argue that individuals have multiple identities (e.g., a moral person, an athlete, a parent), only a few of which can be held in consciousness at any point in time. Certain situational factors can temporarily overwhelm one's moral identity, leaving one open to behaving unethically. They find evidence to support this idea using economic incentives to lie in a negotiation task and summarize their findings as follows:

...in the messy, imperfect world of everyday morality, the situation in which we find ourselves can often be decisive in determining the direction toward which our moral compass turns (Aquino et al., 2009, p. 3).

In a similar vein, we suggest that certain situational factors can overwhelm predispositions against fraud, ironically, leading to fraud. We discuss the

following situational factors in accounting and organizational contexts: obedience to authority, an organization's ethical climate and normalization, and forecasts. Each of these situations may alone overpower the recognition of committing fraud, or they may interact with one another.

OK
Obedience to authority *CFO → CEO.*

Milgram (1974) demonstrated the powerful effects of obedience to authority. In his research, naïve participants in the role of teacher/punisher were told to administer increasingly powerful electric shocks to a confederate learner in the next room when he answered a question incorrectly. When the shocks reached a certain level, the confederate learner began calling for help and asking that the experiment stop, while the researcher calmly instructed the teacher to continue.⁶ Despite predictions to the contrary from academics and lay people alike, Milgram found that *all* subjects administered shocks up to the 300-V level, while 65% of subjects administered them to the strongest shock level available: "Danger, Severe Shock," and "XXX."

Examples of acquiescence to authority exist with respect to accounting fraud. In court, Scott Sullivan (WorldCom CFO) testified that Bernie Ebbers (his boss and CEO) told him, "we have to hit the numbers," when discussing the financial statements (Latour and Young, 2005). Several former CFOs at HealthSouth testified that Richard Scrushy, their boss and CEO, "managed greatly by fear and intimidation" (Stuart, 2005), and would not accept financial statements unless they met forecasts (Beam, 2009). It is plausible that the tendency for obedience might have blinded these individuals to the fact that they were committing fraud.

This obedience effect would be especially strong if individuals subscribed to the following moral foundation: the importance of respect and obedience toward authority figures. Haidt et al. (2009) and Graham et al. (2009) argue that there are five different moral foundations upon which cultures or groups create their definition of morality: (1) harm, care, and altruism (people are vulnerable and often need protection); (2) fairness, reciprocity and justice (people have rights to certain treatment or resources); (3) the importance of loyalty to the in-group; (4) the role of authority and importance of respect and obedience; and (5) the importance of

purity, in body and spirit. Moral foundations are "psychological systems that enable people to perceive actions and agents as praiseworthy or blameworthy" (Haidt et al., 2009, p. 112). Though most moral psychologists apply the first two foundations, these authors argue the last three help explain differences in how individuals might view "moral" action.

Hence, we argue that an individual may be placed in a situation in which *an authority figure instructs him/her to participate in some type of fraud*, be it corruption, producing fraudulent financial statements, or covering up. The individual may simply do what s/he is told, and perceive that s/he is being a loyal subordinate without consideration of the legality or ethicality of the actions.

Organizational climate

Every organization has a unique work climate that describes how employees carry out its practices and procedures (Victor and Cullen, 1988). We posit that one such ethics-related work climate may lead employees to carry out fraud without recognizing it: an egoist/local climate. An ethical work climate is defined as the "prevailing perceptions of typical organizational practices and procedures that have ethical content" (Victor and Cullen, 1988, p. 101). Victor and Cullen (1988) describe nine different types of ethical climate along two dimensions: ethical criterion (egoistic, benevolent, and principled) and locus of analysis (individual, local, and cosmopolitan). This matrix is summarized in Table I, along with definitions of each of the dimensions.

We posit that the egoist/local ethical climate is likely to lead employees to commit fraud without thinking about it. In this intersection, employees are expected to do most anything to increase company profit. They learn that the policies and procedures always remain in line with the organization's interest, and they are rewarded based on furthering the organization's interests regardless of the consequences. This particular ethical climate dovetails with the study of Den Nieuwenboer and Kaptein (2008) who highlight the importance of group membership in motivating and rewarding corruption within an organization.

In such an environment, it is easy to see how an employee who carefully watches and learns how to behave might commit fraud if it furthers the

← ethical issues.

TABLE I
Ethical work climate types (Victor and Cullen, 1988, p. 104)

Ethical criterion	Locus of analysis		
	Individual	Local	Cosmopolitan
Egoism	Self-interest	<i>Company profit</i>	Efficiency
Benevolence	Friendship	Team interest	Social responsibility
Principle	Personal morality	Company rules and procedures	Laws and professional codes

Ethical criterion refers to the basic criterion the organization uses in moral reasoning. An *egoist* organization maximizes its own self-interest, a *benevolent* organization maximizes joint interests (e.g., with business partners), while a *principled* organization adheres to principles rather than focusing on maximizing any particular interests.

Locus of analysis refers to the source or referent group used for applying moral reasoning. *Individual* locus refers to the ethical reasoning within the individual employee him/herself, the *local* refers to a group within the organization such as a work group, while the *cosmopolitan* locus specifies groups external to the organization such as professional groups or applicable law.

We argue the italicized texts – the egoist/local climate – represents the climate that leads employees to commit fraud without awareness.

organizational interests. For example, a salesperson might use predatory pricing or offer a bribe to obtain business. An employee in accounting might book a sale prematurely to meet organizational goals. Braithwaite (1984) highlights this phenomenon in the pharmaceutical industry. In these cases, employees view their acts as doing their job.

This situational factor, like obedience, also has a parallel to one of the moral foundations described by Haidt et al. (2009) and Graham et al. (2009): in-group loyalty. To the extent the individual subscribes to the moral belief of loyalty to the group (in this case, the work group or organization), then the individual mimics the behavior of other group members, with moral values intact.

Ashforth and Anand (2003) discuss a related process that culminates in the normalization of collective corruption. Normalization refers to a process by which actions come to be taken for granted, unremarkable and unquestioned over time (Vaughan, 1999). According to Ashforth and Anand (2003), corruption becomes normalized in three phases. First, an initial corrupt decision is made by a leader within the organization; this decision takes place within a permissive ethical climate. Second, corrupt processes begin to form, primarily through leaders' instructions to subordinates and the use of rationalizations (or neutralizations) to justify the behavior.

Finally, corruption becomes routinized and mindlessly followed by all members of the organization. Once deeply embedded in organizational systems and structures, certain practices come to be institutionalized, regarded as “normal” in the course of everyday organizational life.

Forecasts

Forecasts apply to one specific type of fraud – fraudulent financial reporting – that tends to be perpetrated more often by publicly held organizations. The salience of earnings forecasts places significant pressure on top management (documented by Graham et al., 2005). We argue that top management can become so focused on meeting earnings forecasts that they are blinded to the possibility that they are committing fraud. Prospect theory (Kahneman and Tversky, 1979) suggests that individuals who make decisions under risk choose a reference point from which they measure outcomes and decide a course of action. The natural reference point for a publicly held organization is the earnings forecast. Kunda's (1990) theory of motivated reasoning argues that individuals may be unknowingly biased toward reaching a conclusion they want to reach. In other words, when an individual has a directional goal, that individual is motivated to process and evaluate information in a manner biased

toward reaching a conclusion consistent with that goal.

Putting the above two theories together, top executives of publicly held organizations may view the earnings forecast as a directional goal, and they will evaluate accounting information in an **unconsciously biased manner** to meet that goal. To make matters worse, Kunda (1990) argues that this bias is enhanced when individuals have both a directional goal and accuracy goal. Applied to corporate reporting, accounting or financial management is likely to face both types of goals.

Burgstahler and Eames (2006) document how analysts' earnings forecasts impact financial reporting. They provide evidence that management uses two methods to meet or beat analyst forecasts: (1) upward management of reported earnings, and (2) downward management of analysts' forecasts. Specifically, management uses operating cash flows and discretionary accruals to manage earnings toward a target. This evidence supports the notion that management appears fixated on the forecasts and manages to those numbers. These data are often interpreted to mean that when a forecast is within reach, financial statements are manipulated to reach it. Many believe that such manipulation is performed within accounting rules (e.g., by using accounting estimates and taking advantage of gray areas in accounting rules). However, theory suggests that such directional goals can become so insidious that individuals fail to recognize that they are "pushing the envelope" too far.

Interaction of situational factors

Both theory and anecdotal evidence suggest that the situational factors that we describe above often interact. For example, Ashforth and Anand (2003) theorize that fraudulent behavior becomes normalized within organizations (or an unethical climate is created) when malevolent executives instruct subordinates to perpetrate fraud. Over time, such behavior becomes acceptable and commonplace; new employees simply follow the norm. In this example, obedience is the initial mechanism for perpetrating fraud, followed eventually by an organizational climate of unwitting fraudulent behavior. Similarly, forecasts as directional goals can interact with obedience. In the HealthSouth fraud, Richard Scrushy would not accept financial statements that

did not meet analyst forecasts (Beam, 2009). In this example, it appears that forecasts were the directional goals, and Scrushy used his authority as the mechanism to produce fraudulent financial statements.

Box 2: I use affect-laden moral intuition

If individuals are aware that the behavior in question is fraudulent, then we hypothesize that the next step is an affect-laden intuition. According to the social intuitionist model of moral judgment (Haidt, 2001, 2007, 2008), individuals faced with the decision to commit fraud – a moral dilemma – will first base their decision on an instantaneous intuition. This moral intuition is automatic, effortless, and affect-laden. Haidt defines moral intuition as, "the sudden appearance in consciousness of a moral judgment, including an affective valence (good-bad, like-dislike), without any conscious awareness of having gone through steps of searching, weighing evidence, or inferring a conclusion" (Haidt, 2001, p. 818). According to this definition, individuals in our framework are only aware of the result of the intuition: whether committing the fraud is **acceptable or not**. If the intuition indicates that committing fraud is unacceptable, then they do not commit fraud because their "gut" (negative affect) tells them not to. If the intuition indicates it is acceptable, then they are able to rationalize the behavior. In this case, individuals can commit fraud while avoiding negative affect. If the intuition is unclear or conflicting, then individuals go to a rational and effortful reasoning stage.

The essence of the moral intuition stage is that individuals have an affective reaction to perceived immoral behavior. This affect-based process is consistent with, and supported by, evidence from neuroscience. Damasio (2003, 2007) found that individuals with damage to a particular portion of the brain, the ventromedial prefrontal cortex, could no longer make ethical judgments. They lacked the "flashes of affect" that most people feel when considering an unethical or immoral act, even though they retained their reasoning skills and IQ. Others have found similar links between moral judgment and portions of the brain that control emotion (Greene et al., 2001; Hotz, 2007), highlighting the pivotal role played by emotion. For many people, these affective reactions immediately lead to an

intuition that committing fraud is wrong. For example, in a survey of college students, Diekhoff et al. (1999) find that the biggest deterrent to cheating is guilt. The only way to overcome that intuition is the ability to rationalize the behavior as acceptable in this particular situation.

We note that the same situational factors that can cause an otherwise law-abiding individual to perpetrate fraud without awareness may also allow a different individual (who is aware the behavior is fraud) to perpetrate the fraud using intuition. That is, many individuals are aware that the act is fraudulent, but they see no other alternative; they perceive constraints to acting morally. For example, individuals may have been told to perpetrate a crime, and they perceive no other choice because they will lose their job if they do not follow orders.

Using the same example described above, we can apply some of the same moral foundations (Graham et al., 2009; Haidt et al., 2009) discussed earlier to further understand why individuals may do as they are told. The individuals may follow the moral foundation that views obedience as an important moral compass, perhaps *more* important than perpetrating fraud. Lower level accounting managers at WorldCom cited a sense of loyalty to their boss, Scott Sullivan, for following orders to book fraudulent accounting entries (Pulliam, 2005). It is possible that these individuals were aware that they were doing something wrong, but believed that the more important “right” thing was to be loyal to their boss.

Finally, we argue that **rationalization is the mechanism used to avoid negative affect when an individual’s intuition concludes it is acceptable to commit fraud.** Indeed, rationalization is the only mechanism available at this point in the decision process. Following the same example above, the individual can easily displace responsibility by arguing s/he has no choice but to follow orders and the person giving the order is responsible for any consequences. The individual in this situation has shifted blame to the authority figure to avoid negative affect.

Box 3: I use reasoning

If the result of one’s intuition is unclear or conflicting, then the individual will apply reasoning to the decision. Unlike moral intuition which is automatic and

affect-laden, reasoning is a more controlled, effortful, rational process. The individual seeks and processes information. According to Haidt, “the words *intuition* and *reasoning* are intended to capture the contrast made by dozens of philosophers and psychologists between two kinds of cognition...**intuition occurs quickly, effortlessly, and automatically**,...whereas **reasoning occurs more slowly, requires some effort**, and involves at least some steps that are accessible to consciousness” (Haidt, 2001, p. 818). In many ways, the reasoning process is akin to performing a cost benefit analysis. Many researchers argue that an individual will perform a cost benefit analysis when considering whether to perpetrate a fraud (Hannan et al., 2006; Tsang, 2002).

The **benefits** of committing fraud might include financial rewards, the appearance of being successful, or getting revenge. Potential **costs** to committing fraud include getting caught, with resultant decreases in social status, possible financial penalties, and even jail time. Some individuals might care about whether others are hurt by committing fraud, and consider that cost in the decision making process (Gneezy, 2005). In addition, moral disengagement and neutralization theories imply that individuals will anticipate experiencing negative affect if they commit fraud, regardless of whether they get caught. Anticipated negative affect is a cost of committing fraud. In our framework, each individual weighs the costs and benefits according to his/her own utility function. If the individual decides that the costs of committing fraud outweigh the benefits, s/he will not commit fraud – an end-point in the framework. However, if the cost benefit analysis goes the other way, the individual will commit fraud and experience some type of negative affect.

It is important to note that Haidt’s (2001, 2008) views reasoning in such situations as not at all “rational.” In his social intuitionist model of moral judgment, he argues that once individuals pass the moral intuition stage, they make a “moral judgment” and then use “moral reasoning” to justify their judgment. He defines moral judgment as, “evaluations (good vs. bad) of the actions or character of a person” (Haidt, 2001, p. 817) and discusses moral reasoning as, “more like a lawyer defending a client than a judge or scientist seeking truth” (Haidt, 2001, p. 820). In other words, Haidt argues that if individuals are in the “moral reasoning” stage, then

直觉
纠结

they have already decided to commit fraud. Their reasoning process is really searching for ways to justify the already-made decision. This argument is consistent with Kunda's (1990) motivated reasoning theory. We believe individuals facing a decision to commit fraud can and do make "rational" judgments, using some form of cost benefit analysis. For example, Lee Iacocca, then president of Ford, chose to move ahead with production of the Pinto despite evidence that it could explode in rear collisions (Gioia, 1992; Sherefkin, 2003). Allegedly, a cost benefit analysis revealed it would be too costly to fix the problem. We extend Haidt's theory by elaborating upon a "reasoning" stage after "moral intuition" and before "moral judgment." Perhaps empirical testing can resolve whether individuals use rational reasoning before a judgment, as we posit, or moral (motivated) reasoning to justify an already formed judgment, as Haidt suggests.

Box 4: I commit fraud and attempt to reduce negative affect

Non-predisposed individuals who decide to commit fraud are expected to experience negative affect (feelings) because committing fraud is contrary to their attitudes or ethical values. These negative feelings are either psychological discomfort (Devine et al., 1991; Festinger, 1957) or guilt (Bandura, 1991, 1999; Sykes and Matza, 1957). The experience of negative affect associated with a fraudulent act is supported by several theories, namely, cognitive dissonance (Festinger, 1957; Harmon-Jones and Mills, 1999), moral disengagement (Bandura, 1991, 1999), and neutralization (Sykes and Matza, 1957).⁷

Individuals who experience negative affect also experience a motivation to reduce that negative affect (Bandura, 1999; Cromwell and Thurman, 2003; Festinger, 1957; Sykes and Matza, 1957). We suggest that there are four general categories that capture the methods fraudsters use to reduce their negative feelings, each with implications for future behavior. We discuss each category – boxes 4a through 4d – in Figure 1 from left to right.

Box 4a: Tolerate the affect

Some literature implies that individuals may not be able to reduce the negative affect that accompanies a

fraudulent act (Palmer, 2008; Palmer and Maher, 2006). These individuals simply try to tolerate the feelings. In such situations, we posit the feelings persist and the individual remains stuck in a perpetual cycle of negative affect.

In a similar vein, Cromwell and Thurman (2003) argue that one method of neutralizing negative affect is to try to avoid it. They refer to this technique as *postponement*. In their research, they found that some individuals simply tried to ignore the act all together, to postpone any guilt they would likely have. These individuals simply stated they had not thought about it. In his trial, Dennis Koslowski, then CEO of Tyco, testified that he had not thought about his behavior when he was perpetrating fraud (Reingold, 2003). Though neutralization theorists refer to postponement as a neutralization technique (a rationalization), we categorize it differently than other rationalizations because of a decidedly different outcome. The distinction is whether the rationalization is successful or not. A successful neutralization or rationalization reduces negative affect, allowing the individual to commit fraud while feeling fine about it. Postponement does not reduce negative affect; thus there is no distinct outcome. The individual remains in a loop of negative affect unless s/he is able to find another method.

Box 4b: Confess or fix the fraud

Festinger (1957, 1962) argued that one of the ways individuals reduce dissonance is to **change the inconsistent behavior**. Applying this concept to fraud, we might expect a fraudster to stop committing fraud, confess, or fix the fraud (i.e., make the victim whole again). Looking at fraud cases anecdotally, confession occurs when the individual is feeling terribly guilty and/or is about to get caught. In the most severe circumstances, fraudsters have committed suicide and left a note expressing extreme sorrow yet seeing no other way out of the situation (Knapp, 2001; Ribeiro, 2010). For fraudsters who feel similar guilt but do not believe they will be caught, they might simply fix the fraud somewhat anonymously by replacing a stolen asset, repaying stolen money, or reversing fraudulent transactions. Based on anecdotal evidence, it appears that confession and fixing the fraud occur less frequently than other methods, and fraudsters in such situations appear to be driven by high levels of remorse and

guilt. Perhaps these fraudsters were unable to reduce negative affect sufficiently using other methods.

Box 4c: Self-affirm, cleanse myself or change my attitude

Self-affirmation theory argues that dissonance is not caused by two competing cognitions but rather a threat to one's feelings about his/her own integrity (Steele, 1988). Individuals are motivated to see themselves in a positive light. If an individual commits fraud, then s/he is motivated to improve self-image in some other way. The theory asserts that an individual could admit wrongful behavior if s/he affirmed another equally valuable part of the self. For example, a fraudster might contribute large amounts of money to a charity, if being a charitable person were important to him/her. Dennis Kozlowski contributed millions to charities (Conlin et al., 2003), including his alma mater (Byrne, 2002), while he fraudulently used more than \$600 million of Tyco funds for personal expenses.⁸

The second method in this category is self-cleansing. An intriguing line of research finds that individuals who have behaved unethically, or asked to think of a time they behaved unethically, tend to wash or cleanse themselves more frequently than those who have not (Zhong and Liljenquist, 2006). Though we are unaware of examples of this "MacBeth effect" in an organizational setting, a noticeable *change* in an individual's cleansing-type behavior might be a clue to fraudulent behavior.

Attitude change is the method of dissonance reduction most studied in social psychology. This literature finds robust attitude change among individuals who perform an act that is contrary to their attitude (see Elliot and Devine, 1994 as an example). Applied to a fraud context, an example of an attitude change would be an increase in attitude favoring fraud. In other words, the attitude might go from "committing fraud is wrong" to "committing fraud may not be so bad."

Box 4d: Rationalize the fraud

Rationalization is defined as a way to justify a behavior or thought that is inconsistent with one's opinion (Sloane, 1944). Social psychology literature defines it as, "a post-behavioral process through which a problematic behavior becomes less problematic for the person who has displayed it" (Foin-tiat, 1998, p. 471). Researchers sometimes use

different terminology for the same construct.⁹ The common element is that rationalization is a mechanism that allows individuals to justify an inconsistent ("bad") behavior to reduce or avoid the negative affect that would normally accompany it.

Rationalization involves changing one's perception of the situation or social environment to justify the behavior (Festinger, 1957, 1962). An individual who rationalizes a behavior still holds the same overall attitude toward that behavior, but justifies it with situation-specific perceptions. Individuals who rationalize fraudulent behavior are able to sleep at night, believing they are honest and ethical. A thorough reading of theories related to rationalization and mechanisms to disengage or neutralize negative affect yields a list of seven "rationalization categories," as follows:

Moral justification refers to the reconstrual of a reprehensible behavior as appearing socially worthy or having a higher moral purpose (Bandura, 1999). This mechanism has been used to justify military conduct or terrorism. Three techniques emanating from neutralization theory fit the same category. Sykes and Matza (1957) posit an "appeal to higher loyalties," in which the perpetrator argues s/he is helping the group. This individual feels that his/her loyalty to the group – whether it is family, friends, or the organization – is more important than loyalty to victims. For example, individuals committing fraudulent financial reporting may argue that they were helping the organization. Another technique known as "the defense of necessity" has a similar tone. An individual argues that s/he had no choice but to engage in a criminal act (Cromwell and Thurman, 2003), which is usually followed by an appeal to a higher loyalty. Finally, an individual can "condemn the condemners" by arguing that the entire system is corrupt, and that the people calling him/her a criminal are hypocrites. This person sees him/herself as striking out against a malevolent system (Sykes and Matza, 1957).

Some individuals argue that their behavior is not so bad when compared to more flagrant acts. Bandura labels this "*advantageous comparison*" while Sykes and Matza refer to this as "justification by comparison." For example, an employee may steal office supplies from his/her employer and justify it as a very minor offense compared to stealing something more valuable. Perhaps more harmful is a situation in

which individuals perpetrate a financial statement fraud while arguing that it is not nearly as bad as Enron. In experiments that provide participants with the opportunity and motivation to misreport, Murphy (2010) finds that some participants argue they “cheated only partway.” In other words, they did not take full advantage of a situation, but rather found what they considered a compromise between complete dishonesty and complete honesty.

Euphemistic labeling is used by Bandura (1999) to refer to someone who uses strange or convoluted language to make a wrongful act sound better. An example of this may include situations in which management tries to justify aggressive interpretations of GAAP with incomprehensible language or reasoning. According to the whistleblower at WorldCom, Scott Sullivan wrote a lengthy white paper in support of capitalizing rather than expensing certain costs (Cooper, 2005). In the same experiment cited above (Murphy, 2010), one participant explained his/her misreporting by saying that s/he was “leveling the playing field,” when there was no discernable playing field to be leveled in the particular experiment.

Bandura describes a relatively easy rationalization mechanism known as “*minimize, ignore, or misconstrue consequences of the act.*” This category includes arguments such as “no one was hurt,” known as denial of injury by Sykes and Matza (1957), or lessening the significance of the counter-behavior (Simon et al., 1995). In addition, this is used by individuals who choose to ignore any harm to another individual. This mechanism appears to be broadly applied and has been found to be especially effective. In experiments, Bandura and colleagues found that participants who used this mechanism were less able to recall the harmful effect while readily remembering other aspects of the experiment (Bandura et al., 1996). It is rather easy to imagine a fraudster arguing that s/he did not really hurt anyone by stealing from an organization.

One mechanism takes aim at the victim. Sykes and Matza (1957) refer to this as “*denial of the victim*” in which the perpetrator claims to be retaliating or punishing the victim. In other words, the perpetrator argues that the victim had it coming. Bandura (1999) refers to either attributing blame to or dehumanizing the victim. Dehumanization of the victim is used in offenses such as genocide. In a

corporate environment, such rationalization can go hand in hand with a motive to retaliate against a boss who passed over an employee for a promotion, or otherwise mistreated an employee (Sprouse, 1992). Fraudsters may argue the organization deserved to be hurt by his/her fraudulent behavior.

Two mechanisms throw the blame elsewhere. The first, “*obscuring personal agency by displacing responsibility,*” is used to blame someone else for the offense. For example, an individual may argue that s/he was told to engage in fraudulent behavior (as discussed earlier). Similarly, individuals can *diffuse responsibility* in several ways. One easy way is to argue that “everybody does it” (Bandura, 1999; Callahan, 2004; McKimmie et al., 2003). Richard Scrushy, the former CEO of HealthSouth, allegedly stated that “all companies fudge their numbers” (Stuart, 2005). Some individuals claim that they are simply not responsible for their actions (Gosling et al., 2006). Some argue a lack of responsibility because they feel helpless against the forces that drive them to do what they do (Sykes and Matza, 1957). This mechanism is used to deflect blame away from the perpetrator to society or other outside forces.

ENDpoints and continuing behavior

Our framework ends with four levels of behavioral tendencies dependent upon how the individual processes the fraud decision and handles negative affect. The four endpoints are aligned in “best to worst” normative order; that is, END1 is the best outcome while END4 is the worst outcome in terms of fraudulent behavior. END1 is the decision not to commit fraud in the first place. END2 through END4 represent an increasing likelihood of committing, or continuing to commit, fraud. END4 is arguably the worst because the individual commits fraud with moral values intact.

The purpose of this section is to provide more detailed insights into fraud prevention and detection. We believe that each method of reducing negative affect, based on its underlying theory, impacts the propensity to continue committing fraud. Armed with knowledge of these associations, perhaps interventions can be designed to lead individuals down pathways that have a decreased likelihood of committing fraud. Alternatively, we can identify

behaviors associated with pathways that lead to increased likelihood of fraudulent behavior, and use them for fraud detection. For example, END1 is useful for tracing backwards through the paths that lead individuals there, to identify and examine the underlying psychological mechanisms for fraud prevention purposes. Likewise, END2 may provide insights or ideas for fraud prevention. END3 and END4 may be useful to identify behaviors that can be used as red flags for predicting fraudulent activity or detecting fraud.

Importantly, we assume in these situations that the fraudster is not caught. We are relying solely on the psychological forces that propel individuals. Speaking in general, if the fraudster is not caught, then the fraud is likely to continue because the immediate rewards for committing the fraud are reinforced (Wilson and Herrnstein, 1985). This finding is consistent with an emboldened fraudster who finds continued success with his/her chosen method of reducing negative affect.

END1: I do not commit fraud

There are two paths to *not* committing fraud in our framework. First, some people will automatically avoid fraud when they are aware of it and their intuition tells them to. The flashes of negative affect are great enough that the individual does not consider committing fraud. Second, other individuals will decide not to commit fraud after using reasoning; they have decided the costs of committing fraud outweigh the benefits.

Deciding not to commit fraud is, of course, the most favorable outcome in the framework. It would be helpful to examine in greater detail the intuition and reasoning process in the presence of opportunity and motivation to commit fraud. Perhaps one of these processes is a stronger deterrent, or they vary depending upon other situational factors. We believe it is useful to examine not only the decision process leading to fraud, but also the process that leads away from fraudulent behavior, to learn more about effective prevention.

END2: I am unlikely to commit fraud again

We posit that if an individual confesses or fixes the fraud, then s/he is unlikely to commit fraud again. Remember that the individual is not predisposed to commit fraud and has not been caught. Thus, the

most likely reason the individual confesses or fixes the fraud is to reduce negative affect; s/he feels terrible and wishes to relieve that feeling. The motive to reduce negative affect is supported by dissonance (Festinger, 1957), neutralization (Sykes and Matza, 1957), and moral disengagement theory (Bandura, 1991, 1999). This particular method for reducing negative affect is quite bold compared to the other methods. Thus, we argue it is unlikely the individual will place him/herself in a similar situation again. One may argue that if a fraudster fixes the fraud *anonymously*, s/he may perpetrate fraud again since s/he is emboldened by not being caught.¹⁰ We believe that this is less likely, since a strong psychological force propelled the fraudster to fix it in the first place. However, because our argument is based on theory and anecdotal evidence, it remains an important empirical question to be examined.

END3: I will likely continue committing fraud

Self-affirmation, cleansing, and attitude change all, theoretically, allow individuals to continue the reprehensible act; they have reduced their negative affect. However, these individuals are not justifying their actions. They know their fraudulent behavior violates their own self-beliefs and remains counter to societal norms. Thus, we argue that even though these individuals may be reducing their negative affect, it remains an empirical question whether these individuals' negative affect is reduced to a tolerable level. Fraudsters who use these methods of reducing negative affect are more likely to use them simultaneously and with greater frequency. Note that the arrow between box 4c and END3 is bidirectional, indicating that these individuals must continue using these methods as long as they continue to commit fraud.

Two of the three methods may be useful for fraud detection, albeit slim. Self-affirmation and cleansing are both observable, but are done for reasons other than fraudulent activity. For example, if a fraudster contributes to charity as a self-affirmation, we should not use that observation alone as a red flag for fraud detection. However, we should not use that observation to conclude the individual is necessarily a "good" person either. Likewise, cleansing is a physical activity and may be observable, but may be done for reasons other than reducing negative affect. Finally, attitude change is neither a physical activity

nor observable. There is no practical way to observe attitude change, and it is difficult to measure attitude change; thus it is nearly impossible to detect.

END4: I commit (or continue committing) fraud while upholding my moral values

We believe that the worst outcome with respect to future fraudulent behavior is when fraudsters believe their moral values are upheld. There are three paths toward this outcome: (1) through lack of awareness due to powerful situational factors, (2) through rationalization combined with moral intuition before committing the fraud, and (3) through rationalization after committing the fraud. Note that rationalization plays a key role in two of the three paths. Indeed, rationalization appears to be ubiquitous, both theoretically and empirically (Callahan, 2004). Worse yet, individuals who rationalize have no compunction about continuing to commit fraud while believing themselves to be moral, law-abiding individuals.

An understanding of rationalization is useful for predicting the likelihood of fraud within an organization or for detecting it. Auditors, board members, executives, and forensic specialists would benefit from a working knowledge of the types of rationalizations that would likely accompany different types of fraud. For example, they could sensitize themselves to the likely rationalizations and listen for them as red flags for fraudulent activity. They can even use them in interviews with suspects, to get a confession.

Discussion

Our framework describes an individual's decision-making process with respect to committing fraud within an organization. It is consistent with other models relating to corruption within organizations or ethical decision making. For example, it can be used to explain how fraud becomes normalized within an organization, consistent with Ashforth and Anand (2003). We can trace the process as follows, using Figure 1. In the first phase, top management makes a "rational" decision to commit fraud by concluding the benefits of committing fraud outweigh the costs. They are expected to experience negative affect, but use rationalization to reduce or

avoid it. In the next phase, middle managers are told by top management to commit fraud. They can take one of three avenues, consistent with each of the three pathways: (1) blindly do what they are told, without thought, (2) rely on their own intuition and/or reasoning and decide to commit fraud because they are provided a rationalization by top management, or (3) refuse to commit fraud. The first two lead to continued fraud while upholding one's own ethical values. Finally, new employees look for signals indicating socially acceptable behavior within the organization. The climate encourages fraudulent behavior as normal and acceptable, so new employees commit fraud without thinking. The end result is continual fraud, with individual organizational members not thinking about it and believing their ethical values are upheld.

Two key observations are made with respect to our framework and Ashforth and Anand's (2003) study on normalization within organizations. First, the road to normalization requires a series of factors to work in tandem (Palmer, 2008; Palmer and Maher, 2006). The interaction of the situational factors and three different pathways cannot be underestimated. Note that two of our framework's situational factors – obedience to authority and ethical climate – are also highlighted by Ashforth and Anand (2003).

Second, both our framework and Ashforth and Anand (2003) highlight the important role of rationalization. Drawing on Adams and Balfour (1998), Ashforth and Anand (2003) emphasize the role of rationalizing ideologies in reducing ambiguities between means–ends dilemmas. These ideologies allow individuals to negate negative attributions and, in doing so, expand the boundaries of legitimate action in a given situation (Ashforth and Anand, 2003, p. 16). Thus, fraud is acceptable both normatively and cognitively.

Our framework is also consistent with Rest's (1979, 1994) Model of Ethical Action. His model theorizes that ethical reasoning consists of four components or steps: (1) identification of a situation as an ethical dilemma, (2) making an ethical judgment (what ought to be done), (3) intending to act ethically, and (4) carrying out the ethical action. The four boxes in our framework generally align with Rest's four steps. However, our framework focuses on both results (ethical and fraudulent behavior) while also highlighting psychological phenomena

that drive the decision process, both during and after the fraud is carried out.

Conclusion and future research

Organizations lose an estimated 5% of annual revenues to fraud (ACFE, 2010). Despite fraud prevention efforts such as increased legislation and enforcement or increased emphasis on “tone at the top,” fraud remains relatively entrenched within organizations. The purpose of this article is to develop a more thorough understanding of the psychological pathways to fraud, to further fraud prevention and detection efforts. It provides additional insights into the attitude/rationalization side of the fraud triangle in the presence of both opportunity and incentive/pressure. We find there are three distinct psychological mechanisms leading to fraudulent behavior: (1) lack of awareness, (2) intuition coupled with rationalization, and (3) reasoning. Each mechanism would require a different type of intervention designed to deter fraud, and may provide “psychological red flags” for fraud detection.

The framework developed in this article is particularly useful for future research into fraud prevention. According to leading criminologists, there are three general categories of crime prevention: punitive, defense, and interventionist methods (Sutherland et al., 1992). Punitive crime prevention methods use increasing punishment to make individuals too fearful to commit a crime. Regulations such as the Sarbanes–Oxley Act of 2002 in which, for example, an individual can go to jail for lying to the auditor, use the punitive crime prevention method. Defense methods concentrate on limiting the opportunity for committing a crime, such as improving internal controls within an organization. Interventionist methods are based on the observation that the first two methods are not necessarily effective. This method assumes that, “crime rates can be reduced significantly only by determining the conditions that produce them and then changing those conditions” (Sutherland et al., 1992, p. 574). The interventionist method, “is, or could be, the most effective system for reducing crime rates” (Sutherland et al., 1992, p. 575). Researchers are in a unique position to examine various interventions designed

to prevent fraud. We propose several research questions, following each of the three pathways.

The first pathway to fraud occurs when individuals are unaware their actions are fraudulent. Interventions regarding this decision point (or lack thereof) must deal with how awareness can be altered. In these situations, the saliency of the situation overwhelms the saliency of the fraudulent behavior. In addition, we suggest that the situations discussed in our framework can interact with each other leading to a number of potential research questions within organizational settings. For example, in the presence of malevolent authority, egoistic/local ethical climate, or analyst forecasts, what mechanisms (e.g., training, codes of conduct) increase awareness of an act as fraudulent? Is the interaction of the three situational factors additive or multiplicative and how might they be overcome? And, to what extent does the strength of individuals’ moral foundations of loyalty or respect for obedience impact awareness of or propensity to commit fraud?

The second pathway to fraud occurs when individuals’ intuitions tells them it is acceptable to commit fraud because of a rationalization. Researchers need to better understand not only how easily rationalizations can be conjured, but what might thwart the use of rationalizations. Some evidence exists that reminders of flaws in common rationalizations might be an effective intervention in preventing fraud. For example, Murphy (2010) found that when reminders of the flaws in typical rationalizations were provided to participants prior to making a (mis)reporting decision, significantly fewer participants misreported. Arendt (1984) argues that forcing an individual to think first may be an antidote to unethical or evil behavior. Alternatively, interventions designed to increase affective reactions may be successful. Future research may consider the extent to which certain mechanisms such as training, reminders, and forced thinking can reduce or prevent individuals’ ability to use rationalization. In addition, can the immediate affective reaction be made stronger or more salient to prevent fraudulent behavior? What mechanisms (whistle-blowing hotline, different organizational structures) can overcome an employee’s perception that s/he has no other choice but to commit fraud?

The final pathway to fraud deals with reasoning. Simply making the perceived costs outweigh the

perceived benefits of fraud should sway rational individuals away from fraudulent behavior. However, it is not clear whether perception of the cost/benefit decision differs from fact, nor is it clear whether the decision process is truly rational. Research questions emanating from this pathway may include understanding in what ways are perceptions different from reality when facing a decision to commit fraud and under what circumstances are decisions to commit fraud rational versus rationalization? And, are the methods of reducing negative affect equally successful, and do they predict the likelihood of fraud within an organization?

Our framework does not distinguish between different types of fraud. Though we argue that it should apply to any type of fraud, the magnitude of negative affect and/or the methods used to reduce negative affect may be impacted by the type of fraud. Researchers might consider applying Jones' issue-contingent model of ethical decision making to various types of fraud (Jones, 1991). Jones posits that ethical decision making is impacted by the moral intensity of the particular issue at hand. Moral intensity is intended to capture, "the extent of issue-related moral imperative in a situation" (Jones, 1991, p. 372). Six characteristics can impact each situation's moral intensity: (1) the magnitude of the consequences of the act, (2) the degree of social consensus about the ethicality of the act, (3) probability that the act will take place and will cause an effect, (4) temporal immediacy of the consequences, (5) proximity of the victims to the actor, and (6) concentration of effect or number of people impacted. To the extent that decisions involving fraud are perceived as decisions involving ethics, the Jones' model may provide useful insights into the level of negative affect anticipated or experienced by the perpetrator. We posit that our framework applies best to frauds of higher moral intensity, with the level of moral intensity perhaps associated with the level of negative affect anticipated or experienced by the perpetrator.

Notes

¹ One example of a predisposed individual is a psychopath. Psychopaths represent only about one percent of the general population but 15% of the prison population (Babiak and Hare, 2006).

² We use "situation" to refer to elements in the environment, external to the individual, such as the impact of others, the institutional setting, the regulatory environment, etc.

³ Researchers often use the terms emotion, feelings, or affect interchangeably. Within social psychology, the term used most often is affect (see Zajonc, 1980, one of the first articles on this phenomenon). For individuals who commit fraud, we refer to the distinct emotion as *negative affect*: a "bad" feeling that can be experienced as guilt or discomfort (Elliot and Devine, 1994; Monteith et al., 1993; Plant and Devine, 1998).

⁴ For example, auditors can become familiar with the rationalization categories and design interview techniques to identify them. An identified rationalization serves as a psychological red flag to the presence of fraud.

⁵ We use the terms "ethical" and "moral" interchangeably in this article. Both are defined loosely as right versus wrong, with individuals using different definitions or foundations for what is right.

⁶ In fact, no shocks were administered. Participants were de-briefed after each demonstration and given the opportunity to talk to the learner to verify that s/he was alright.

⁷ Research has documented the presence of discomfort and guilt in circumstances where attitude and behavior are inconsistent (Devine et al., 1991; Elliot and Devine, 1994; Monteith et al., 1993; Plant and Devine, 1998).

⁸ Self-affirmation could be particularly insidious because of how it is viewed by others. For example, an auditor may see that executives of a company contribute to charities and conclude that they are ethical leaders.

⁹ Different terms have been used to describe the same construct as rationalization. Neutralization theorists use "techniques of neutralization" (Sykes and Matza, 1957), while Bandura (1991, 1999) refers to them as "moral disengagement mechanisms."

¹⁰ We thank an anonymous reviewer for this insight.

Acknowledgments

We thank the following persons for their insightful comments on earlier drafts: Bryan Church, Jon Davis, Trish Devine, Karla Johnstone, Brian Mayhew, Holly Skaife, participants of the Advancing Fraud Research Conference at Queen's University, and two anonymous reviewers.

References

- Adams, G. B. and D. L. Balfour: 1998, *Unmasking Administrative Evil* (Sage, Thousand Oaks, CA).
- Advisory Committee on the Auditing Profession (ACAP): 2008, *Final Report of the Advisory Committee on the Auditing Profession* (United States Department of the Treasury, Washington, DC).
- American Institute of Certified Public Accountants (AICPA): 2002, October, *SAS No. 99: Consideration of Fraud in a Financial Statement Audit* (AICPA, New York, NY).
- Aquino, K., D. Freeman, A. Reed II, V. K. G. Lim and W. Felts: 2009, 'Testing a Social Cognitive Model of Moral Behavior: The Interactive Influence of Situations and Moral Identity Centrality', *Journal of Personality and Social Psychology* **97**, 123–141.
- Aquino, K. and A. Reed: 2002, 'The Self-Importance of Moral Identity', *Journal of Personality and Social Psychology* **83**, 1423–1440.
- Arendt, H.: 1984, 'Thinking and Moral Considerations: A Lecture', *Social Research* **51**, 7–37.
- Ashforth, B. E. and V. Anand: 2003, 'The Normalization of Corruption in Organizations', *Research in Organizational Behavior* **25**, 1–52.
- Association of Certified Fraud Examiners (ACFE): 2010, October, *Report to the Nations on Occupational Fraud and Abuse* (ACFE, Austin, TX).
- Babiak, P. and R. D. Hare: 2006, *Snakes in Suits* (Harper Collins Publishers, New York, NY).
- Bandura, A.: 1991, 'Social Cognitive Theory of Moral Thought and Action', in W. M. Kurtines and J. L. Gewirtz (eds.), *Handbook of Moral Behavior and Development: Vol. 1 Theory* (Erlbaum, Hillsdale, NJ).
- Bandura, A.: 1999, 'Moral Disengagement in the Perpetration of Inhumanities', *Personality and Social Psychology Review* **3**, 193–209.
- Bandura, A., C. Barbaranelli, G. V. Caprara and C. Pastorelli: 1996, 'Mechanisms of Moral Disengagement in the Exercise of Moral Agency', *Journal of Personality and Social Psychology* **71**, 364–374.
- Beam, A.: 2009, *HeathSouth: The Wagon to Disaster* (Wagon Publishing, Fairhope, AL).
- Braithwaite, J.: 1984, *Corporate Crime in the Pharmaceutical Industry* (Routledge and Kegan Paul, London).
- Burgstahler, D. and M. Eames: 2006, 'Management of Earnings and Analysts' Forecasts to Achieve Zero and Small Positive Earnings Surprises', *Journal of Business Finance & Accounting* **33**, 633–652.
- Byrne, J.: 2002, September 20, 'Seton Hall of Shame?', *Business Week Online*, p. 1.
- Callahan, D.: 2004, *The Cheating Culture* (Harcourt, Inc, Orlando, FL).
- Carcello, J. V., J. C. Bedard and D. R. Hermanson: 2008, 'Responses of the American Accounting Association's Tracking Team to the Recommendations of the Advisory Committee on the Auditing Profession', Working Paper, University of Tennessee, Bentley University and Kennesaw State University.
- Carcello, J. V. and D. R. Hermanson: 2008, 'Fraudulent Financial Reporting: How Do We Close the Knowledge Gap?', Working Paper, University of Tennessee and Kennesaw State University.
- Cohen, J. R., L. Holder-Webb, D. J. Sharp and L. W. Pant: 2007, 'The Effects of Perceived Fairness on Opportunistic Behavior', *Contemporary Accounting Research* **24**(4), 1119–1138.
- Collins, J. D., K. Uhlenbruck and P. Rodriguez: 2009, 'Why Firms Engage in Corruption: A Top Management Perspective', *Journal of Business Ethics* **87**, 89–108.
- Conlin, M., J. Hempel, J. Tanzer and D. Polek: 2003, 'The Corporate Donors', *BusinessWeek*, Vol. 3860, pp. 92–96.
- Cooper, C.: 2005, WorldCom Fraud. Speech Delivered at American Accounting Association Audit Midyear Meeting, January, 2005.
- Cromwell, P. and Q. Thurman: 2003, 'The Devil Made Me Do It: Use of Neutralizations by Shoplifters', *Deviant Behavior* **24**, 535–550.
- Damasio, A.: 2003, *Looking for Spinaza* (Harcourt, Inc., Orlando, FL).
- Damasio, A.: 2007, 'Neuroscience and Ethics: Intersections', *The American Journal of Bioethics* **7**(1), 3–7.
- Den Nieuwenboer, N. and M. Kaptein: 2008, 'Spiraling Down into Corruption: A Dynamic Analysis of the Social Identity Processes That Cause Corruption in Organizations to Grow', *Journal of Business Ethics* **83**, 133–146.
- Devine, P. G., M. J. Monteith, J. R. Zuwerink and A. J. Elliot: 1991, 'Prejudice with and Without Compunction', *Journal of Personality and Social Psychology* **60**(6), 817–830.
- Diekhoff, G. M., E. E. LaBeff, K. Shinohara and H. Yasukawa: 1999, 'College Cheating in Japan and the United States', *Research in Higher Education* **40**(3), 343–353.
- Elliot, A. J. and P. G. Devine: 1994, 'On the Motivational Nature of Cognitive Dissonance: Dissonance as Psychological Discomfort', *Journal of Personality and Social Psychology* **67**(3), 382–394.
- Erickson, M., M. Hanlon and E. L. Maydew: 2004, 'How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings', *The Accounting Review* **79**(2), 387–408.

- Evans, J. H. III, R. J. Hannan, R. Krishnan and D. V. Moser: 2001, 'Honesty in Managerial Reporting', *The Accounting Review* **76**(4), 537–559.
- Festinger, L. A.: 1957, *A Theory of Cognitive Dissonance* (Peterson, Evanston, IL).
- Festinger, L. A.: 1962, 'An Introduction to the Theory of Dissonance', in L. A. Festinger (ed.), *A Theory of Cognitive Dissonance* (Stanford University Press, Stanford, CA).
- Fiske, S. T., L. T. Harris and A. Cuddy: 2004, 'Why Ordinary People Torture Enemy Prisoners', *Science* **306**, 1482–1483.
- Fointiat, V.: 1998, 'Rationalization in Act and Problematic Behaviour Justification', *European Journal of Social Psychology* **28**, 471–474.
- Gioia, D. A.: 1992, 'Pinto Fires and Personal Ethics: A Script Analysis of Missed Opportunities', *Journal of Business Ethics* **11**, 379–389.
- Gneezy, U.: 2005, 'Deception: The Role of Consequences', *The American Economic Review* **95**(1), 384–395.
- Gosling, P., M. Denizeau and D. Oberle: 2006, 'Denial of Responsibility: A New Mode of Dissonance Reduction', *Journal of Personality and Social Psychology* **90**(5), 722–733.
- Graham, J., J. Haidt and B. A. Nosek: 2009, 'Liberals and Conservatives Rely on Different Sets of Moral Foundations', *Journal of Personality and Social Psychology* **96**(5), 1029–1046.
- Graham, J. R., C. R. Harvey and S. Rajgopal: 2005, 'The Economic Implications of Corporate Financial Reporting', *Journal of Accounting and Economics* **40**(1–3), 3–73.
- Greene, J. D., R. B. Sommerville, L. E. Nystrom, J. M. Darley and J. D. Cohen: 2001, 'An fMRI Investigation of Emotional Engagement in Moral Judgment', *Science* **293**, 2105–2108.
- Haidt, J.: 2001, 'The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment', *Psychological Review* **108**(4), 814–834.
- Haidt, J.: 2007, 'The New Synthesis in Moral Psychology', *Science* **316**, 998–1002.
- Haidt, J.: 2008, 'Morality', *Perspectives on Psychological Science* **3**(1), 65–72.
- Haidt, J., J. Graham and C. Joseph: 2009, 'Above and Below Left-Right: Ideological Narratives and Moral Foundations', *Psychological Inquiry* **20**(2), 110–119.
- Hannan, R. L., F. W. Rankin and K. L. Towry: 2006, 'The Effect of Information Systems on Honesty in Managerial Reporting: A Behavioral Perspective', *Contemporary Accounting Review* **23**(4), 885–918.
- Harmon-Jones, E. and J. Mills: 1999, 'An Introduction to Cognitive Dissonance Theory and an Overview of Current Perspectives on the Theory', in E. Harmon-Jones and J. Mills (eds.), *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology* (American Psychological Association, Washington, DC).
- Hermanson, D. R.: 2009, 'Fraudulent Financial Reporting', Speech Delivered at American Accounting Association Audit Midyear Meeting, January 17, 2009.
- Hogan, C. E., Z. Rezaee, R. A. Riley Jr. and U. K. Velury: 2008, 'Financial Statement Fraud: Insights from the Academic Literature', *Auditing: A Journal of Practice & Theory* **27**(2), 231–252.
- Hotz, R. L.: 2007, May 11, 'Scientists Draw Link Between Morality and Brain's Wiring', *The Wall Street Journal*.
- Jones, T. M.: 1991, 'Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model', *Academy of Management Review* **16**(2), 366–395.
- Kahneman, D. and A. Tversky: 1979, 'Prospect Theory: An Analysis of Decision Under Risk', *Econometrica* **47**(2), 263–291.
- Kay, A., S. C. Wheeler, J. A. Bargh and L. Ross: 2004, 'Material Priming: The Influence of Mundane Physical Objects on Situational Construal and Competitive Behavioral Choice', *Organizational Behavior and Human Decision Processes* **95**, 83–96.
- Knapp, M. C.: 2001, *Contemporary Auditing: Real Issues and Cases, 4/e* (South-Western College Publishing, Cincinnati, OH).
- Kunda, Z.: 1990, 'The Case for Motivated Reasoning', *Psychological Bulletin* **108**, 480–498.
- Latour, A. and S. Young: 2005, February 9, 'WorldCom's Sullivan Says He Told CEO of Problems', *The Wall Street Journal*.
- McKimmie, B. M., D. J. Terry, M. A. Hogg, A. S. R. Manstead, R. Spears and B. Doosje: 2003, 'I'm a Hypocrite, But So is Everyone Else: Group Support and the Reduction of Cognitive Dissonance', *Group Dynamics: Theory, Research and Practice* **7**(3), 214–224.
- Milgram, S.: 1974, *Obedience to Authority: An Experimental View* (Harper & Row, Publishers, Inc, New York, NY).
- Monteith, M. J., P. G. Devine and J. R. Zuwerink: 1993, 'Self-Directed Versus Other-Directed Affect as a Consequence of Prejudice-Related Discrepancies', *Journal of Personality and Social Psychology* **64**(2), 198–210.
- Murphy, K. J.: 1999, 'Executive Compensation', in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, Vol. 3 (North Holland, Amsterdam).
- Murphy, P. R.: 2010, 'The Attitude Toward and Rationalization of Fraudulent Financial Reporting', Working Paper, Queen's University.

- Palmer, D.: 2008, 'Extending the Process Model of Collective Corruption', *Research in Organizational Behavior* **28**, 107–135.
- Palmer, D. and M. W. Maher: 2006, 'Developing the Process Model of Collective Corruption', *Journal of Management Inquiry* **15**, 363–370.
- Plant, E. A. and P. G. Devine: 1998, 'Internal and External Motivation to Respond Without Prejudice', *Journal of Personality and Social Psychology* **75**(3), 811–832.
- PricewaterhouseCoopers: 2009, November, *The Global Economic Crime Survey: Economic Crime in a Downturn..*
- Public Company Accounting Oversight Board (PCAOB): 2005, *Consideration of Fraud in a Financial Statement Audit*. AU Section 316, www.pcaobus.org.
- Pulliam, S.: 2005, March 24, 'Crossing the Line: At Center of Fraud, WorldCom Official Sees Life Unravel; David Myers Fell Into Despair, Then Aided Prosecutors; Planning for Prison Time; A BMW Ride at 115 MPH', *The Wall Street Journal*.
- Reingold, J.: 2003, December, 'Make the Buck, Then Pass It', *Fast Company*.
- Rest, J.: 1979, *Development in Judging Moral Issues* (University of Minnesota Press, Minneapolis, MN).
- Rest, J.: 1994, 'Background Theory and Research', in J. Rest and D. Narvaez (eds.), *Moral Development in the Professions* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 1–26.
- Ribeiro, J.: 2010, February 23, 'Wipro Says Employee Charged with Fraud Committed Suicide', *cio.com*.
- Salterio, S. and A. Webb: 2006, 'Honesty in Accounting & Control: A Discussion of Hannan, Rankin and Towry (2006)', *Contemporary Accounting Research* **23**(4), 919–932.
- Sherefkin, R.: 2003, June 16, 'Lee Iacocca's Pinto: A Fiery Failure', *Automotive News*, Vol. 77, p. 208.
- Simon, L., J. Greenberg and J. Brehm: 1995, 'Trivialization: The Forgotten Mode of Dissonance Reduction', *Journal of Personality and Social Psychology* **68**(2), 247–260.
- Sloane, E. H.: 1944, 'Rationalization', *The Journal of Philosophy* **41**(1), 12–21.
- Sprouse, M.: 1992, *Sabotage in the American Workplace: Anecdotes of Dissatisfaction, Mischief and Revenge* (Drop Press, San Francisco).
- Steele, C. M.: 1988, 'The Psychology of Self-Affirmation: Sustaining the Integrity of the Self', in L. Berkowitz (ed.), *Advances in Experimental Social Psychology*, Vol. 21 (Academic Press, New York, NY), pp. 261–302.
- Stuart, A. N.: 2005, June 1, 'Keeping Secrets. How Five CFOs Cooked the Books of HealthSouth', *CFO Magazine*.
- Sutherland, E. H., D. R. Cressey and D. F. Luckenbill: 1992, *Principles of Criminology*, 11th Edition (General Hall Inc, New York, NY).
- Sykes, G. M. and D. Matza: 1957, 'Techniques of Neutralization: A Theory of Delinquency', *American Sociological Review* **43**, 643–656.
- Tsang, J.: 2002, 'Moral Rationalization and the Integration of Situational Factors and Psychological Processes in Immoral Behavior', *Review of General Psychology* **6**(1), 25–50.
- Vaughan, D.: 1999, 'The Dark Side of Organizations: Mistake Misconduct, and Disaster', *Annual Review of Sociology* **25**, 271–305.
- Victor, B. and J. B. Cullen: 1988, 'The Organizational Bases of Ethical Work Climates', *Administrative Science Quarterly* **33**, 101–125.
- Wells, J. T.: 2001, February, 'Why Employees Commit Fraud', *Journal of Accountancy*.
- Wells, J. T.: 2004, February, 'New Approaches for Fraud Deterrence', *Journal of Accountancy*.
- Wilson, J. Q. and R. J. Hernstein: 1985, *Crime and Human Nature* (Simon and Schuster, New York, NY).
- Zahra, S. A., R. L. Priem and A. A. Rasheed: 2005, 'The Antecedents and Consequences of Top Management Fraud', *Journal of Management* **31**(6), 803–828.
- Zajonc, R. B.: 1980, 'Feeling and Thinking: Preferences Need No Inferences', *American Psychologist* **35**(2), 151–175.
- Zhong, C.-B. and K. Liljenquist: 2006, 'Washing Away Your Sins: Threatened Morality and Physical Cleansing', *Science* **313**, 1451–1453.
- Zimbardo, P.: 2007, *The Lucifer Effect: Understanding How Good People Turn Evil* (Random House, New York, NY).

Queen's School of Business,
Queen's University,
Goodes Hall, Kingston, ON K7L 3N6, Canada
E-mail: pmurphy@business.queensu.ca