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Behavioral Assessment and Modification in Fraud Mitigation Efforts

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EXECUTIVE SUMMARY

While fraud prevention regulations are necessary, they might be just one component of curbing fraudulent behavior.

Despite the widespread fraud prevention efforts on the part of the accounting profession, regulators, anti-fraud professionals, and others, occupational fraud continues to occur at an alarming rate.[1] This is quite paradoxical given that, in view of the high level of fraud prevention regulatory efforts alone, one logically would expect a measurable reduction in the rate and/or magnitude of fraud. How is it possible that such costly and extraordinary regulatory efforts can prove so ineffectual? And is regulation merely one component of a much more comprehensive solution to the problem of fraudulent behavior?

THE REGULATORY APPROACH: NECESSARY BUT NOT SUFFICIENT

Some of the truly historic actions taken by legislators and regulators include the Sarbanes-Oxley Act of 2002 (SOX), the formation of the Public Company Accounting Oversight Board (PCAOB) in 2002 (which followed from SOX) by the U.S. Securities & Exchange Commission (SEC), and the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. These actions constitute meaningful and well-intentioned efforts at fraud reduction and shoring up the U.S. financial system.

Similarly, the SEC implemented two significant initiatives aimed at identifying and taking enforcement actions against those involved in fraudulent activity, the first of which began in 2009 in response to the global financial crisis. This initiative took the form of an interagency financial fraud enforcement task force involving the engagement of dozens of federal agencies working in tandem with state and local authorities. The task force was led by the U.S. Department of Justice with representatives from the SEC, the Treasury Department, and the Department of Housing and Urban Development serving as its steering committee. The activities of this task force resulted in more than 160 entities and individuals facing more than $3 billion in penalties, disgorgement, and other monetary sanctions.[2] The second initiative, launched in 2013 and labeled "Operation Broken Gate," entailed the SEC's commitment to increased enforcement actions against not only the direct perpetrators of fraud but also those serving in oversight roles, such as board members, auditors, and attorneys.[3] As evidenced by an increased number of enforcement actions against "gatekeepers," the SEC seems to have been honoring this commitment.

The accounting profession likewise has taken a more serious position concerning financial statement fraud. For example, the issuance of *Statement on Auditing Standards 99* (SAS 99), "Consideration of Fraud in a Financial Statement Audit" (now AU Sec. 316 or AU 316), by the American Institute of Certified Public Accountants (AICPA) provides independent auditors with the guidance needed for planning and conducting a financial statement audit to aid in the identification of fraud.

Further, organizations have made significant investments establishing more robust governance oversight structures and implementing internal controls aimed at preventing and detecting fraud. Boards of directors across the United States can readily attest to the many new actions and safeguards they have taken vis-à-vis fraud awareness and mitigation.

With such significant undertakings, it seems reasonable for one to expect at least a fairly significant reduction in the rate of occupational fraud. Unfortunately, recent studies indicate otherwise. For example, "Report to the Nations: 2018 Global Study on Occupational Fraud and Abuse," administered by the Association of Certified Fraud Examiners (ACFE), found that occupational fraud (encompassing asset misappropriation, corruption, and financial statement fraud) remains a significant issue and estimated that 5% of revenue is lost by a typical organization each year due to occupational fraud. This study analyzed 2,690 cases of fraud that occurred in 125 countries and further determined that the proportion of financial statement fraud has actually increased every year since 2012. Of particular interest to accounting professionals is the finding that accounting is the department with the highest proportion of total frauds and that executive management is involved at the highest frequency in both financial statement and corruption frauds.[4]

Similarly, in its most recent annual "Global Fraud & Risk Report," Kroll surveyed 540 senior executives and found that incidents of fraud have increased every year since 2012. The study states, "The incidence of fraud continued to climb this year. Overall, 84% of surveyed executives report their company fell victim to at least one instance of fraud in the past 12 months, up from 82% in 2016. This represents a continuous, year-on-year rise since 2012, when the reported incidence was 61%."[5] Finally, PwC's "Pulling fraud out of the shadows: Global Economic Crime and Fraud Survey 2018," which surveyed more than 7,200 participants serving in senior, audit, compliance, and risk management functions, indicates that, in 2017, the reported rate of economic crime was up significantly over 2016 and had reached its highest level since the survey was first given in 2001. The study states, "Not only has the threat of economic crime intensified in recent years, the rules and expectations of all stakeholders—from regulators and the public to social media and employees—have also changed, irrevocably."[6]

Thus, while all the very costly efforts have been shown to increase fraud awareness and improve the focus on internal controls, it is clear that the problem of occupational fraud continues, perhaps even at unprecedented levels. Still, it seems intuitive that, without appropriate laws and other regulations, fraud would likely be occurring at even higher levels. One begins to postulate that while the conventional regulatory, rules-driven, and controls-based approaches are critically necessary, perhaps such efforts are not sufficient by themselves. If so, it is time to expand the scope of fraud-reduction efforts to include a focus on the behavioral aspects of "what" and "who" drives fraud activity. In short, internal controls notwithstanding, individuals continue to experience the kinds of pressures and rationalizations that underlie all acts of fraud. A comprehensive solution would seem to warrant efforts beyond removal of the control-related opportunity that is inherent to all fraud commissions (and that has arguably been the predominant focus of regulatory efforts) and include efforts that address matters of individual human behavior.

This article uses eight behavioral-based learning objectives to assist professionals in ensuring that they meet the high ethical expectations of their profession and thereby avoid the common pitfalls that may lead to fraud. (These learning objectives were adapted from the *Strategic Finance* article "Avoiding the Fraud Mind-set" and expanded based on additional research.[7]) It also provides discussion as to how the learning objectives may be used by those in governance roles when engaging in the mentoring, oversight, and development aspects of their responsibilities. The learning objectives focus on behavioral aspects of fraud as commonly identified in fraud cases, which were originally developed using the "pressure" and "rationalization" components of Donald Cressey's "fraud triangle." Thus the focus is one that extends well beyond the regulatory actions that have historically been regarded as the solution to rampant fraud, and the analyses reflect the outcomes of two separate studies we conducted.

The first study on these objectives surveyed 886 accounting professors. The partial results of this study were published in "Avoiding the Fraud Mind-set," and the eight learning objectives that flow from that article are explained here. The second study expanded upon this initial investigation by surveying 100 experienced accounting practitioners and extending into the areas of mentoring and oversight. This article's discussion of the combined methodologies and results of the two studies thus provides both an academic and "real-world" perspective on which to formulate behavioral approaches to fraud reduction.

THE NEED FOR BEHAVIORAL CONSIDERATIONS

Frauds are perpetrated by individuals, not by entities. Indeed, fraud often involves the collusive efforts of two or more individuals. The largest frauds also often involve those serving at the highest levels of an organization. In fact, research indicates that fraudulent financial reporting involves both the CEO and/or the CFO 89% of the time and that the rate of such frauds has been on the rise over the past three years.[8] A seemingly obvious solution may be the enactment of still more regulation aimed at internal control enhancements. Yet research has found that even strong internal controls may not be effective in the prevention and detection of financial statement fraud since senior executive perpetrators are uniquely positioned to evade and/or override such controls. A KPMG survey of 750 fraudsters titled "Global Profiles of the Fraudster" found that "44 percent of fraud perpetrators have unlimited authority in their company and are able to override controls."[9] Research further points to the fact that, due to their network affiliations (i.e., employment, education, and social networks), CEOs often have well-established relationships with the executive team and board members. These relationships may result in a "connectedness" with members of the governance structure that increases the risk of fraud and reduces the risk of fraud detection.[10] Still other research finds that the level of authority held by the perpetrator is directly correlated with the magnitude of the fraud loss, most economic crime is committed by internal actors, and the proportion of those crimes attributed to senior management increased from 2016 to 2018.[11]

Thus, one could posit that in order to effectively prevent and detect fraud (including financial statement fraud), management and those charged with oversight—such as boards and auditors—should be experts not only in governance structures, regulations, rules, and internal controls, but should be equally well-versed in human behavior. In particular, management and other overseers should be made keenly aware of the kinds of pressures and rationalizations faced by those in authority (i.e., senior and middle management) and that too often lead to fraudulent activity. Unfortunately, most professionals serving in such oversight roles are not properly trained to assess behavior and so are unprepared to engage in such assessments. Accordingly, several calls recently have been made for those charged with governance oversight to become educated in the area of human behavior; however, fulfilling such an expanded role would pose significant challenges. As aptly noted by Barry J. Epstein and Sridhar Ramamoorti, "This will require a new focus on areas that so far have played little or no part in accounting curricula. Many practitioners and academics may see these areas as hardly relevant to the mainstream concerns of accounting and auditing, and may therefore be resistant…"[12]

THE FRAUD TRIANGLE

In his 1953 book, *Other People's Money: A Study in the Social Psychology of Embezzlement*, the renowned criminologist Donald Cressey introduced the fraud triangle, which more than six decades later continues to serve as the basis for the study of all forms of fraud.[13] The "sides" of the fraud triangle represent the three components of any act of fraud—opportunity, pressure (or "incentive"), and rationalization. Indeed, the fraud triangle is a substantive part of SAS 99 (AU 316) and thus helps guide independent auditors in their assessment of the potential for fraud in any given audit engagement. As Cressey stated originally, each side of the fraud triangle reflects a condition that is present when virtually any fraud occurs.

Opportunity refers to an absence or weakness of controls, which is perceived as a means of possibly "getting away with" an act of fraud. Certain individuals within the organization have a greater opportunity to perpetrate a fraud than others. For example, high-ranking corporate executives may have the "clout" to override many controls, a threat that is recognized in SAS 99: "Management has a unique ability to perpetrate fraud because it frequently is in a position to directly or indirectly manipulate accounting records and present fraudulent financial information."

Pressure (i.e., incentive) refers to the motivation one feels to engage in an act of fraud. Some individuals who are experiencing real or perceived pressure to achieve certain outcomes find themselves behaving in ways that are highly uncharacteristic of their typical behavior. For example, corporate executives may capitulate to the pressures of meeting investor earnings expectations by manipulating the entity's accounting records. Similarly, the pressures posed by earnings-based compensation plans have been associated with fraudulent conduct on the part of certain executives. Of course, it is not just C-suite personnel who are vulnerable to pressure, nor does pressure impact only financial reporting fraud. An individual who suffers from addiction or who is involved in a hostile divorce can face financial pressure that can lead to poor ethical choices. Such individuals may feel compelled to embezzle funds or commit some other form of fraud.

Rationalization refers to the manner in which the fraudster "internally justifies" his or her behavior. Fraud perpetrators may rationalize that they are simply "borrowing" funds that they intend to pay back. They may feel justified in embezzling funds to the extent that "I have been underpaid for years. This place just does not appreciate all that I do. I am simply taking what they should have rightfully been paying me." Similarly, a CFO may rationalize an act of financial statement fraud on the basis of, "It is essential to the survival of the organization and to its employees and shareholders."

Table 1: Participant Demographics (n = 986)

Demographic	Percentage
Gender:	
Female	44.2%
Male	55.8%
Professional Certification:	
Yes	78.1%
No	21.9%
Highest Degree:	
Undergraduate	5.6%
Master's or higher	94.4%
Segment:	
Practitioner	10.1%
Professor	89.9%

SUPPORT FOR LEARNING OBJECTIVES

In order to determine the perceived value of this study's eight learning objectives to the careers of an accounting professional, we surveyed 986 participants in two studies. Table 1 provides a demographic summary of the participants. A key demographic factor is that the participants are very experienced and educated, with 78.1% holding at least one professional certification and

Table 2: Importance of Learning Objectives for Career Management 0 = Strongly Disagree, 100 = Strongly Agree (n = 986)

Learning Outcome	Mean
Develop an ability to recognize your own human tendency toward rationalization.	81.24
Understand that fraudsters are typically not "black-cloaked villains"; rather, they are "real people."	78.95
Recognize the psychological costs of "getting away" with fraud as well as the tangible and intangible costs of getting caught.	78.79
Clearly define the specific values that are most important to you as an individual in both your personal and future professional lives.	78.70
Understand the importance of living within your means.	76.43
Build a trusted network as a means of mitigating nonshareable problems.	73.34
Understand the importance of maintaining your marketability within the profession.	73.22
Understand that you are an individual of value as reflected in the choices you make in life. Avoid defining your value based on the position/title you hold.	72.38

94.4% holding an advanced degree.

The participants first were asked to rate their level of agreement, on a scale of 0 to 100 (0 = strongly disagree, 50 = moderately agree, and 100 = strongly agree), indicating the extent to which they believe professionals should consider each objective during their careers *in order to meet the high ethical expectations of the profession*. Overall, all eight learning objectives received strong support with means ranging from 72.38 to 81.24. See Table 2.

A brief discussion of each learning objective follows.

LEARNING OBJECTIVES

1. Develop an ability to recognize your own human tendency toward rationalization.

Rationalization is part of the human condition. Individuals use rationalization as a means of soothing and reconciling an unethical action with their ethical values.[14] Even individuals with a healthy mind-set may engage in unhealthy rationalization and succumb to fraud by internalizing such rationalizations as "I need to save my job," "I am not compensated fairly," or "I need to save my company." Certain individuals may become accustomed to rationalizing unethical behavior resulting in a process that often leads to the engagement in more frequent and risky rationalizations. In the most extreme cases, the three personality types, termed "the dark triad" of narcissism, Machiavellianism, and psychopathy, may not only increase rationalization behavior and fraud risk but may drive individuals to create fraud opportunities in even the most robust internal control environments. Unfortunately, research suggests that "corporate management contains a much higher proportion of dark triad personalities than the general population."[15] Equally concerning is the finding in Ernst & Young's survey of 2,825 executives, "Corporate misconduct—individual consequences," that "42 percent could justify unethical behavior to meet financial targets."[16] This statistic is very alarming given that the level of authority held by these individuals often enables them to override controls.

"This learning objective makes individuals aware of the fact that everyone is prone to rationalization and that many people do so to a degree that might surprise them. The primary means by which someone can keep from 'crossing the line' is first being able to recognize the precise moment at which they begin to rationalize, and then making certain that doing so in a given situation will not ensnare them in an act of fraud."[17]

2. Understand that fraudsters are typically not "black-cloaked villains"; rather, they are "real people."

Fraud perpetrators are commonly portrayed within the media, textbooks, and professional training materials as devious, manipulative, and evil villains. While such portrayal is sometimes accurate, the much more common profile of the fraudster is actually very similar to that of the law-abiding population. Portraying the fraudster as a "black-cloaked villain" diminishes the ability of others to identify with such people. Such a lack of affinity provides an opportunity for individuals to excuse their own questionable behavior since so few individuals view themselves as villains. This view is supported within a body of research that finds that many people view fraud activity as "other people's problems"—a perception that reflects a lack of affiliation.[18] In addition, research finds that the vast majority of occupational fraudsters do not outwardly appear to be villains; rather, many times they are first-time offenders, often holding positions of respect and authority (i.e., manager or higher). They tend to be well-educated and are often very trusted and respected within their organizations.[19]

"This learning objective helps individuals realize the very simple yet important fact that their own upbringing, education, socialization, and professional development are probably very much the same as those who chose to engage in fraud. This realization may enable people to more easily identify with fraud perpetrators and thus come to realize that they themselves aren't immune to the incentives, pressures, and rationalizations that well-known fraudsters have succumbed to."[20]

3. Recognize the psychological costs of getting away with fraud as well as the tangible and intangible costs of getting caught.

Most people clearly understand the self-inflicted tangible costs of getting caught in a fraud, such as job termination, loss of income, reputational damage, and, in some cases, incarceration. What many do not reflect upon is the equally damaging effect being caught in a fraud has on those they care about the most, such as family and friends. These victims often face very dire repercussions, such as loss of lifestyle, public humiliation, and absence of a loved one during a period of incarceration.

Also less obvious to potential fraudsters are the costs of getting away with fraud. People who have engaged in frauds have described devastating psychological consequences during the period in which their fraud went undetected. These consequences were felt even in cases where perpetrators felt the fraud was unlikely to ever be detected. Research indicates that such consequences may include the stress of always "looking over your shoulder" in fear of suspicion and detection and the requirement to continually manage a series of lies in interactions with both internal and external stakeholders of the organization, as well as during interactions with family and friends.[21]

"This learning objective underscores not only the severe costs of getting caught in a fraud situation, but also the unavoidable psychological costs of not getting caught. Individuals may better understand that there is a significant price to committing fraud whether they are caught or not."[22]

4. Clearly define the specific values that are most important to you as an individual in both your personal and future professional lives.

In order to effectively engage in ethical reasoning (i.e., being able to make a valid choice between right and wrong), an individual must first have a deep understanding of his or her personal values. Such knowledge is at the core of making moral judgments.[23] Given the complexity that often surrounds ethical decision making in business, the importance of having this clarity and awareness of personal values becomes all the more obvious. While most individuals believe they have a strong set of values, many do not actually take the time to clearly define and reflect upon such values. Individuals may find themselves facing an ethical dilemma without a clear set of values to use as a basis for choosing the appropriate course of action. Without such values, many people may yield to pressures and rationalization within the course of making a critical decision. Of course, such an approach will often place the individual at risk of engaging in a fraud.

"This learning objective helps ensure that individuals have considered and identified a core set of values before they encounter a potential fraud situation. They will thus be equipped with a solid moral foundation that might otherwise have been absent from their lives and that could make the difference between proper conduct or a deeply regrettable mistake."[24]

5. Understand the importance of living within your means.

Research from the Pew Charitable Trusts indicates that 57% of Americans indicate they are not financially prepared for the unexpected, with 55% of households either "breaking even" on a monthly basis or incurring monthly expenses in excess of income. This harsh reality also impacts those with relatively high incomes, with 22% of Americans who earn an annual income of $100,000 or more indicating they are not financially secure.[25] Further research shows that the top two red flags displayed by fraudsters include living beyond their means and financial difficulties.[26] Many of these perpetrators earn very lucrative salaries, as well as bonuses and stock compensation, yet still manage their lives with ongoing financial pressure. It is critically important to live a sustainable lifestyle where base earnings (not including incentive compensation) exceed expense obligations. In addition, building comfortable savings to cover living expenses during the time needed to recover from a potential loss of income should be a major priority. Toward this end, understanding "needs" vs. wants is a valuable objective.

"This learning objective helps people recognize scenarios in which they are living beyond their means and provides them with an ability to formulate a workable financial exit strategy in the event that they someday find themselves in a potential fraud situation."[27]

6. Build a trusted network as a means of mitigating nonshareable problems.

All individuals encounter circumstances that they may view as potentially embarrassing or even shameful in terms of others' views. Some of these circumstances—such as a divorce, family problems, addictions, and excessive peer/family pressures—have been determined to be behavioral red flags of fraud perpetrators.[28] When such "nonshareable" problems continue to be unresolved, they can easily result in fraudulent behavior.

"This learning objective emphasizes the fact that no one is perfect and that 'we all have problems.' It is important to feel comfortable sharing these problems with people you trust in order to reach acceptable resolutions and thus avoid the often devastating effects that nonshareable problems can have. This objective encourages people to identify at least one trusted person with whom they can share 'nonshareable problems'—no matter how deeply personal or potentially embarrassing such problems may seem—and seek an acceptable resolution."[29]

7. Understand the importance of maintaining your marketability within the profession.

Fraud perpetrators often feel "locked in" to their current position and believe that finding another job in a reasonable time frame with comparable compensation is not likely. As a result, they believe they need to preserve their current position "at all costs." Life as a financial professional is often hectic and leaves little time for professional development and networking. While doing so is easier said than done, it is very important for individuals to take the time to invest in themselves and ensure they remain marketable and maintain strong professional networks. (According to a Workplace Trends survey of 4,347 job seekers and 129 recruiters, the best time to find a job is when one already has a job and that such opportunities are the result of successful networking.[30])

"This learning objective underscores the importance of maintaining your marketability and alternative career options. Feeling capable and qualified to find new opportunities elsewhere can alleviate the pressures that people may face when presented with a 'do I or don't I?' fraud situation."[31]

8. Understand that you are an individual of value as reflected in the choices you make in life. Avoid defining your worth based on the position/title you hold.

Often those with high career objectives and those who have achieved such objectives by reaching the senior levels of an organization base much of their self-worth on the title or position they hold. Because of the compulsive manner in which they address their career responsibilities, some of these individuals are labeled "workaholics." Research has found that workaholism correlates with many negative consequences, including life conflict, increased pressure, and poor emotional health.[32] Career-ambitious workaholics who define much of their self-worth on typically short-lived positions subject themselves to an excessive amount of pressure in order to maintain such positions at all costs. This pressure often leads to fraudulent behavior on their part.

"This learning objective makes individuals aware of the fact that they will ultimately find themselves satisfied with some of the choices they make in life, dissatisfied with others, and that the best time to give thought to such matters is in the here and now. They

Table 3: Importance of Learning Objectives for Mentoring and Oversight
0 = Strongly Disagree, 100 = Strongly Agree
(n = 100)

Learning Outcome	Mentoring Others Mean	Oversight Responsibilities Mean
Clearly define the specific values that are most important to you as an individual in both your personal and future professional lives.	84.78	82.15
Develop an ability to recognize your own human tendency toward rationalization.	80.04	83.42
Understand that fraudsters are typically not "black-cloaked villains"; rather, they are "real people."	80.28	85.54
Understand that you are an individual of value as reflected in the choices you make in life. Avoid defining your value based on the position/title you hold.	80.79	74.02
Build a trusted network as a means of mitigating nonshareable problems.	79.18	71.05
Understand the importance of living within your means.	77.97	79.02
Recognize the psychological costs of "getting away with" fraud as well as the tangible and intangible costs of getting caught.	77.40	79.88
Understand the importance of maintaining your marketability within the profession.	75.69	70.45

thus come to realize that their true self-worth isn't defined by a formal title/position, but by the choices they make in life and that the current role they serve as a manager is typically short-lived. Therefore, it is illogical to participate in inappropriate conduct for the sake of maintaining a position or title."[33]

REGRESSION ANALYSIS

Next, a regression model was run for each learning objective (i.e., dependent variable) to identify any significant differences in mean responses using the individual demographics (e.g., gender, professional certification, highest degree, and segment) as independent variables. The results of this analysis indicate only one statistically significant demographic variable ($P < .05$). In other words, the mean response for each of the eight learning objectives was not significantly different for gender, professional certification, and highest academic degree, thus indicating a high degree of consistency among those demographic variables. The only demographic variable to show statistical difference in mean responses was segment. The mean response for practitioners is statistically higher than that of professors for five of the eight learning objectives. These include: (1) clearly define the specific values that are most important to you as an individual in both your personal and future professional lives; (2) understand the importance of living within your means; (3) build a trusted network as a means of mitigating nonshareable problems; (4) understand the importance of maintaining your marketability within the profession; and (5) understand that you are an individual of value as reflected in the choices you make in life—avoid defining your value based on the position/title you hold.

This finding is important to the extent that it points to learning outcomes that are viewed as more important by practitioners than professors, thus potentially resulting in a gap in the education and training required for new entrants into the accounting profession. Based on this finding, professors perhaps should consider including a greater focus on these objectives within the curriculum. In addition, practitioners should be aware of this potential gap when integrating new hires into their organizations.

MENTORING AND OVERSIGHT

Next, a series of questions was presented only to the practitioner participants. First, they were asked to indicate their level of agreement—on a scale of 0 to 100 (0 = strongly disagree, 50 = moderately agree, and 100 = strongly agree)—regarding the importance of each objective when engaging in mentoring and oversight duties. Table 3 shows the overall results, which again indicate a very strong level of importance placed on each of the eight learning objectives.

It is interesting to note that the following learning

Table 4: Confidence and Training in Performing Task
0 = Low, 50 = Moderate, and 100 = High
(n = 100)

Task	Confidence in Effectively Performing Task	Level of Training Received during Career Related to Task
Reviewing the effectiveness of the internal controls of an organization in preventing and detecting fraudulent activity.	72.47	69.55
Identifying potential pressures that management may be subject to that may lead to fraudulent activity.	74.10	63.93
Identifying potential rationalization behaviors demonstrated by management that may lead to fraudulent activity.	68.11	61.59

objectives were ranked as the three most important to consider in the performance of one's mentoring and oversight responsibilities: (1) clearly define the specific values that are most important to you in both your personal and future professional lives; (2) develop an ability to recognize your own human tendency toward rationalization; and (3) understand that fraudsters are typically not "black-cloaked villains"; rather, they are "real people."

Next, the practitioners were asked to indicate their level of confidence—on a scale of 0 to 100 (0 = a low confidence level, 50 = a moderate confidence level, and 100 = a high confidence level)—in assessing: (1) effectiveness of the internal controls of an organization in preventing and detecting fraudulent activity, (2) potential pressures that management may be subject to that may lead to fraudulent activity, and (3) potential rationalization behaviors demonstrated by management that may lead to fraudulent activity. Last, the practitioners were asked to provide the level of training they received during their careers with regard to each of these three areas, again using a scale of 0 to 100 (0 = a low level of training, 50 = a moderate level of training, and 100 = a high level of training). These results are shown in Table 4.

The results indicate that practitioners feel more confident in assessing the kinds of potential pressures to which management may be subject and which, in turn, may lead to fraudulent activity, as well as in assessing the effectiveness of internal controls vis-à-vis the prevention and detection of fraud. Yet the participants were less confident when it came to assessing the kinds of management rationalization behaviors that can lead to fraudulent activity. Also, the mean responses regarding the level of training received to perform such assessment tasks may indicate that additional training is needed in these areas. In particular, the level of training provided in the areas of identifying potential pressures and rationalization behaviors is concerning and warrants further investigation.

A BROADER SOLUTION IS NEEDED

While it is unlikely that certain notorious fraudsters would have conducted themselves dramatically differently had they received proper behavioral training at some point during their lives, it seems fair to state that most people might indeed choose proper paths with such training. The goal, therefore, is to limit the development of such mind-sets among people who are truly capable of being trained to make proper ethical choices, even in the most ethically challenging situations.

Contemporary research has identified the "10-80-10 approximation":

> A common rule of thumb used in forensics is the 10-80-10 approximation. It asserts that approximately 10% of the population will steal or commit fraud given any opportunity; 80% is honest much of the time; and 10% is honest in all situations.[34]

The author goes on to indicate that those who fall within the 80% category are considered "situationally honest" and that this group is therefore of tremendous importance; i.e., they are capable of behaving either ethically or unethically depending on the given situation. This finding points toward the need for organizational training that focuses on what might be coined the "malleable majority"—i.e., the 80% of society that can be trained to behave properly in various individual situations. This construct of the malleable majority is also consistent with the assertion of the "situationism theory" used in psychology that states that personality and behavior are influenced much more by the situation a person faces than by one's innate traits.

Practitioners and academics should collaborate on the development of a series of training modules that place participants in a wide variety of ethically challenging hypothetical scenarios and lead the participants to the proper ethical choice in each of those situations. If people are placed within a broad spectrum of ethical challenges, they can gradually acquire the ethics "tool kit" that can serve them well in actual situations. The 10% on either end of the 10-80-10 range would find such training either unnecessary or without any value, but, for the malleable majority, such training could make all the difference between a truly successful professional life—i.e., one that is grounded in ethically sound decision making—or a failed professional life—one that may end in embarrassment, job loss, or even loss of freedom.

Society's "regulatory approach" to fraud mitigation is entirely necessary but not sufficient. The preponderance of business fraud since the enactment of key pieces of anti-fraud legislation seems to make this point painfully clear. Accordingly, a broader solution is necessary—one that addresses human behavior and the ways in which individuals can be trained to act properly irrespective of the challenges they face. ■

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ENDNOTES

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