

## 2019 Williamsburg Advanced Fraud Academy

### WHEN A TRIANGLE BECOMES A SINGULARITY: ASSESSING AND RESPONDING TO “DARK TRIAD” FRAUD RISK

Prepared and Presented by

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#### I. THE NEED FOR AND IMPORTANCE OF FRAUD RISK MODELS

A. Fraud has imposed a huge societal cost, which obviously prevents investment in or spending on other worthy and needed undertakings.

1. It is generally acknowledged that fraud is a serious problem for businesses of all sizes, costing billions of dollars each year.
  - a. According to the ACFE 2018 *Report to the Nations*, businesses may lose as much as 5% of revenue every year to fraud – which would equate to \$3.98 trillion of 2017 gross world product (about \$79.6 trillion).
    - i) The 2018 study found 2,690 instances of so-called occupational fraud, across 125 nations, with costs of over \$7 billion (averaging \$130,000 per incident, but with 22% of cases resulting in losses over \$1 million).
    - ii) Asset misappropriations are most common and least costly (but in some instances what began as asset theft leads to fraudulent financial reporting in order to conceal the theft), with average cost of \$114,000.
    - iii) Fraudulent financial reporting cases, only 10% of all instances, are vastly more costly (over \$800,000 median).
    - iv) Small businesses (defined as having < 100 employees) suffer disproportionately, with average losses of twice those of larger firms. Weak internal controls are the likely reason.
    - v) Although the statistics reported in the *Report to the Nations* is essentially anecdotal, and in any event being based on observed frauds cannot be used to project to other undiscovered instances, it is clear that occupational fraud is widespread and costly, and thus needs to be a concern for management and for independent auditors.
  - b. According to multiple sources cited by Ray in his doctoral dissertation (Ray, J. V., *Psychopathy, Attitudinal Beliefs, and White Collar Crime*, 2007; available at: <https://scholarcommons.usf.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=5085&context=etd>):

- i) The costs of white collar crime, both direct and indirect, have been said to be over one trillion dollars annually, a conservative estimate that is about fifty times higher than the costs of street crime (Lynch, M. J. and Michalowski, R., Primer in Radical Criminology: Critical Perspectives on Crime, Power, & Identity (4th ed.), Criminal Justice Press, 2006).
  - ii) Physical harm resulting from white collar crime is also much greater than for other reasons, with workplace disease and injury alone has been estimated at 3 million per year, while the number of workplace deaths per year is about 55,238 (Reiman, J., The Rich Get Richer and the Poor Get Prison (7th ed.), Pearson, 2004). This means that, compared to estimates for street crime, individuals are 2.4 times more likely to be killed and thirteen times more likely to be injured as a result of preventable workplace accidents (Lynch, M. J. and Michalowski, R., op. cit.).
- c. A more apropos gauge of materiality might be to compare the amount lost to fraud to the average business' net income margin, which is commonly under 20% and sometimes as low as 2% or so: if 5% of *gross* revenue is lost to fraud, this means potential net earnings have been depressed by from 20% to 70%, which by any definition is highly material.
  - d. Fraud, because it is concealed, may go on for years before being discovered, usually by accident or by a whistle-blowing employee (40% by tips; only very few via outside audits). The average fraud lasts eighteen months; some last for many years (Enron, WorldCom, Bernie Madoff, Parmalat, others lasting a decade or more).
2. Fraud is the clearest *leading indicator* of a business' forthcoming demise. Once weakened by a fraud event, companies often file for bankruptcy protection, and others may limp along and try to recover, but even many of these ostensible survivors, already mortally wounded, expire within a few years.
  3. When businesses fail, blame is often placed on the accountants and auditors, who are highly likely to find themselves embroiled in costly litigation, adding further to the social cost of fraud.
  4. Fraud harms many segments of society and erodes the political credibility of the capitalistic economic model that has been the basis for the creation of wealth and which is the natural corollary of democracy:
    - a. Owners always most affected.
    - b. Creditors usually also affected.
    - c. Employees at risk of losing jobs.
    - d. Customers at risk of losing source of supply of goods or services.
    - e. Vendors losing customers.
    - f. Eleemosynary institutions crippled in ability to provide services to those reliant upon them.
  5. Concern over fraud has waxed and waned historically in the wake of well-publicized accounting scandals.
    - a. This has prompted the auditing profession and regulators to further define responsibilities relating to fraud prevention, deterrence, and detection, including those of independent auditors.
    - b. This is evidenced by the recent promulgation of various laws and auditing standards that emphasize the importance of controls relating to fraud prevention and detection, along with the responsibilities for both management and their auditors.
    - c. The bottom line is this: fraud is a *shared responsibility* of management, including those (e.g., board audit committees) charged with oversight duties, and of the auditors.

B. Fraud has historically represented a great business risk for the auditing profession.

1. Fraud is a major problem for accountants and auditors (both internal and external) because they are perceived (rightly or wrongly) to be the most directly responsible for establishing internal controls and for preventing or detecting fraud. Major firms have previously reported spending as much as 20% of gross fee income on litigation, settlements and insurance. This raised the obvious question: could more effective auditing reduce these costs?
2. At least two once-prominent major CPA firms (Laventhol & Horwath; Arthur Andersen) and other smaller firms went extinct following economic and reputational harms resulting from presumably faulty audits of entities shown to have perpetrated large-scale frauds.
3. The profession -- having lost one of the hallmarks of a profession, namely the ability to regulate its own professional standards with the creation of the nominally independent, but actually SEC-controlled PCAOB -- has to be viewed as still tenuously clinging to its status as independent.
4. Notwithstanding periodic efforts to "educate" the public to the profession's self-defined limited role in preventing or uncovering fraud (e.g., via the late-1980s "expectation gap audit standards"), the investing public (as well as regulatory overseers) demands that auditors be effective in fraud detection, and court decisions continue to penalize those who fail in doing so.

C. Accordingly, over time the profession absorbed the representation of the factors contributing to fraud risk propounded by sociologists and criminologists, eventually incorporating this into current auditing standards.

## II. THE DEVELOPMENT OF THE "CRESSEY FRAUD RISK TRIANGLE" MODEL AND ITS VARIANTS

A. Edwin H. Sutherland's work effectively defined white-collar crime (implicitly including financial reporting fraud) as being essentially situational in character (i.e., driven by environmental factors and not related or responsive to the psychological traits or conditions of the perpetrator).

1. Sutherland (Ph.D. in sociology, University of Chicago, 1913), by invitation, in 1921 began work on a criminology textbook. This result, *Criminology* (1924) – retitled *Principles of Criminology* in 1934 – became the most influential textbook in that field.
2. After reviewing the existing literature in criminology, which explained criminal behavior as a product of either "inherited feeble-mindedness" or "multiple-factors," Sutherland largely rejected the claim that criminals were simpleminded, but did endorse the latter attribution in the first edition, explaining different criminal behaviors through the relative influence of various geographic, economic, political, and sociological factors.
3. By the 1934 revision of his book, Sutherland had argued that crime occurs when behaviors learned within different cultures and groups come into conflict. Sutherland spent much of the remainder of his career formulating, revising, and defending his renowned "differential association theory."
4. Sutherland concluded that multiple factors, such as gender, race, and age, cannot in themselves explain criminal behavior. Rather, he theorized that crime is caused by the different interactions and patterns of learning that occur in groups (e.g., juvenile gangs) that happen to be composed primarily of males, minority group members, or young people.
5. By the fourth (1947) edition, Sutherland clearly set forth *differential association theory* in a set of nine abstract principles (e.g., that the principal part of the learning of criminal behavior occurs within intimate personal groups). The principles asserted that behavior is learned through a process of communication in intimate personal groups. These groups teach "definitions" (including skills, motivations, attitudes, and rationalizations) either favorable or unfavorable to

the violation of the law. Criminal behavior results, it is argued, when a person is exposed to an excess of definitions favorable to the violation of the law over definitions supportive of adherence to lawful behaviors.

6. Soltes, in his study of actual convicted white collar criminals (Soltes, E., Why They Do It: Inside the Mind of the White-Collar Criminal, Public Affairs, 2016) supports Sutherland's idea of *differential association* in explaining why situational factors lead certain otherwise upstanding executives to engage in fraudulent behavior.
  - a. Soltes cites the need for what he calls "uncomfortable dissonance" to stimulate behavior change -- e.g., desisting from committing a criminal act. This is fully compatible with the Cressey Fraud Triangle's vertex of rationalization.
  - b. Other researchers have also addressed, directly or otherwise, the well-established matter of affective-cognitive dissonance, and how this needs to be addressed by (normal) persons committing acts that conflict with their self-image.
    - i) For example, Bandura (Bandura, A., Moral Disengagement: How People Do Harm and Live With Themselves, Worth Publishers, 2016) contends that in the development of a moral self, individuals adopt standards of right and wrong that serve as guides and deterrents for personal conduct, and, in general, do things that give them satisfaction and a sense of self-worth. They refrain from behaving in ways that violate their moral standards, because such conduct will bring self-condemnation.
    - ii) These positive and negative self-sanctions are instrumental in keeping behavior in line with moral standards, but, in a pervasive moral paradox, will behave harmfully and still maintain a positive self-regard and live in peace by disengaging moral self-sanctions from their harmful practices. According to Bandura, these psychosocial mechanisms of moral disengagement operate at both the individual and social system levels.
7. Importantly, Sutherland's theory emphasized that people can be independent, rational actors and individually motivated. This notion of one being a criminal based on his or her environment is now seen as being problematic.
8. Equally importantly -- and most germane to the primary focus of this presentation -- Sutherland entirely eschewed the notion that personality traits might affect a person's susceptibility to these environmental influences.
  - a. Sutherland argued that personality did not have any relevance to economic crime.
  - b. According to Sutherland, it is wrong to individualize and look for the cause of economic criminality in some lack of character at the level of the agent, because economic crime did not originate from the agent's biopsychic properties but from the situations and social bonds in the organization.
  - c. He stated the agenda for research as a focus on organizations -- i.e., the relation between the organization and its external environment (the market, other organizations, etc.) and its internal structures (norms, goals, values, etc.), where economic crime would be seen as a collective act (e.g., the complexity of the organization), and not as one caused by a single agent's personality.
9. Sutherland's work has been widely criticized, with adverse comments concerned that:
  - a. Sutherland tied the definition of white collar crime to the social status of the perpetrator, claiming it was "a crime committed by a person of respectability and high social status in the course of his occupation," thus defining crime in terms of the position of the perpetrator rather than the nature of the act itself.

- b. He dismissed the normal guilty mind ("*mens rea*") requirement that is a traditionally mandatory element defining criminality.
  - c. He was at least sympathetic to a presumption of guilt, particularly in regards to corporate/institutional alleged perpetrators, in contrast to the normal presumption of innocence until proven otherwise.
  - d. He also, in his writings, was loose in defining crimes, including many civil wrongs, such as violations of regulatory provisions or requirements, and even oversights or inadvertent acts, as being white-collar criminal acts.
  - e. His approach has had the unfortunate consequence of having "white-collar crime" become an almost undefined, elastic and ever-expanding catch-all classification.
  - f. As already noted, Sutherland's theory is "situational," meaning that the inclination to engage in fraud flows from the circumstances surrounding the would-be perpetrator. This is in contrast to the approach explained later in this presentation, which stresses the personality characteristics of at least certain would-be fraudsters -- and thus can be described as being "dispositional" in character.
10. An alternative, but similar, working definition created in 1996 by the National White Collar Crime Center, a group of white collar crime researchers, stated that:
- a. "White collar crimes are illegal or unethical acts that violate fiduciary responsibility of public trust committed by an individual or organization, usually during the course of legitimate occupational activity, by persons of high or respectable social status for personal or organizational gain" (Helmkamp, J., Ball, J., and Townsend, K. (eds.), *Definitional Dilemma: Can and Should There be a Universal Definition of White Collar Crime? Proceedings of Academic Workshop*, National White Collar Crime Center, 1996).
  - b. This definition still includes the status of the offender as part of the definition, which can make measurement and operationalization of white collar crimes problematic, especially when using official records of white collar crimes, which do not account for status of the offender, and therefore research using such data must define white collar crimes by offense type.
- B.** A number of alternative typologies of white collar crime have been proposed, including those based on the characteristics of the offender, those based on the type of the offense, and those based on the culture of the organization being targeted.
1. Typology based on characteristics of the offender (Helmkamp, J., Ball, J., & Townsend, K., op. cit.):
    - a. Illegal or unethical acts that violate fiduciary responsibility of public trust committed by an individual or organization, usually during the course of legitimate occupational activity, by persons of high or respectable social status for personal or organizational gain.
    - b. This, a version of the common (Sutherland, et al.) definition, incorporates the idea that the perpetrator has high social status (e.g., by virtue of being corporate manager or executive).
    - c. The implied presumption is that the psychological characteristics of the perpetrator is irrelevant to the likelihood of an offense occurring.
  2. Typology based on type of the offense (Friedrichs, D.O., Trusted Criminals: White Collar Crime in Contemporary Society (3rd ed.), Thomson Wadsworth, 2007):

- a. Corporate crime (done to benefit the employing enterprise);
  - b. Occupational crime (acts committed during the course of one's occupation with the intent of financial gain);
  - c. Governmental crime (harmful activity committed solely by government entities);
  - d. State-corporate crime (acts by government and corporate entities in conjunction with one another), crimes of globalization, or finance crime; and
  - e. Enterprise (a type of crime in which illegal activities are organized into a business entity, combining a legitimate business with the illegal activity), entrepreneurial (a form of crime in which a scam artist combines misleading, money-making activity with something resembling a real business venture), techno-, or avocational crime (which are marginal forms of white collar crime, which capture those crimes that resemble white collar crime [e.g., tax evasion], but are not committed through the course of an occupation).
3. Typology based on the culture of the entity or organization being affected (See, e.g., The Measurement of White Collar Crime Using Uniform Crime (UCR) Reporting Data, United States Department of Justice, N.D.; available at [www.fbi.gov/ucr/whitecollarforweb.pdf](http://www.fbi.gov/ucr/whitecollarforweb.pdf)).
- C. Criminological theories concerning white collar crime have been varied, but most have utilized one of a range of theoretical macro-level, social psychological, and rational choice perspectives.
1. *Social structural explanations* suggest that characteristics such as race, class, and gender, promote white collar crime through means of exploiting inequality in capitalist societies.
    - a. The assertion is that the powerful are able to use their position in society to reduce effective regulation and control, while deflecting attention from the harm that their behavior causes. (See, e.g., Lynch, M. J. and Michalowski, R., Primer in Radical Criminology: Critical Perspectives on Crime, Power, and Identity (4th ed.), Criminal Justice Press, 2006; Messerschmidt, J. W., Crime as Structured Action: Gender, Race, Class, and Crime in the Making, Sage, 1997; and Friedrichs, D. O., *op. cit.*)
    - b. Furthermore, some believe that laws and agencies that are constructed to regulate corporate entities do so in a way that is either ineffective or only protects those with power. (See, e.g., Stretesky, P. and Lynch, M. J., Corporate Environmental Violence and Racism, Crime, Law, and Social Change, v. 30, at pp. 163-184, 1999; and Burns, R. G. and Lynch, M. J. (2002). *Another Fine Mess . . . A Preliminary Examination of the Use of Fines by the National Highway Traffic Safety Administration*, Criminal Justice Review, v. 27(1), at pp. 1-25, 2002.)
  2. *Marxian perspectives* suggest, in common with social structure explanations, that:
    - a. The state is controlled by those with capital, *and*
    - b. Therefore laws promote the interests of the powerful and maintain the status quo. (See, e.g., Lynch, M. J. and Michalowski, R., *op. cit.*)
    - c. Barnett (Barnett, H. C., Corporate Capitalism, Corporate Crime, Crime & Delinquency, 27, pp. 4-23, 1981) suggests that the state and corporations share an interest in promoting profit, which places constraints upon the state's ability to effectively regulate corporate entities.
      - i) It thus follows that in capitalist nations a lack of effective regulation, positions of power, and an increase in competition among corporations creates a society where profits are placed above the welfare of workers, consumers, and citizens.
      - ii) This, in turn, creates opportunity for individuals and corporations to engage in white collar crime.

3. *Structural strain* theory (Messner, S. & Rosenfeld, R., Crime and the American Dream, Wadsworth, 1994), also known as *Institutional Anomie Theory*, suggests that economic institutional power promotes material gains and weakens the effect of noneconomic institutions that promote alternative, noneconomic goals and social norms, causing a state of anomie.
  - a. This is said to result in an individualism and unconventional means to gain monetary rewards.
  - b. This is asserted as being especially applicable to white collar crime, where norms that once regulated illegal or unethical behavior lag behind cultural values that promote economic success.
4. *Anomie*, or normlessness (Durkheim, E., The Division of Labor in Society, Free Press, 1933), suggests that anomie occurs when cultural norms fail to keep up with social change.
  - a. Political, economic, and technological advancements increase wants and desires.
  - b. Norms that once regulated these desires fail to do so, and until cultural norms are able to catch up with the prevailing social structure, a state of normlessness exists.
  - c. In this anomic state, corporations have nothing to inhibit deviant means of obtaining these newly created goals.
  - d. Additionally, structural strain suggests that a state of anomie exists when the ability to obtain goals valued by society (i.e., success, profit) are not achievable.
  - e. In this situation, individuals will resort to innovative (criminal) ways to obtain these materialistic goals (Merton, R., *Social structure and anomie*, American Sociological Review, 3, pp. 672-682, 1938).
5. *Organizational theories* of white collar crime focus on the organization or corporation as a rational actor, guided by internal and external climates and patterns of behavior.
  - a. Similar to *strain theories*, organizational theories also focus on norms governing corporations.
  - b. This is explained as individuals who enter the organization have their personal beliefs and intentions altered by the climate of the organization.
  - c. Individuals therefore adapt to the policies and procedures of the organization, becoming committed to the organization and conforming to its culture and climate.
6. *Differential association and social learning theories* suggest that individuals learn criminal behavior in the same manner that normal behavior is learned. (See, e.g., Akers, R. L., and Sellers, C. S., Criminological Theories: Introduction, Evaluation, and Application (4th ed.), Roxbury, 2004; and Sutherland, E. H., Principles of Criminology (4th ed.), J.B. Lippincott, 1947.)
  - a. For example, organizations may provide operational or effective definitions (e.g., that inflating stock values is an acceptable practice) and reinforcements (e.g., bonuses) conducive to white collar crime.
  - b. A number of studies support the notion that social learning theory provides a viable explanation of white collar crime.
7. *Control balance theory* suggests that an imbalance of control (control surplus or control deficits) will result in autonomous and repressive forms of deviance, respectively. (See, e.g., Piquero, N. L. and Piquero, A. R., *Control Balance and Exploitative Corporate Crime*, Criminology, v. 44(2), at pp. 397-430, 2006; and Tittle, C. R., Control Balance: Toward A General Theory Of Deviance, Routledge, 1995.)

- a. Investigation has been conducted into the ability of control surpluses to explain exploitative behavior in corporate settings.
  - b. Arguably, surpluses of power result in the actor's attempt to extend that surplus by expressing "autonomous" acts, which are exploitative and domineering in nature.
8. *Rational choice/deterrence* theories have been studied, with mixed results. (See, e.g., Makkai, T. and Braithwaite, J., *The Dialectics of Corporate Deterrence*, Journal of Research in Crime and Delinquency, v. 31, issue: 4, at pp. 347-373, 1994; Weisburd, D., Waring, E. J., & Chayet, E. F., *Specific Deterrence in a Sample of Offenders Convicted of White-Collar Crime*, Criminology, v. 33(4), at pp. 587-607, 1995; Nagin, D. S. and Paternoster, R., *Personal Capital and Social Control: The Deterrence Implications of Individual Differences in Criminal Offending*, Criminology, v. 32, at pp. 581-606, 1994; and Paternoster, R., and Simpson, S. S., (1996). *Sanction Threats and Appeals to Morality: Testing a Rational Choice Model of Corporate Crime*, Law & Society Review, v. 30, no. 3, at pp. 549-84, 1996.)
- a. Individuals were less likely to commit white collar crimes when confronted with formal sanctions, moral commitments, and organizational factors.
  - b. Other studies found an interaction between individual differences (self-centeredness and desire-for-control, respectively) and the likelihood of being deterred by perceived risk. More specifically, it found that individuals who are self-centered are less likely to weigh the costs of engaging in white collar crime
  - c. Another study found that desire-for-control was positively related to sanction threats and negatively related to perceived benefits.

D. Sutherland's student, Donald R. Cressey (Ph.D., Indiana University, 1950), embraced his mentor's theories and similarly ignored or rejected personality factors as having relevance to the likelihood of criminal behavior.

- 1. Cressey co-authored a standard text and reference work, *Principles of Criminology*, with Dr. Sutherland, a book that enjoyed at least eleven editions through 1992.
- 2. Cressey authored his most recognized work, *Other People's Money: A Study in the Social Psychology of Embezzlement*, in 1973, in which he proposed what became known as the Fraud Triangle, which in turn has become incorporated in the auditing literature under U.S. GAAS as well as the International Standards on Auditing (ISAs) promulgated by the IAASB.

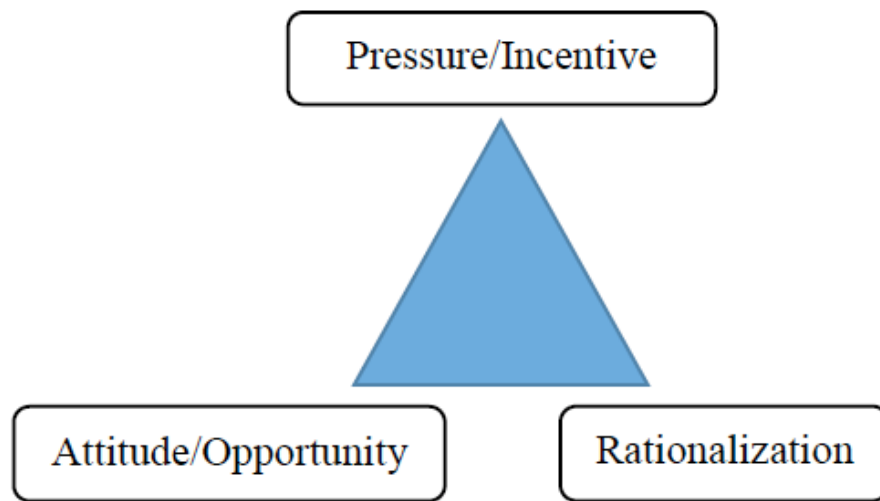
E. Notwithstanding that Cressey's work dealt with embezzlements, a specific sub-set of what are now generally seen as white-collar crimes, the auditing profession, under pressure to develop procedures (or, at least, attitudes) oriented toward the detection of financial reporting frauds, embraced the Fraud Triangle model (which posits three elements that ostensibly either must be present to spur the commission of financial reporting or other occupational frauds, or encourage the commission of such crimes), and the Fraud Triangle (whether identified explicitly or not) now guides or informs risk assessment phases of all standard audit engagements.

F. The Fraud Triangle can be represented as shown on the following page:

- 1. The model hypothesizes that three factors must be present (or, at the least, increase the likelihood) for a *normal* person to commit fraud (actually, embezzlement).
  - a. **Pressure/incentive:** a person has financial problem, either personal or corporate, that can be functionally addressed through the fraud. Although the Cressey model stresses the financial aspect, an extension can readily posit that an incentive may be non-remuneratory (e.g., a perceived need to earn bragging rights).



- b. **Opportunity:** the fraud perpetrator can “solve” his financial problem in secret, using his position, with no, or only a low, risk of being caught.
- c. **Rationalization:** the perpetrator does not see himself as criminal, but as merely caught in a web of circumstances beyond his control and addressing those circumstances as best he can, in an effort to avoid the pain of affective-cognitive dissonance. Rationalizations include:
  - i) Only borrowing the money for some near-term emergency, and planning to repay it.
  - ii) Entitled to the money, having long been underpaid, or others having less worthiness being overpaid for what they did, and perpetrator feels unfairly compensated.
  - iii) Employer is dishonest, and being defrauded is part of the culture; there is a negative ‘tone at the top’ of the organization.



2. None of the three elements seemingly relate to, or would be affected by, personality factors, which Cressey (and Sutherland) had explicitly rejected as being relevant to fraud (actually, in the derivation of the Triangle, embezzlement) risk.
3. Thus, there is an implied assumption that *either*:
  - a. The personality of the fraudster is ‘normal’ – i.e., not a “dark triad” type; *or*
  - b. Even non-normal personality types will fit the Fraud Triangle specifications – i.e., will only commit, or be more likely to commit, fraud (or embezzlement) if all three of the elements or conditions are satisfied.
4. Cressey and his followers never spoke of limitations of the triangle model, but more recent work has spotlighted existence of “dark triad” (narcissistic, Machiavellian, psychopathic) personalities that are not dependent upon normal motivations and constraints.
5. Inasmuch as the Fraud Triangle was adopted (albeit without attribution) as a basis for auditing standards (SAS 99 and its successors; ISA 240), it is now widely employed in assessing fraud risk in audit settings. For example, risk assessment “checklists” commonly used for self-completion by financial executives or used to guide interviews conducted by audit staffers, implicitly address the three elements of the Cressey Fraud Triangle model.

### III. LIMITATIONS AND CRITICISMS OF THE FRAUD RISK TRIANGLE

A. Many academicians and practitioners have offered extensions or modifications to the Cressey Fraud Triangle model in the years since it was promulgated. Until recently, however, these did not seek to modify the Fraud Triangle to address how the presence of abnormal personality characteristics might serve to make the model inapplicable.

B. Some proposed modifications to or extensions of the Cressey Fraud Triangle follow.

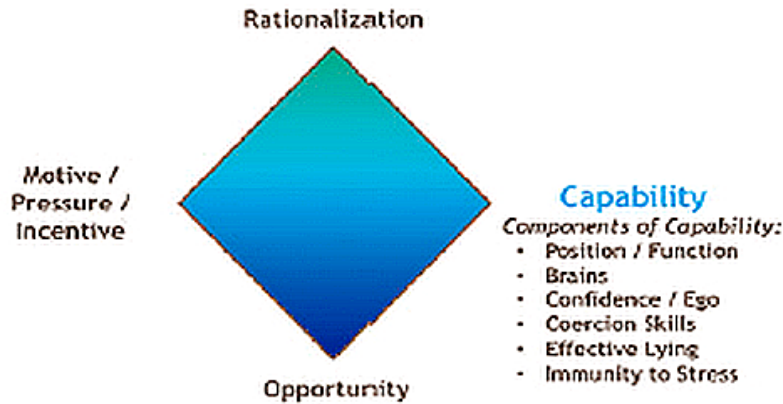
1. Dorminey, et al., offered criticisms of the Fraud Triangle in *Beyond the Fraud Theory: Enhancing Deterrence of Economic Crime* (The CPA Journal, July 2010). It notes that most of the Triangle model attributes are not subject to observation, thus limiting ability to apply in actual practice. Various shortcomings are cited, as set forth below.

|                              | Definition   | Shortcomings  | Extension  | Benefit of Extension  |
|------------------------------|--|---|--|---|
| <b>The Fraud Triangle</b>    |  |   |  |   |
|                              | Convergence of perceived pressure, perceived opportunity and rationalization to facilitate fraud.  | Fraud triangle is from the fraudster's perspective, so two attributes (pressure and rationalization) are generally nonobservable.   | Fraud diamond: Add an assessment of capability (see the discussion of pressure and rationalization in the text).                                     | Capability is generally a more observable attribute than pressure or rationalization.   |
|                              |  | Does not adequately explain the actions of pathological fraudsters: predators who are better organized, have better concealment schemes and are better at interacting with auditors and anti-fraud professionals. | Recognize that predators seek only opportunity and enhance a commitment to professional skepticism, brainstorming and critical thinking.             | Understanding predators better prepares anti-fraud professionals for dealing with more deliberate and nefarious fraudsters.                 |
| <b>Attributes</b>            |  |   |  |   |
| <b>Perceived Pressure</b>    | Nonshareable financial need.   | Perceived pressure is an incomplete descriptor of a fraudster's motivations.  | Expand the set of fraudsters' motivations using MICE: Money, Ideology, Coercion and Ego (entitlement).   | MICE provides a broader set of fraud motivations beyond nonshareable financial need.  |
| <b>Perceived Opportunity</b> | Opportunity to commit and conceal the fraud act.   | Does not address collusive behavior or management override.   | Focus on an anti-fraud environment, such as culture, tone at the top and engaged corporate governance, in addition to traditional internal controls. | Understanding collusive behaviors better prepares anti-fraud professionals for the challenges of management override, corruption and abuse. |
| <b>Rationalization</b>       | Morally defensible justification for actions seemingly out of character for the fraud perpetrator. | Nonobservable.  | Fraud Scale: Substituting integrity for rationalization.   | More visible than rationalization by observing decisions and decision-making processes to assess a person's integrity.                      |

2. The Wolfe-Hermanson Fraud Diamond

- a. Derived from Cressey triangle, but adds the *capability* factor, inasmuch as without the skill to execute the fraud, there would be few attempts and even fewer successes. Capability incorporates:
  - i) "Brains," i.e., intelligence.
  - ii) An appropriate position, within the organization, from which this can be executed.
  - iii) Self-confidence, or ego.
  - iv) Coercion skills (if a co-offender's assistance is needed).
  - v) The ability to lie about involvement when (if) asked about it afterwards.

- vi) Ability to handle stress.
- b. Arguably, unless the potential offender has the capabilities to execute a fraud, what would otherwise be an *opportunity* wouldn't actually be one; thus, *capability* might be seen as a component part of (or a necessary condition precedent to) opportunity.
- c. As with the Cressey model, implicit is the assumption of normality of personality.

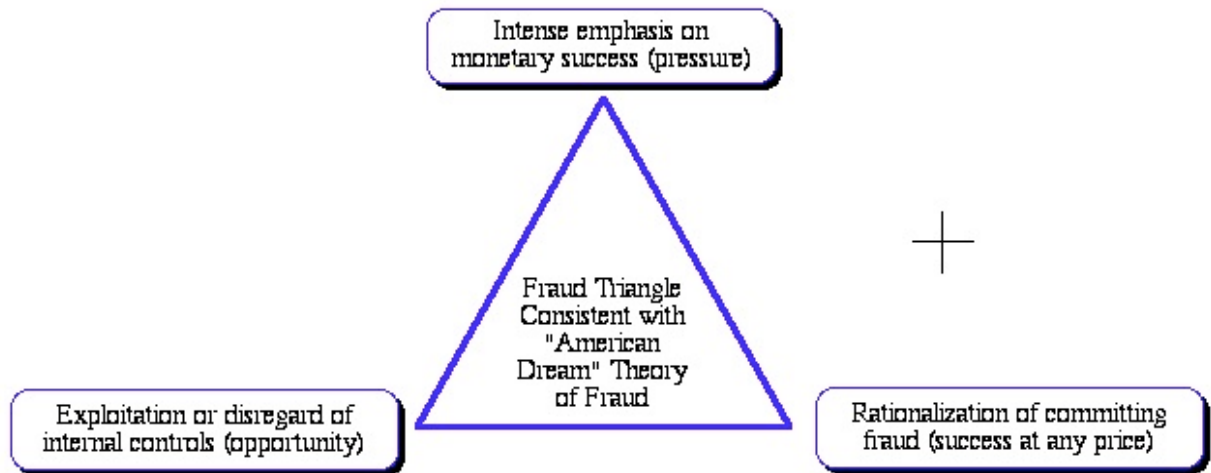


### 3. Crowe Horwath's Fraud Pentagon™

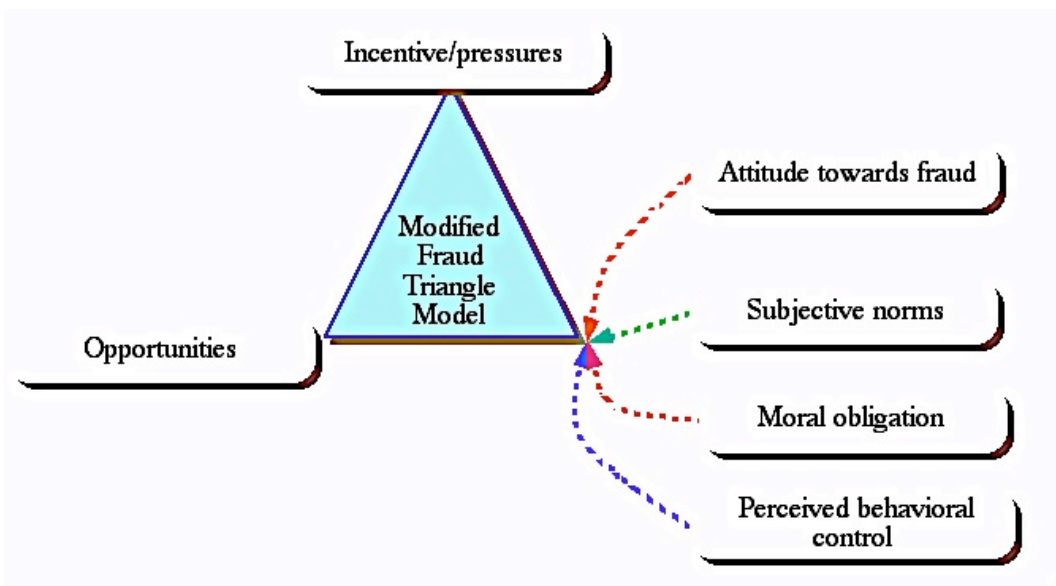
- a. Derived from the Cressey triangle – or alternatively, the Wolfe-Hermanson diamond – with arrogance added.
- b. Sides denote arrogance, competence, opportunity, pressure, and rationalization.
- c. As with the Cressey and Wolfe-Hermanson models, no allowance is made for non-normal (deviant) personalities, such as those in the “dark triad” of personality types.
- d. Recognizes changes in corporate culture over intervening decades.
  - i) Newer corporate culture celebrates wealth and fame rather than hard work and advancement over time.
  - ii) Many businesses no longer owner-managed.
  - iii) Managers and directors of today unlikely to face ownership costs when mishaps occur.
  - iv) Such distance enables actions that seem to be without negative consequence to perpetrator.
- e. In Crowe's Fraud Pentagon™, employee's competence or power and employee arrogance factored into conditions generally present when fraud occurs.
  - i) Competence includes employee's ability to override controls and/or socially control situation to his advantage.
  - ii) Arrogance includes attitude of entitlement in person who believes he is not subject to corporate policies and procedures.



4. The “American Dream Theory” variation on the Fraud Triangle.
  - a. Built upon an elaboration of the Fraud Triangle and its integration with agency theory and stewardship theory, in work first done by Albrecht, et al. [<http://ruby.fgcu.edu/courses/cpacini/courses/common/fraudandcorporate.pdf>], and that later has been given the name “broken trust theory.”
    - i) *Agency theory*, adapted from economics, describes a principal–agent relationship between owners (such as stockholders) and executives, with top executives acting as agents whose personal interests do not naturally align with shareholder interests. Executives having conflicts of interests (their own vs. owners’) is the *agency problem*. The implication is that owners’ representatives (board members) must *control* executives.
    - ii) *Stewardship theory*, adapted from psychology, sees corporate executives as stewards of their companies who will choose the interests of the stockholders over the interests of self, regardless of personal motivations or incentives. Essentially, this holds executives to be fiduciaries for owners. Implication is that owners’ representatives should *empower* executives, who will then do the right things.
    - iii) Research suggests that executives identified with either the agency theory or with the stewardship theory, not both, and that those identifying with stewardship were more trustworthy, and thus unlikely to commit fraud.
  - b. Coupled with certain longstanding sociological insights and theories (particularly that of *anomie*, the 18<sup>th</sup> Century’s Emile Durkheim-invented term for the “normlessness” that is presumed to be a product of modern, materialistic societies), a revised version of the Fraud Triangle was created, which is thought to be apt when explaining corporate executives’ frauds.

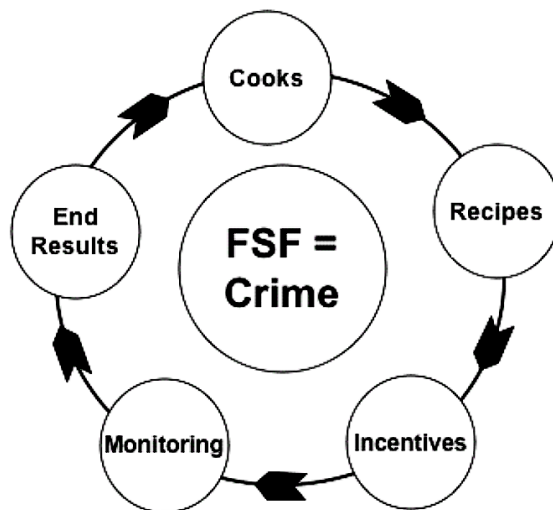


5. "Theory of Planned Behavior" modifications to Fraud Triangle model.
- a. The "theory of planned behavior" is not limited to describing fraudulent conduct.
  - b. Replaces the *rationalization* element, which is deemed necessary in the Cressey Fraud Triangle to psychologically allow individuals to engage in fraud, given existence of both perceived need and opportunity, with the four factors that collectively influence *planned behavior*.
    - i) *Subjective norms* are defined as the potential fraud perpetrator's perception that most people who are important to him think he or she should or should not perform the behavior in question.
    - ii) The *attitude toward the behavior* or towards fraud refers to the degree to which a potential perpetrator has a favorable or unfavorable evaluation or appraisal of the behavior in question.
    - iii) *Moral obligation* refers to the responsibility to perform or refuse to perform a certain behavior, which can be considered as an additional determinant of intentions in situations where ethical behavior is involved. In addition to the individual's own moral belief system, these moral obligations can be derived from laws, professional codes of ethics, and other similar sources.
    - iv) *Perceived behavioral control* reflects the potential fraud perpetrator's perception of how easy or difficult it is to engage in the particular behavior. Perceived behavioral control is related to intentions and is not assimilated within "opportunities" and "resources" that are considered "non-motivational" factors. Note that the Theory of Planned Behavior deals with perceived, rather than actual, behavior[al] control.

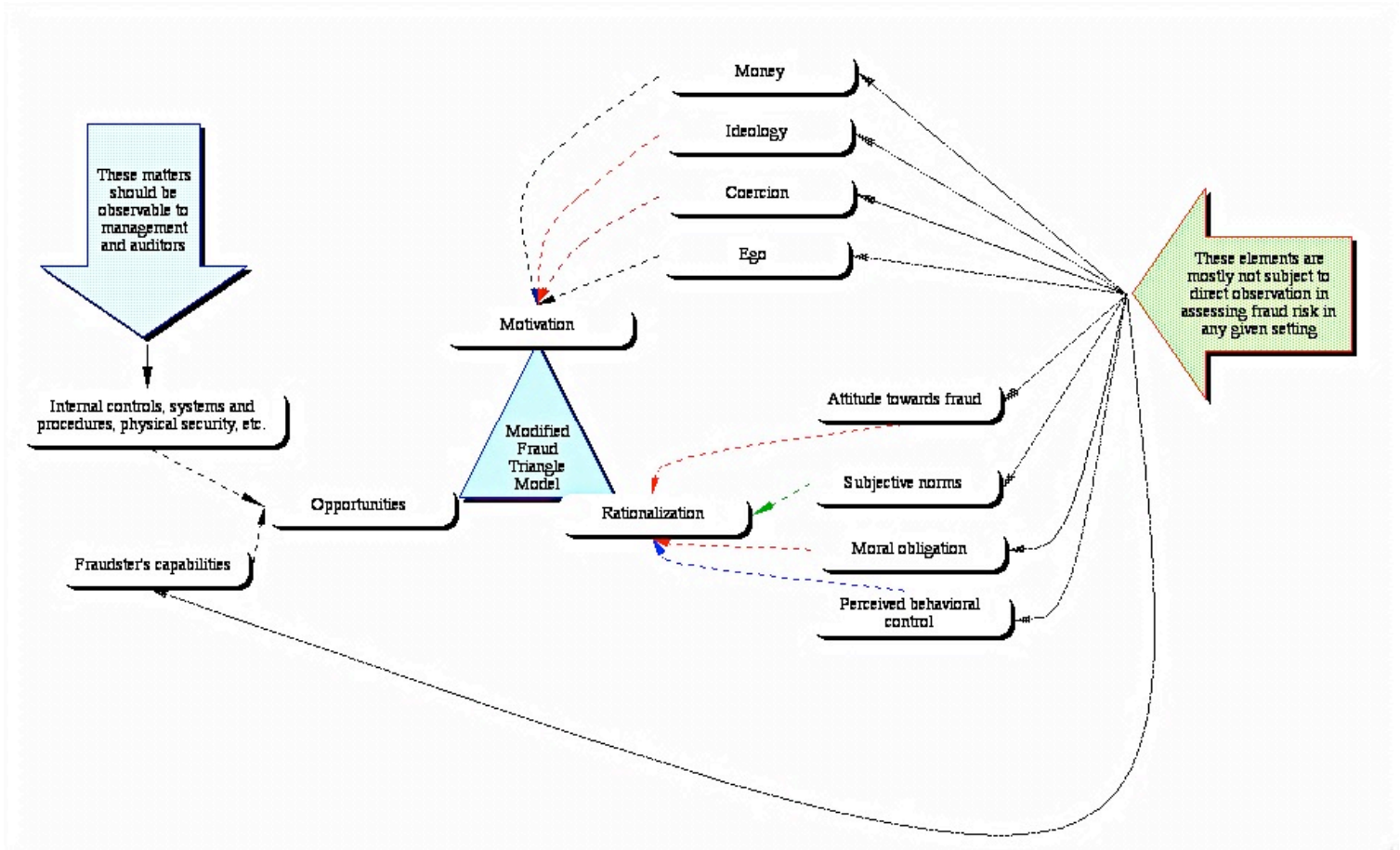


6. Rezaee's model of susceptibility to fraud

- a. The CRIME model posits the relationship shown below.
- b. *Cooks* are the perpetrators (CEOs and CFOs are the predominant cooks).
- c. *Recipes* are the techniques and devices employed, such as premature revenue recognition, the use of "cookie jar reserves" to provide for later periods' income, and deferral of current period expenses as if they represented benefits for later periods. About 90% of recipes relate to manipulation of financial reporting; 10% involve theft of assets.
- d. *Incentives* pertain to motivations for fraud, which are generally economic (boosting share prices; justifying bonuses; averting replacement). Some motivations are "psychotic" in nature, not being rational.
- e. *Monitoring* connotes the various control elements (tone at the top, audit committee actively performing its duties) that can prevent (or, at least, detect) frauds.



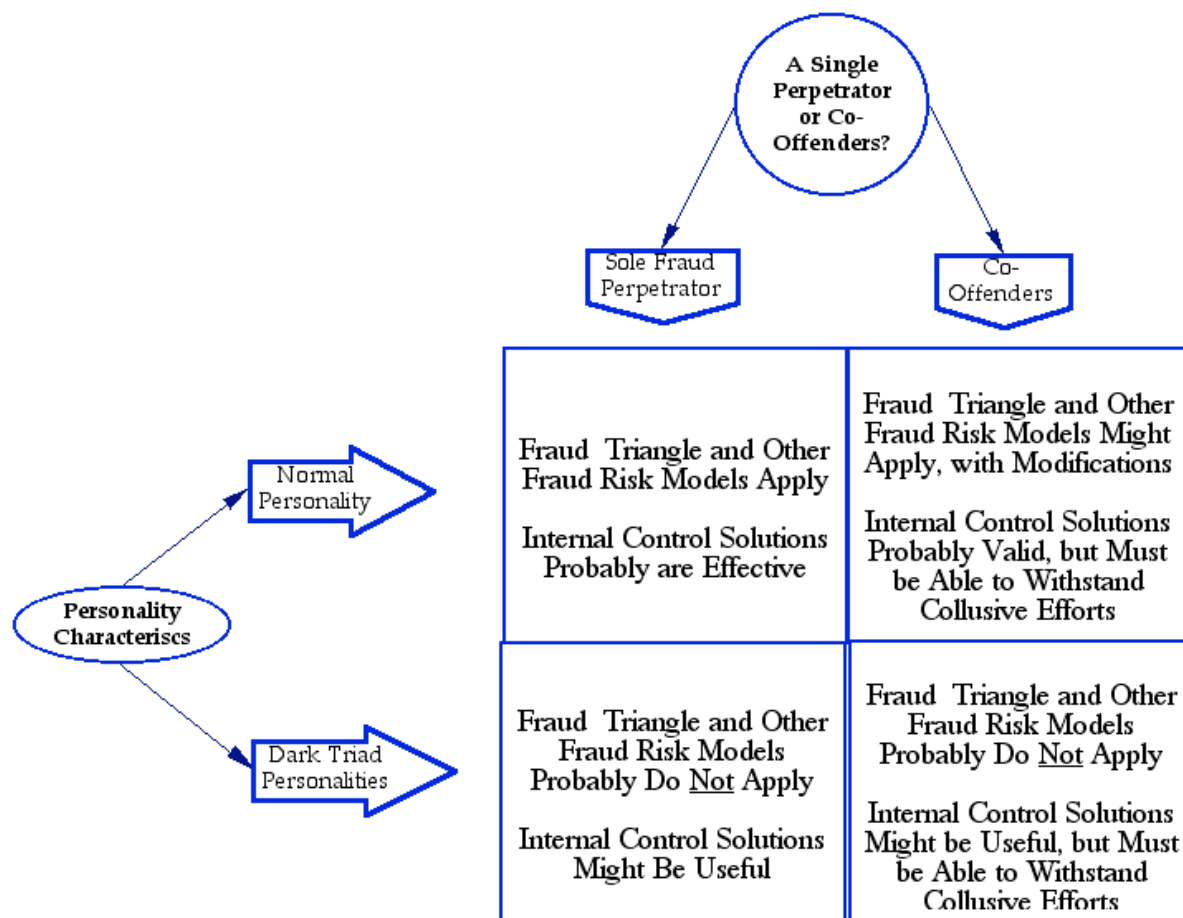
- f. Again, the possibility that the fraud perpetrator’s personality falls within the “dark triad” is not addressed.
7. A unified, expanded fraud model for non-deviant personality, non-collusive financial frauds, (prepared by the presenters of this session and shown below).
- a. This model incorporates many of the expanded sets of factors amending the Cressey Fraud Triangle, described above.
  - b. Motivation (or pressure/incentive) is seen to have multiple possible underlying causes, including need for money, an ideology such as antipathy to capitalism, coercion such as being blackmailed because of some personal problems or prior job-related infraction, and being driven by ego, “to prove I am smart enough to do this.”
  - c. This model explication highlights the fact that most of the elements are not readily observable, if at all subject to outside observation (and in any event, outside auditors would be less able than on-site management to note these traits).



C. Limitations of traditional fraud prediction models.

- 1. The Fraud Triangle and its derivative models implicitly are based on assumption of perpetrators having normal, non-deviant personality types.

2. The Fraud Triangle and its derivative models are predicated on there being a lone perpetrator; they fail to consider what other factors might motivate collusive fraud (more accurately, might motivate a collaborator to agree to enter into a fraudulent scheme with its author). This subject has been examined by Clinton Free and Pamela R. Murphy (see [[http://www.researchgate.net/publication/241128310\\_The\\_Ties\\_that\\_Bind\\_The\\_Decision\\_to\\_Co-Offend\\_in\\_Fraud](http://www.researchgate.net/publication/241128310_The_Ties_that_Bind_The_Decision_to_Co-Offend_in_Fraud)]).
3. The foregoing limitations might be graphically represented below.
4. There are doubtless other implications of non-normal personalities of offenders, and of decisions to co-offend in fraud; the table below deals only with two of these (applicability of Fraud Triangle model and value of normal internal controls as a deterrent), and is a two-dimensional representation of what is actually a 2x2x2 matrix. If other implications were addressed, the matrix would become 2x2xN dimensional.



#### IV. THE PSYCHOLOGY OF FRAUD (FROM FREUD TO FRAUD)

A. As explained by Ramamoorti, et al., (*Bringing Freud to Fraud: Understanding The State-Of-Mind Of The C-Level Suite/White Collar Offender Through "A-B-C" Analysis*, Journal of Forensic and Investigative Accounting, 6:1, Jan-June 2014), the motivation for fraud is under-hypothesized in the extant literature.



1. Beyond the elements in the Fraud Triangle, there exist other motivations such as those based on "fraudster's emotions" (e.g., revenge, social status comparisons, "crimes of passion" etc.), mastery of a situation or technique (e.g., a "catch-me-if-you-can" game), "self-interest or group interest," "noble cause corruption," etc.
  2. This expanded set of cognitive, conative, affective, and other motivational variables underlying the perpetration of fraud is better accounted for by psychologist Michael Apter's *reversal theory* (a theory of personality, motivation and emotion in the field of psychology that focuses on the dynamic qualities of normal human experience to describe how a person regularly reverses between psychological states, reflecting their motivational style and the meaning they attach to a given situation at a given time).
- B.** Ramamoorti has also argued (*The Psychology and Sociology of Fraud: Integrating the Behavioral Sciences Component Into Fraud and Forensic Accounting Curricula, Issues in Accounting Education, 23:4, November 2008, pp. 521-533*) that because fraud is a human act it must have solutions drawn from many fields that seek to understand human behavior.
1. The professions of accounting, finance, and economics have been rather myopic and lacking in a strong behavioral science foundation.
  2. Other fields of endeavor have also become curious about the concepts of social engineering and the science of persuasion.
  3. Consequently, strong currents are seen to be moving to broaden the study of fraud, away from the classical economic models of how markets work and what drives capitalism, and more into the world of human behavior and the behavioral sciences.
    - a. In the study of markets, the focus has been traditionally on large groups of people, and when economists speak about behavior their thinking is in terms of averages and aggregates such as "the corporation" or "an industry," or, in macro-economic terms, entire countries or geographical trading blocs or regions.
    - b. The foundation for this is an assumption that *homo economicus* is rational.
  4. "Greed" as an explanation for fraud is seen to be insufficient, because:
    - a. White-collar criminals generally are highly placed managers or executives, with generous incomes and typically luxurious lifestyles within their means, obviating simple need or greed as the reason for committing financial fraud.
    - b. Accordingly, psychologically-based explanations are likely to be more relevant -- thus the need to "bring Freud to (the explanation for) fraud."
- C.** A rigorous scientific foundation to behavioral study is accordingly urged.
1. The objective is to achieve an understanding about fraud behavior in order to deepen the capacity to prevent and deter fraud.
  2. This will require a sound theoretical framework that enables the generation of a set of testable hypotheses concerning behavioral responses and psychological mechanisms, which can then be confirmed or challenged using empirical data through observation and experiment.
- D.** Fraud behavior is multifactorial but can be parsed for analysis.
1. The ABC (bad apple, bad bushel, bad crop) model: a backbone upon which to place a new model for fraud.
    - a. Fraud occurs either because of an individual criminal's intent (the "apple"), a duo or team of "bad boys" who push ethical envelopes (the "bushel"), and/or a culture of passivity or, worse yet, a criminogenic culture (the "crop").
  2. Fraud happens out in the open so it is fundamentally a problem of perception.

- a. Somewhat ironically, fraud is the only crime in which the victim cooperates with the criminal. E.g., those who invested directly with Bernie Madoff did so willingly.
  - b. There are several tools that criminals use to distract from the commission of non-fraud crimes, the classic being the physical bump to distract from the pickpocket.
  - c. In the case of fraud, however, the perpetrator deploys diversionary tactics similarly by taking advantage of the task-focused nature of the work place.
3. Fraud is deception, fooling another's perception.
- E. Three tools are proposed as partial means to understand the occurrence of fraud.
1. *Judgment*, both individually and in groups, is perhaps fundamental to comprehend in order to understand fraud. Simply put, impaired judgment is a common theme of fraud victimhood.
    - a. Some assert that ethical mistakes are not due to "bad morals," but rather are a result of systematic errors in decision making.
    - b. Management largely connotes the collection of data, the analysis of data, and making judgments or taking actions based thereon. Failure in any aspect of these steps opens the door for the failure to prevent or detect fraud.
  2. *Emotions* can be an important part of problem solving and hence are relevant to understanding fraud.
    - a. Feelings play a critical role in making decisions and adapting to the world. Arguably, the brain, when devoid of feelings, is inaccurate and limited in its ability to problem solve.
    - b. This model challenges fundamental assumptions about the primacy of rationality and intellect, and parallel assumptions of the relative uselessness of emotions or feelings.
    - c. As people navigate their lives they are constantly receiving stimulation, which stimulates affect (the term that psychiatrists, psychologists and neurologists have used for "emotion"). The affect then results in action.
    - d. The nine core emotions that are common to all people are said to be: interest; enjoyment; surprise; anger; fear; distress; shame; disgust; and contempt.
    - e. Both functions of emotion – communication and motivation to take actions – relate to fraud.
    - f. Fraud is a human act in which emotions are manipulated. Because (in the authors' view) fraud occurs "in the open," it employs a manipulation of emotions in the same manner that, e.g., a pickpocket's "bump" is a distraction device.
  3. *Reversal theory* (per psychologist Michael Apter) is suggested to be the third of three tools that are useful in understanding fraud.
    - a. The theory distinctively proposes that human experience is structurally organized into meta-motivational domains, of which four have been identified.
    - b. Each domain consists of a pair of opposing values or motives, so that only one of each pair can be experienced in any given moment.
    - c. The pairs are:
      - i) Means-Ends - The two states in the first pair are called "Telic" (or "Serious") and "Paratelic" (or "Playful") and refer to whether one is motivated by achievement and future goals, or the enjoyment of process in the moment.
      - ii) Rules - The next two states are called "Conforming" and "Rebellious" (or "Negativistic") and refer to whether one enjoys operating within rules and expectations; or whether one wishes to be free and push against these structures.

- iii) Transactions - The next two states are called "Mastery" and "Sympathy" and relate to whether one is motivated by transacting power and control; or by care and compassion.
    - iv) Relationships - The final two states are called "Autic" (or "Self") and "Alloic" (or "Other") and refer to whether one is motivated by self-interests (personal accountability and responsibility) or by the interests of others (altruism and transcendence).
  - d. The primary emphasis of Reversal Theory lies in the concept of reversals - by "triggering" a reversal between states, one can change the meaning attributed to the situation.
    - i) What seemed serious before, can suddenly feel exciting with the right change in situation or mindset.
    - ii) Reversals can be created by changing a situation, reframing it, role playing, or using specific symbols or props that invoke a specific state (e.g., a toy can help trigger the Paratelic/Playful state; the image of a traffic sign may invoke the Conforming state).
  - e. Reversal Theory links the motivational states above to emotion by proposing that if one is in a state and things are going well, positive emotions result; if the needs of the state are not fulfilled, negative emotions result.
  - f. Early in the evolution of reversal theory was a recognition that correlates directly to the study of fraud, particularly the long sustained fraud that is the most expensive. This led to Apter's discovery or realization that the inherent nature of the mind is to switch or "reverse" motivation depending on the context (and hence the name *reversal theory*).
  - g. It is suggested that certain caveats be observed regarding the application of Apter's Reversal Theory to an understanding fraud.
    - i) Understanding the state-of-mind of the fraudster is less about dominant states and more about the state at the time as the fraud unfolds.
    - ii) Actions taken at each of the three vertices of the Fraud Triangle (opportunity, pressure, and rationalization) could be influenced by any of the eight states.
    - iii) Determining why a person does commit fraud would be better determined by an interview by a skilled interviewer than by an inventory.
  - h. The authors' suggestion is that, to understand fraud, a new model that incorporates the changing motivations of executives and the people they manage is essential.
    - i) In addition, a model that can help understand the "changeability" to not choose fraud will help discover new deterrents.
    - ii) According to reversal theory creator Michael Apter, the potential of his theory is that reversal theory is an approach that moves beyond a limited perspective of goals and rewards to look at the complexity and changeability of human motivation and behavior.

## V. EARLIER EXPLORATIONS OF PERSONALITY TRAITS' IMPACT ON WHITE COLLAR CRIME RISK

- A. The possibility that personality traits could impact criminal behavior has been considered before.
  - 1. The "Big Five" personality traits – Agreeableness, Neuroticism, Extroversion, Conscientiousness, and Intellect – alias the Five Factor Model, was first proposed by Tupes and Christal in 1961, (Tupes E. C. and Christal, R. E., *Recurrent Personality Factors Based on Trait Ratings*, USAF ASD Tech. Rep., pp. 61–97), but not widely recognized until the 1980s.
    - a. *Intellect*, also referred to as *openness to experience*, described along the dimension inventive/curious vs. consistent/cautious).
      - i) Characteristic of intellect are appreciation for art, emotion, adventure, unusual ideas, curiosity, and variety of experience.

- ii) Openness reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety a person has. It is also described as the extent to which a person is imaginative or independent and depicts a personal preference for a variety of activities over a strict routine.
  - iii) High openness can be perceived as unpredictability or lack of focus, and more likely to engage in risky behaviors. Also, individuals that have high openness tend to lean, in occupation and avocation, towards the arts, being, typically, creative and appreciative of the significance of intellectual and artistic pursuits.
  - iv) Moreover, individuals with high openness are said to pursue self-actualization by specifically seeking out intense, euphoric experiences.
  - v) Conversely, those with low openness seek to gain fulfillment through perseverance and are characterized as pragmatic and data-driven – sometimes even perceived to be dogmatic and closed-minded.
- b. *Conscientiousness*, described along the dimension efficient/organized vs. easy-going/careless. The tendency is to be organized and dependable, exhibiting self-discipline, acting dutifully, aiming for achievement, and preferring planned rather than spontaneous behavior.
  - i) High conscientiousness is often perceived as being stubborn and focused.
  - ii) Low conscientiousness is associated with flexibility and spontaneity, but can also appear as sloppiness and lack of reliability.
- c. *Extroversion* described along the dimension outgoing/energetic vs. solitary/reserved).
  - i) Characteristic of extroversion are energy, surgency (an aspect of emotional reactivity in which a person tends towards high levels of positive affect, often associated with children), assertiveness, sociability, the tendency to seek stimulation in the company of others, and talkativeness.
  - ii) High extroversion is often perceived as attention-seeking and domineering. Extroverted people may appear more dominant in social settings, as opposed to introverted people in this setting.
  - iii) Low extraversion causes a reserved, reflective personality, which can be perceived as aloof or self-absorbed.
- d. *Agreeableness*, described along the dimension friendly/compassionate vs. challenging/detached).
  - i) Characteristic of agreeableness are the tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others.
  - ii) It is also a measure of one's trusting and helpful nature, and whether a person is generally well-tempered or not.
  - iii) High agreeableness is often seen as naive or submissive.
  - iv) Low agreeableness personalities are often competitive or challenging people, which can be seen as argumentative or untrustworthy.
- e. *Neuroticism*, described along the dimension sensitive/nervous vs. secure/confident).
  - i) Characteristic of neuroticism are the tendency to be prone to psychological stress and the tendency to experience unpleasant emotions, such as anger, anxiety, depression, and vulnerability easily.

- ii) Neuroticism also refers to the degree of emotional stability and impulse control and is sometimes referred to as emotional stability.
  - iii) High stability manifests itself as a stable and calm personality, but can be seen as uninspiring and unconcerned.
  - iv) Low stability manifests as the reactive and excitable personality often found in dynamic individuals, but can be perceived as unstable or insecure. Also, individuals with higher levels of neuroticism tend to have poor psychological well-being.
2. The "Big Five" is a taxonomy for personality traits, based on common language descriptors.
    - a. When factor analysis is applied to personality survey data, some words used to describe aspects of personality are often applied to the same person.
    - b. This theory is based therefore on the association between words, but not on neuropsychological experiments.
    - c. This theory uses descriptors of common language and therefore suggests five broad dimensions commonly used to describe the human personality and psyche.
  3. In 1990, Digman advanced his five-factor model of personality (Digman, J. M., *Five Robust Trait Dimensions: Development, Stability, and Utility*, *Journal of Personality*, 57:2, pp. 195–214, 1989), which Goldberg extended to the highest level of organization (Goldberg, L. R., *The Structure of Phenotypic Personality Traits*, *The American Psychologist*, 48:1, pp. 26–34, 1993).
  4. The aforementioned five overarching domains have been found to contain and subsume most known personality traits and are assumed to represent the basic structure behind all personality traits
- B. Research examined the "Big Five" traits as possible determinants of crime.**
1. Research in this area was limited, but a few studies examined broad measures of personality and their relation to white collar crime. Alalehto, for example (Alalehto, T., *Economic Crime: Does Personality Matter?* *International Journal of Offender Therapy and Comparative Criminology*, 47:3, pp. 335-355, 2003), employed the Big Five model to assess personality traits of individuals who engage in tax evasion.
    - a. Alalehto relied on a unique method for collecting qualitative data, in which individuals were interviewed and asked questions about their co-workers. It was found that certain personality traits based on the Big Five model increased the likelihood that individuals engaged in economic crime.
    - b. For example, he found that individuals high on extroversion, disagreeableness, or neuroticism were more likely to engage in white collar crime.
  2. Based on these findings, Alalehto suggests that there are three types of white collar offenders. His typology consists of:
    - a. The *positive extrovert*, who is driven into economic crime by his manipulative and egocentric characteristics and desire for control;
    - b. The *disagreeable business man*, who acts on suspicion and envy and uses deceitful tactics; and
    - c. The *neurotic*, characterized by high levels of anxiety, low self-esteem, anger, and hostility, making them susceptible to persuasion, and in turn engage in white collar crime.
  3. These findings are broad and suggest that several specific personality constellations may characterize individuals who engage in white collar crime. Other studies have focused on additional traits or different conceptualizations of personality.

C. Other personality-driven theories regarding criminal (white collar and other) behavior have also been debated, before "dark triad" personality hypotheses were widely understood. Some of the following have been briefly noted above. Included are:

1. The *neutralization theory* (Piquero, N. L., Tibbetts, S. G., & Blankenship, M. B., *Examining the Role of Differential Association and Techniques of Neutralization in Explaining Corporate Crime, Deviant Behavior*, 26, pp. 159-188, 2005) proposed that criminal acts (presumably extending to white collar crime) can be committed if the perpetrator has effected techniques of so-called neutralization, developed in the context of juvenile delinquency.
  - a. According to Gresham Sykes and David Matza (Sykes, G. and Matza, D., *Techniques of Neutralization: A Theory of Delinquency, American Sociological Review*, 22, pp. 664–670, 1957), acts that violate norms or go against beliefs carry with them guilt and shame, which dissuades a would-be perpetrator from engaging in criminal or delinquent acts. Therefore, they must find ways to preemptively neutralize the guilt and protect their self-image if they choose to participate in delinquent or deviant behavior.
    - i) One way to do this is by using techniques of neutralization that provide episodic relief from moral constraint and allow individuals to drift back and forth between delinquent and conventional behavior.
    - ii) In simpler terms, it is a psychological method for people to turn off "inner protests" when they do, or are about to do, something they themselves perceive as wrong.
  - b. Several techniques for accomplishing neutralization were hypothesized, many of which would appear to be consonant with personality-based theories of white collar crime:
    - i) *Denial of responsibility*: the offender will propose that they were victims of circumstance or were forced into situations beyond their control.
    - ii) *Denial of injury*: the offender insists that their actions did not cause any harm or damage.
    - iii) *Denial of the victim*: the offender believes that the victim deserved whatever action the offender committed.
    - iv) *Condemnation of the condemners*: the offenders maintain that those who condemn their offense are doing so purely out of spite, or are shifting the blame off of themselves unfairly.
    - v) *Appeal to higher loyalties*: The offender suggests that his or her offense was for the greater good, with long term consequences that would justify their actions, such as protection of a friend.
  - c. Research on neutralization theory has generally produced mixed results, suggesting that it is not powerful enough to serve as a stand-alone explanation for crime. However, it has been incorporated into a variety of other theories, including control theory, learning theory, and labeling theory.
2. *Differential association and social learning theories* (Jones, G.E. & Kavanagh, M.J., *An Experimental Examination of the Effects of Individual and Situational Factors on Unethical Behavioral Intentions in the Workplace, Journal of Business Ethics*, 15:5, pp. 511-523, 1996)
  - a. These teach that criminal behavior is learned, as Sutherland first asserted. Notwithstanding Sutherland's (and, later, Cressey's) denial of personality having a central role in the actions of white collar criminals, one can hypothesize that vicissitudes in individual personality affect the tendency to learn such behaviors (or any other behaviors, for that matter).

- b. Peer and managerial influences thus are held to play roles in unethical (including criminal) behavior, which is consistent with an emphasis on the importance of establishing an appropriate "tone at the top" in control system policies and practices.
  - c. An important quality of differential association theory concerns the frequency and intensity of interaction. The amount of time that a person is exposed to a particular definition and at what point the interaction began are both crucial for explaining criminal activity, according to the theory. From a personality-oriented perspective, however, one might argue that some personality types (extroverts, in particular) would be more prone to such interactions and, accordingly, more at risk of "learning" bad behavior, including white collar crime techniques, from such interactions.
3. *Social control and bonding theories* (Lasley, J. R., *Toward a Control Theory of White Collar Offending*, Journal of Quantitative Criminology, 4, pp. 347-362, 1988).
- a. Bonding theories reverse the traditional position of theories that attempt to explain why some individuals engage in crime by instead asking why it is that individuals do *not* engage in crime (Hirschi, T., *Causes of Delinquency*, University of California Press, 1969). In other words, bonding theories assume that all individuals are prone to criminal behavior, and informal social control inhibits such criminal tendencies.
  - b. In criminology, social control theory proposes that exploiting the process of socialization and social learning builds self-control and reduces the inclination to indulge in behavior recognized as antisocial. It derives from functionalist theories of crime and was developed by Ivan Nye (Nye, F. I., *Family Relationships and Delinquent Behavior*, Greenwood Press, 1958), who proposed that there were three types of control:
    - i) *Direct*: by which punishment is threatened or applied for wrongful behavior, and compliance is rewarded by parents, family, and authority figures.
    - ii) *Indirect*: by identification with those who influence behavior, say because his or her delinquent act might cause pain and disappointment to parents and others with whom he or she has close relationships.
    - iii) *Internal*: by which a youth refrains from delinquency through the conscience or superego.
  - c. Because white collar crime occurs within the realm of an organization with strong social ties and networks, bonding theories may be applicable (Friedrichs, D.O., *Trusted Criminals: White Collar Crime in Contemporary Society* (3rd ed.), Thomson Wadsworth, 2007)
    - i) Bonding theory, as applied to white collar crime, suggests that corporations with strong, positive social networks promote informal social control among its employees.
    - ii) For example, Lasley (Lasley, J. R., *Toward a Control Theory of White Collar Offending*, Journal of Quantitative Criminology, 4, pp. 347-362, 1988) found that individuals with stronger attachments to supervisors and co-workers, higher levels of commitment to rules, and an increased sense of accountability and worth to the company were less likely to engage in white collar crime.
4. *General strain theory* (Langton, L. & Piquero, N.L., *Can General Strain Theory Explain White-Collar Crime? A Preliminary Investigation of the Relationship Between Strain and Select White-Collar Offenses*, Journal of Criminal Justice, 35, pp. 1-15, 2007) posits that blocked goals will lead to frustration within the individual, who will then use innovative means to obtain those valued goals (Agnew, R., *Foundation for a General Strain Theory of Crime and Delinquency*, Criminology, 30:1, pp. 47-87, 1992).

- a. Although, in common with Sutherland and Cressey, the emphasis is on structural or situational factors, it can be understood that responses to the identified conditions may vary depending on the malefactor's personality traits.
  - b. Based on Robert K. Merton's social strain theory (Merton, R.K., Social Theory and Social Structure, rev. ed., Free Press, 1957), which he began developing in the 1930s, that social structures may pressure individuals to commit crimes.
  - c. Agnew further developed this to address types of strain and other characteristics that have relevance to employing this theory to criminology.
    - i) Strain may be *structural*, which refers to the processes at the societal level that filter down and affect how the individual perceives his or her needs.
    - ii) Strain may also be *individual*, which refers to the frictions and pains experienced by an individual as he or she looks for ways to satisfy individual needs.
    - iii) These types of strain can insinuate social structures within society that then pressure citizens to become criminals
  - d. The core idea of Agnew's general strain theory is that people who experience strain or stress become distressed or upset which may lead them to commit crime in order to cope.
    - i) One of the key principles of this theory is that emotion is the motivator for crime. The theory was developed to conceptualize the full range of sources in society where strain possibly comes from, which Merton's strain theory does not.
    - ii) The theory also focuses on the perspective of goals for status, expectations and class rather than focusing on money (as Merton's theory does).
  - e. A range of other variants of strain theory have also been proposed and researched, some of which can be seen to have personality components, as well.
    - i) However, critics of strain theories note that white collar crime may not be well explained, inasmuch as the typical perpetrator has legitimate opportunities for enrichment (or career satisfaction, at least) without resorting to crime; hence a belief that strain theory better explains lower-caste criminal activity.
    - ii) Nevertheless, some research supports applicability of general strain theory to white collar crime occurrences. For example, Langton and Piquero (Langton, L. & Piquero, N.L., *Can General Strain Theory Explain White-Collar Crime? A Preliminary Investigation of the Relationship Between Strain and Select White-Collar Offenses*, Journal of Criminal Justice, 35, pp. 1-15, 2007) tested general strain theory among a group of convicted white collar offenders, and found that strain was positively related to financial motives for offending, and also that strain was positively associated with securities violations and tax fraud.
5. *Deterrence/rational choice theories* (Weisburd, D., Waring, E. J., & Chayet, E. F., *Specific Deterrence in a Sample of Offenders Convicted of White-Collar Crime*, Criminology, 33:4, pp. 587-607, 1995), which date from the late 1700s, refers to an economic principle that assumes that individuals always make prudent and logical decisions that provide them with the highest amount of personal utility.
- a. The basic premise of rational choice theory is that aggregate social behavior results from the behavior of individual actors, each of whom is making his/her individual decisions. The theory also focuses on the determinants of the individual choices ("methodological individualism").



- i) Rational choice theory assumes that an individual has preferences among the available choice alternatives that allow them to state which option they prefer.
  - ii) These preferences are assumed to be complete (the person can always say which of two alternatives they consider preferable or that neither is preferred to the other) and transitive (e.g., if option A is preferred over option B, and option B is preferred over option C, then A is preferred over C).
  - iii) The rational agent is assumed to take account of available information, probabilities of events, and potential costs and benefits in determining preferences, and to act consistently in choosing the self-determined best choice of action.
  - iv) Rationality is widely used as an assumption of the behavior of individuals in microeconomic models and analyses and appears in almost all economics textbook treatments of human decision-making.
  - v) Gary Becker, who won the 1992 Nobel Memorial Prize in Economic Sciences for his studies of discrimination, crime, and human capital, was an early proponent of applying rational actor models more widely.
- b. Rational choice theory and its assumptions about human behavior have been integrated into numerous criminological theories and criminal justice interventions.
  - c. Since its inception, the theory has been expanded upon and extended to include other perspectives, such as deterrence, situational crime prevention, and routine activity theory.
  - d. The rational choice perspective has been applied to a wide range of crimes, including robbery, drug use, vandalism, and white-collar crime. In addition, neuropsychological literature shows that there are neurobiological mechanisms involved in “rational choices.”
  - e. Cornish and Clarke (Cornish, D. B., and Clarke, R. V., eds., The Reasoning Criminal: Rational Choice Perspectives on Offending, Springer-Verlag, 1986) present numerous theoretical and empirical essays that describe the process of criminal decision making.
  - f. Piquero and Tibbetts (Piquero, A. R., and Tibbetts, S. G., eds., Rational Choice and Criminal Behavior: Recent Research and Future Challenges, Routledge, 2002) address a number of issues relating to rational choice theory, such as the methodological issues associated with rational choice and the integration of rational choice theory into other theories. It also contains chapters that describe how rational choice can be applied to a number of criminal behaviors, such as organized crime, corporate crime, and violent behavior.
  - g. Clarke and Felson (Clarke, R. V., and Felson, M., eds., Routine Activity and Rational Choice, Transaction Publishers, 1993) edited a series of essays that apply rational choice to different types of crimes, and that discuss the integration of rational choice with other theories. In addition, this work discusses how opportunity structures and rational choice come together to create a criminal offense.
  - h. Ariely (Ariely, D., Predictably Irrational: The Hidden Forces that Shape our Decisions, HarperCollins, 2008) discusses how human decision-making processes are more likely to be irrational than rational.

## VI. INTEGRATING "DARK TRIAD" UNDERSTANDING INTO AUDITING THEORY AND PRACTICE

### A. The phenomenon of “dark triad” personality types.

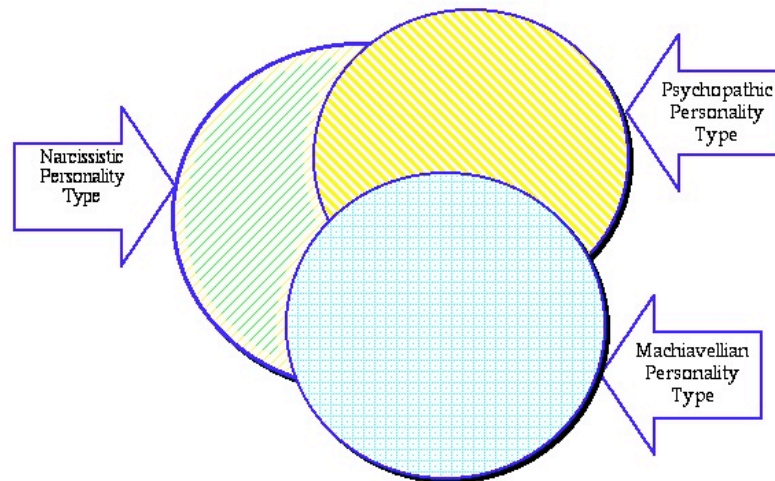
1. As noted above, Cressey, in his Fraud Triangle construction – consistent with positions his mentor Sutherland had taken in his earlier groundbreaking work – made no reference to personality factors, leaving the clear impression that would-be fraud perpetrators of any

personality type would have similar dispositions toward commission of fraud, depending on the confluence of the three Fraud Triangle elements.

2. As popularly interpreted, a would-be perpetrator – regardless of personality characteristics – requires that each of the three factors in the Fraud Triangle be present or satisfied in order to trigger or increase the proclivity towards the commission of the fraud. Satisfaction of one or two factors would not be sufficient to relax the inherent disinclination to engage in such an act.
3. Within the past two decades, however, important research has revealed that certain personality types, denoted as being members of the so-called "dark triad," are present in a significant fraction of executive ranks, and could throw into question the orthodox belief in the necessity for having all three Fraud Triangle factors satisfied for fraud to occur.
4. D. L. Paulhus and K. M. Williams (*The Dark Triad of Personality: Narcissism, Machiavellianism, and Psychopathy*, Journal of Research in Personality, 36:6, December 2002, pp. 556-63) described the three key abnormal personality types, and these findings were reinforced by A. Furman, et al., in a comprehensive review of subsequent research (*The Dark Triad of Personality: A 10-Year Review*, Social and Personality Psychology Compass 7:3, pp. 199–216, 2013).
  - a. The *narcissistic* personality is characterized by grandiosity, pride, egotism, and a lack of empathy for others. Such persons are excessively preoccupied with personal adequacy, power, prestige, and vanity, and are mentally unable to see the destructive damage they cause to themselves and others. Historically, this was called megalomania, and it is said to be an exaggerated variant of egocentrism. (See citations to a large body of literature, including numerous testing methodologies, at A. Furman, et al., op. cit.)
  - b. The *psychopathic* personality is characterized by enduring anti-social behavior, impulsivity, selfishness, callousness, and remorselessness. Psychopaths commonly exhibit glibness or superficial charm, a grandiose sense of self-worth, a heightened need for stimulation and a low threshold for boredom, a pathological inclination for lying, a shallowness of emotional response, a lack of empathy, a parasitic lifestyle, poor behavioral controls, a lack of realistic long-term goals, a failure to accept responsibility for their actions, and criminal versatility. (See A. Furman, et al., op. cit.)
  - c. The *Machiavellian* personality is characterized by manipulation and exploitation of others, a cynical disregard for morality, and a focus on self-interest and deception. Machiavellians are temperamentally predisposed to be calculating, conniving, and deceptive, using other people as "stepping stones" to reach their goals. Their tactics include charm, friendliness, self-disclosure, guilt, and pressure. Although they prefer to use subtle tactics when possible to mask their true intentions and provide plausible deniability, they have been known to use pressure and threats when necessary. (See A. Furman, et al., op. cit.)
  - d. Whether these three types of personalities are officially recognized (e.g., in the American Psychiatric Association's *Diagnostic and Statistical Manual*) or not is essentially irrelevant, inasmuch as:
    - i) Each of these sets of traits has been well described and can be diagnosed using well accepted interview schedules and other tools, and
    - ii) If, as posited, those exhibiting one or the other of these sets of deviant personality traits impact the risks that must be assessed by auditors in determining the nature, timing and extent of auditing procedures, then attention must be paid to these personality issues and auditors must assess the extent to which they are present among the persons having significant influence over the integrity of the reporting entity's (i.e., the auditee's) financial statements.

- iii) Simply stated, a failure to consider whether personalities of key personnel (e.g., those in positions to subvert controls or take advantage of weak controls over the financial reporting process) are non-normal and thus not accurately described by the Cressey Fraud Triangle (or its derivatives) means that actual audit risk being taken will exceed – perhaps significantly – the nominal risk specified in the audit planning process. Put another way: the risk of material misstatements of the financial statements being opined upon will exceed what the auditors believe is being taken.
- e. Studies show that the traits of these three prototypes may overlap, and “trait creep” has expanded each of these over time (Jones, D. N. and Paulhus, D. L. *Differentiating the Dark Triad Within the Interpersonal Circumplex*, In Horowitz, L. M. and Strack, S. N., Handbook of Interpersonal Theory and Research, Guilford, at pp. 249–67, 2010).
  - i) It may be timely to focus research efforts on more precisely defining the traits that characterize each of the dark triad types in an attempt to more precisely discriminate among them (perhaps using methods analogous to factor analysis in social science research), so that more precise instruments (interview outlines, etc.) can be developed.
  - ii) On the other hand, the most important objective, from an auditor perspective at least, is to be able to identify that key personnel having influence or control over the financial reporting process belong to *one or another* of the dark triad personality types -- which one being less critical -- so that appropriate audit scoping decisions can be made.

Evidence Suggests That The Three Dark Triad Personality Types' Traits Overlap to Some Extent

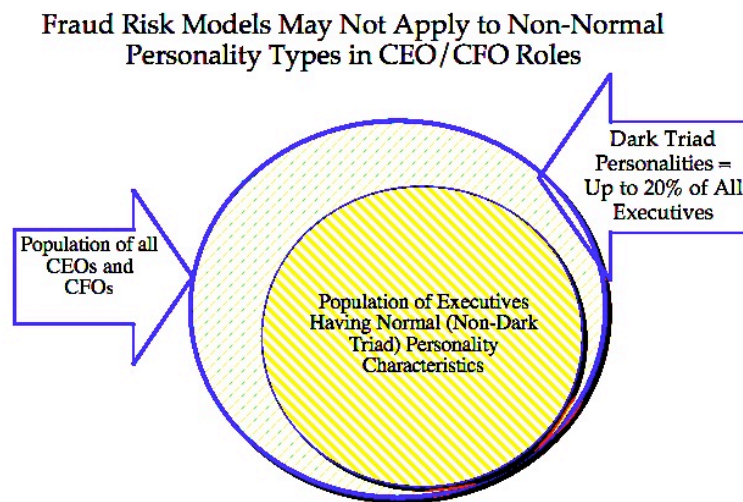


5. It is estimated that these “dark triad” personalities are four times more prevalent in executive ranks than in the general population.
  - a. About 5% of the general population (somewhat higher for men than women) can be characterized as having one of these sets of traits.
  - b. Studies suggest that about 20% of those occupying “c-suite” positions have one or another of these trait sets.
  - c. Logic suggests that such a finding is not surprising, inasmuch as certain of these characteristics (ability to manipulate, etc.) are in fact the traits that help one achieve high positions (e.g., exhibiting leadership skills, related to manipulation of others’ opinions).

- i) While narcissism has been alluded to as a common trait among executives, with substantial anecdotal evidence cited, there has been limited scholarly work to corroborate this presumption.
  - ii) One study, by Blickle, et al., has directly examined its relationship to white collar crime, finding that white collar criminals had significantly higher rates of narcissism than a group of non-criminal white collar executives. (Blickle, G., Schlegel, A., Fassbender, P., & Klein, U., *Some Personality Correlates of White Collar Crime*, Applied Psychology: An International Review, 55:2, pp. 220-33, 2006.)
  - iii) Other studies have found that traits similar to narcissism are associated with white collar crime. One of these, by Nicole Piquero, et al. (Piquero, N. L., Exum, M. L., & Simpson, S. S., *Integrating the Desire-for-Control and Rational Choice in a Corporate Crime Context*, Justice Quarterly, 22:2, pp. 252-80, 2005), builds upon the "rational choice" framework by integrating the notion of "desire-for-control," for its relevance in understanding criminal activity, including white collar crime. Results of the work suggest that desire-for-control is positively related to corporate criminality even after controlling for a number of important situational- and individual-level factors.
  - iv) David Terpstra, et al. (Terpstra, D. E., Rozell, E. J., & Robinson, R. K., *The Influence of Personality and Demographic Variables on Ethical Decisions Related to Insider Trading*, The Journal of Psychology, 127:4, pp. 375-389, 1993), demonstrated that emotional intelligence was a predictor of perceptions of the role of ethics in success, and these, in turn were correlated with self-esteem, social desirability, individual ethics and perceptions of other's ethics. These characteristics are components of certain of the personality types that are believed to affect tendency to commit white collar crime.
- d. Research also demonstrates that psychopathy also can be found with non-trivial frequencies in corporate settings, where it is responsible for significant white collar criminal activity.
- i) Babiak and Hare's widely-heralded work (Babiak, P. and Hare, R. D., Snakes in Suits: When Psychopaths Go to Work, HarperCollins, 2006) addresses the nature of psychopaths in the context of employment and seeks to explain how psychopaths manipulate their way into work and get promoted, as well as the effects of their presence on colleagues and corporations, with further explication of the superficial similarities (and fundamental differences) between leadership skills and psychopathic traits.
  - ii) *Snakes in Suits* is interlaced with fictional narratives illustrating how the factual content applies to real-life situations.
  - iii) Characteristics of manipulators are said to be shifting to meet stereotypical gender expectations: e.g., a female psychopath might make full use of the passive, warm, nurturing, and dependent sex-role stereotype in order to get what she wants out of others, whereas a male psychopath might use a macho image, intimidation, and aggression to achieve satisfaction of his desires.
  - iv) The authors posit that around 1% of senior positions in business are occupied by psychopaths.
  - v) Babiak and Hare describe a "five phase model" of how a typical workplace psychopath climbs to and maintains power, the phases being: entry, assessment, manipulation, confrontation, and ascension.
  - vi) In the *entry* stage, the psychopath will use highly developed social skills and charm to obtain employment into an organization. At this stage it will be difficult to spot

anything that is indicative of psychopathic behavior, and as a new employee it might be perceived that the psychopath is helpful and even benevolent.

- vii) Once on to the *assessment* stage, the psychopath will evaluate his fellow workers according to their perceived usefulness, and you could be recognized as either a pawn (who has some informal influence and will be easily manipulated) or a patron (who has formal power and will be used by the psychopath to protect against attacks).
- viii) *Manipulation* involves the psychopath creating a scenario of “psychopathic fiction” where positive information about themselves and negative disinformation about others will be created, where others' roles are a part of a network of pawns or patrons to be utilized, and they will be groomed into accepting the psychopath's agenda.
- ix) Next, at the *confrontation* stage, the psychopath will use techniques of character assassination to maintain his/her agenda, and others will be either discarded as pawns or used as patrons.
- x) Finally, in the *ascension* stage, the role of others as patrons in the psychopath's quest for power will be discarded, and the psychopath will take for himself/herself a position of power and prestige from anyone who once supported them.



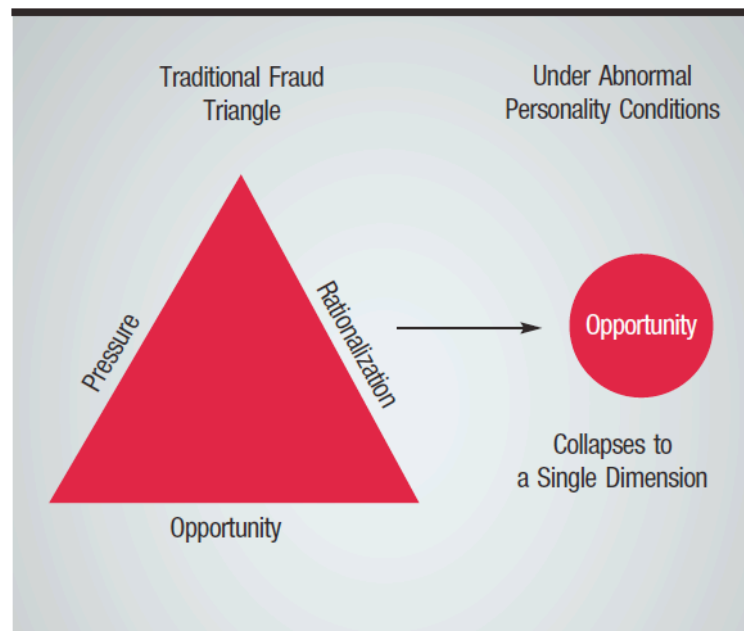
**B.** The challenge for management: to identify those exhibiting dark triad personality characteristics, for the purpose of either excluding them from key or sensitive positions, or, in some instances, placing them in roles, with appropriate supervision and oversight, where those very characteristics can benefit the organization.

1. It has been widely noted that the very attributes that characterize certain dark triad personalities are also commonly present in some of the most successful managers, and in fact might be at least partially responsible for that success. For example, the traits of Machiavellianism have been observed in some of the more famous, persuasive, successful corporate leaders.
2. If senior management can develop or adopt appropriate instruments to identify upcoming management talent possessing such traits, proactive steps can be taken to appropriately manage them for the benefit of the organization, without risking fraudulent activities that those traits might otherwise make more likely to occur.

C. The challenge for auditors: how to identify these persons, whose motivations and constraints are not those of “normal” personality types, and who might exhibit different fraud proclivity profiles.

1. The primary purpose of doing such would be to guide the appropriate scoping of audit procedures in a manner sensitive to the risks of fraudulent financial reporting, properly assessed.
2. A secondary objective would be to better advise the client (board audit committee, etc.) of fraud risks that may not have been identified by management. This would be a natural extension of the already-extant auditing requirement to report material weaknesses in controls to those having responsibility for the financial reporting process.
3. As described in two articles previously authored by the presenters (Epstein, B. J. and Ramamoorti, S., *Today's Fraud Risk Models Lack Personality*, The CPA Journal, March 2016, pp. 15-21; Ramamoorti, S. and Epstein, B. J., *When Reckless Executives Become Dangerous Fraudsters*, The CPA Journal, November 2016, pp. 6-10), the risk models currently used by the profession may be insufficient for dealing with dark triad, abnormal personalities, for whom only opportunity may be necessary to commit fraud.
  - a. The authors suggested giving explicit attention to key executives' personality types and the resultant behavioral/integrity risks as an integral part of risk assessment. Given the well-demonstrated existence of substantial numbers of executives having dark triad personalities, continuation of the historical failure to consider the impact of these phenomena on audit risk – now that this matter has been convincingly revealed by psychological research – should be viewed as intolerable.
  - b. Simply expressed, the traditional Fraud Triangle model of risk would collapse into a "singularity" (as shown in the next illustration, which originally appeared in the presenters' March 2016 article) in the presence of key executives having profiles meeting the dark triad personality types: narcissism, psychopathy, or Machiavellianism.

The Collapse of the Fraud Triangle



- c. If indeed key personnel having the inherent ability to materially affect the veracity of the reporting entity's financial reporting process exhibit one or another of the dark triad types, the traditional presumption that financial reporting fraud risk is only (or generally) to be deemed enhanced if each of three Fraud Triangle factors (perceived need, opportunity, and ability to rationalize bad acts) is present is clearly no longer operative.
  - d. In the presenters' experience – over many decades as auditing practitioners and/or expert advisors – not only have personality characteristics almost never been overtly considered, but also the presence of even one or two of the Cressey Fraud Triangle factors has been largely dismissed as a risk issue if the *other* two or one factors was judged to be satisfied (e.g., if controls were assessed as weak but the financial managers' financial needs were not known as being unusual and their attitudes did not seemingly include a tendency to rationalize anti-social behaviors).
4. As explained in the presenters' *CPA Journal* articles, a better understanding of personality characteristics, even if only informally or partially implemented by auditors, could lead to significant improvement in fraud risk assessments and audit scope decisions.
- a. Later, as more sophisticated, formalized practices will hopefully come into use, further improvements to fraud risk assessment processes in even routine financial audits would be likely to result.
  - b. Furthermore, the mere fact that auditors had begun to explicitly assess the personality-based fraud risk elements would have salutary effects on the overall control environment, in the same way that counting petty cash (never a material item) strengthens the existence of controls. A focus by auditors on personality factors is unlikely to go unnoticed by potential dark triad personality types, and the heightened “perception of detection” would probably itself potentially serve as a deterrent.
5. In the authors' view, the biggest challenge will be to develop unobtrusive or inconspicuous ways to analyze the personalities of at-risk individuals. Note, however, that a large body of diagnostic devices and techniques has already been identified in the literature (see, e.g., citations presented by A. Furman, et al., *The Dark Triad of Personality: A 10-Year Review*, op. cit.).
- a. Unlike behavioral scientists' typical subjects — college sophomores seeking to earn a few dollars or easy extra course credit — corporate executives will almost certainly resent and resist being asked to complete multiple-item questionnaires concerning abnormal personality traits or the proclivity to perpetrate fraud, as well as the implication that their honesty is being challenged.
  - b. Behavioral scientists and auditing professionals will have to work together to develop new tools in order to accomplish such diagnostic exercises, taking into account the existence of the powerful “social desirability of responses” bias (the tendency of some respondents to report an answer in a way they deem to be more socially acceptable than would be their “true” answer, in order to project a favorable image of themselves and to avoid receiving negative evaluations, the consequence of which is an over-reporting of socially desirable behaviors or attitudes and under-reporting of socially undesirable behaviors or attitudes).
  - c. A means for drawing operational inferences from the results of those exercises will also need to be developed. For example, if a given CFO scores high on the narcissism scale, there will need to be a mechanism to combine this insight with other risk assessment data so that planned auditing procedures can be altered accordingly.
  - d. Indeed, at some point the profession may have to choose, as a response to personality-driven fraud risks, whether to adopt changes to commonly employed auditing procedures or simply to conduct “more auditing” (i.e., expansions of already utilized testing

procedures). This is not a new problem; the standard quasi-mathematical audit risk model does not specify how much “more auditing” should be performed for a given amount of additional assessed risks (inherent risk or control risk), and there is no reason why the risk of dark triad personalities would be any different in terms of presenting an overdue challenge to evolve a more precise and operationally utilizable audit risk model.

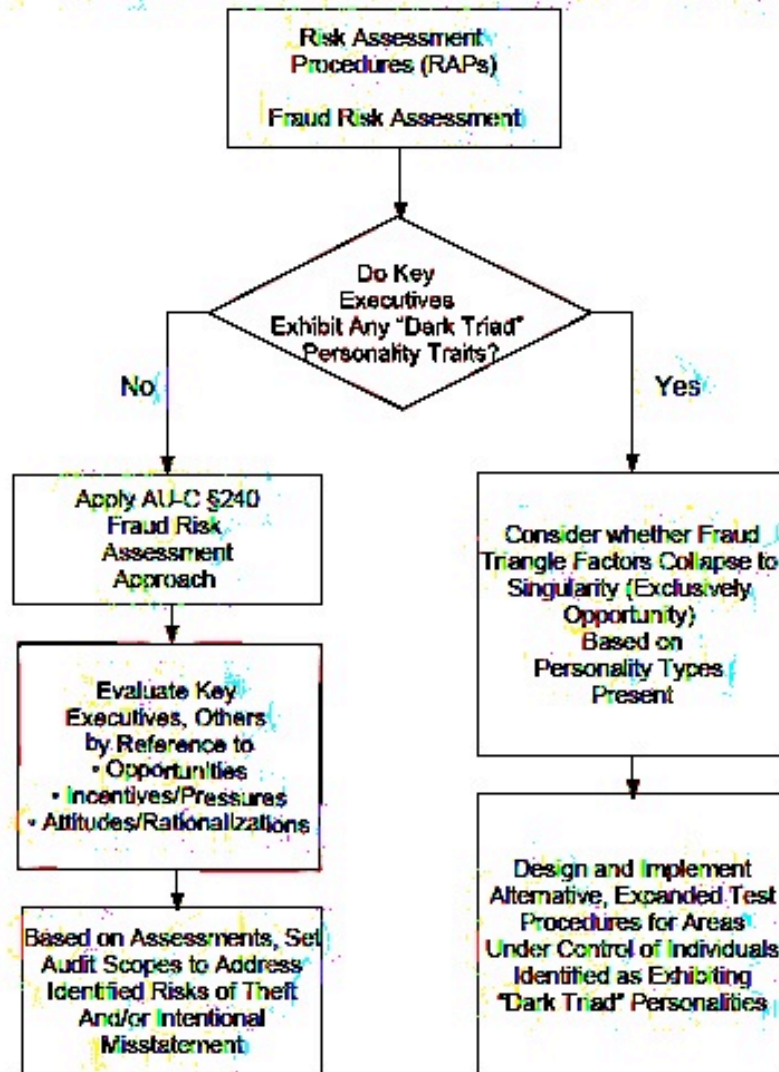
**D.** What are the likely implications of the presence in responsible positions of the organization (the auditee) of managers exhibiting one of the dark triad personality types?

1. The Fraud Triangle, most importantly, might collapse to a singularity in the presence of “dark triad” personalities.
  - a. Those managers or others having roles in the financial reporting process having “dark triad” personalities might require neither a perceived need, nor the ability to rationalize their behaviors, but merely the opportunity, to be driven to commit fraud.
  - b. The implications, if true, could include a very different approach to internal control design, indicating the need for installation of stronger guards against perceived opportunities.
  - c. Implications could also relate to executive/managerial hiring processes, relying more on personality screening procedures (note that instruments are already available to diagnose each of these deviant personality syndromes).
2. From an audit perspective, the normal audit risk assessment process under SAS 99 and successor standards (AU-C 240) and ISA 240 and similar standards, implicitly predicated on and thus limited to dealing with normal personality types, might have to be altered, as suggested in the decision tree presented on the following page.
3. There is now a need for financial reporting- and auditing-oriented research on the implications of “dark triad” personality types.
  - a. Given that there is now a fairly substantial literature concerning “dark triad” personality types (and variations or extensions thereof, cited above), the needs are thus two-fold.
    - i) First, this literature needs to be integrated into auditing guidance or standards. Simply put, auditors can no longer afford to ignore risks posed by the deviant personalities affecting perhaps one-fifth of all audit situations.
    - ii) Second, ways should be found to *operationalize* the findings of the “dark triad” literature so that auditors in real-world circumstances might be able to assess managements of auditees for the presence of personality types that might necessitate alterations in risk assessment and related auditing procedures. This probably demands that methodologies be developed that can be seamlessly, and unobtrusively, be incorporated into routine risk assessment procedures by auditors not possessing advanced, specialized educational credentials.
  - b. Why research is needed.
    - i) The rationale and motivation for this proposed research is rooted in the perceived relevance for CPAs, and for auditors of other stripes, as they engage in scoping and conducting audit procedures.
      - a) This in turn is predicated on the expectation that commonly employed fraud risk models might be inapplicable, or suffer reduced relevance, to audit scoping decisions if the candidate fraud perpetrator’s personality does not lie within the range of normality.



- b) If procedures can be tailored to account for the risks that flow from the presence of abnormal personality types in the management ranks, audits will become more powerful tools in the fight against endemic financial reporting fraud.
- ii) In order to conduct an audit, decisions regarding the nature, scope and timing of substantive audit procedures must be made.
- a) These scope decisions are driven, in large part, by risk assessments (and also by quantitative and qualitative materiality judgments and certain other factors).
- b) Fraud risk is a key risk assessment impacting upon audit scope decisions.
- c) Heretofore, management personality factors have played little or no role in making or thinking about fraud risk assessments, in part because knowledge about the deviant personality types has not been addressed in the auditing literature, and also because much of what is known, or is hypothesized to exist, is a relatively recently development.

**Alternative Fraud Risk Assessment Process Considering Personality Traits of Management**



- iii) The authors believe that a better understanding of personality characteristics, even if only informally operationalized by auditors, could lead to significant improvement in fraud risk assessments and hence in audit scope decisions. As more sophisticated, formalized personality characteristic assessment practices become employed, further improvements in fraud risk assessment processes in the context of even routine financial audits are almost certain to be achieved.
- iv) Audit risk assessments within context of non-normal personality types have not been addressed at all by the literature of auditing.
  - a) This raises the risk that standard audit behaviors as prescribed by professional standards may prove inadequate or useless in the presence of abnormal personality types within the management ranks.
  - b) Therefore it must be concluded that if (a) non-normal personalities are observed within auditee management ranks, and (b) these do imply greater-than-average risks for fraud occurrence, then auditors should be seeking to find a way (a) to identify the presence of non-normal personalities, and (b) adjust audit scope and other decisions accordingly, so that compliance with professional standards (regarding, e.g., obtaining sufficient appropriate evidence upon which to base an auditors' opinion) can be achieved.
- c. Anticipated steps in proposed empirical research on actual financial reporting (or other?) frauds: to what extent do actual (discovered) frauds indicate involvement of "dark triad" personalities?
  1. Obtain, adapt or develop valid instruments to measure dark triad personality types.
  2. Overcome practical problems of (formally or informally) administering tests to assess personalities of key management persons in audit context.
  3. Educate auditors and students (future auditors) about these behavioral characteristics, how to effect their recognition, and the responses to be made in their presence.
  4. Address the practical problems associated with empowering auditors to design and evaluate results of key person interviews in terms of dark triad personality types.
  5. Make formal or informal adjustments to the profession's audit risk model methodology to incorporate determinations of presence of such personalities within management ranks.
- d. Responses to the behavioral/integrity risks identified by instruments that evaluate dark triad personalities.
  1. Recognition that not all three Cressey Fraud Triangle factors will necessarily have to be present in order to raise the risk of financial reporting fraud occurring (extreme interpretation: some of the normal risk factors are not needed for fraud to occur if perpetrator has a "dark triad" personality).
  2. Research (or thought) addressing whether "dark triad" personalities merely increase risk of fraud (to be dealt with by expansion of audit procedures) or change the fundamental character of risks facing auditors (which might, e.g., indicate the need for developing entirely new audit approaches).
  3. Back-testing new approaches, at least in an abstract sense, against historical fraud cases to determine how auditing approaches actually employed could have been altered and how likelihood of detecting the frauds sooner would have been changed as a result.

4. Making recommendations for changes to professional standards to incorporate sensitivity to “dark triad” personalities.
- e. Audit policy formulation and implementation issues will need to be addressed.
1. If instruments are to be used, board/audit committee mandates might be necessary to enforce cooperation from management, raising concerns about control over audit strategy and maintaining the element of surprise.
  2. How much understanding of behavioral phenomena can reasonably be expected from auditors (i.e., can such tools be properly used, and what are the risks if they are not)?
  3. How might inclusion of such “personality-based” assessments in formal auditing practice affect litigation risks facing the profession? (E.g., would missing a “dark triad” manager, later found to be fraud perpetrator, increase exposure of auditors if evaluation was part of audit program?)

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