

Perceptions of Auditor Conscientiousness and Fraud Detection

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INTRODUCTION

Fraud is expensive at both the societal and organizational level. One analysis concluded that the collective economic cost of fraud exceeds \$650 billion each year (ACFE, 2006). The costs at the organizational level are more immediate and include the loss of reputation, a decline in market capitalization and even the dissolution of the firm. Because of the extensive implicit and explicit costs of fraud, identifying ways to increase the probability of fraud detection is of great interest to *all* stakeholders, but because the organization holds the ultimate responsibility for any fraudulent behavior, it has the greatest motivation to detect fraud before it can adversely impact the financial statements. One way organizations can enhance the probability of detecting fraud in its nascent stage is by identifying, hiring and utilizing internal auditors that are best suited for the task of fraud detection.

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Most research into auditor[†] characteristics has examined such items as vulnerability to time pressure, experience or the use of heuristics, but little attention has been paid to the personality traits of the individual auditor and the role they may play in fraud detection (Braun, 2000; Fathil and Schmidtke, 2010; Jaffar et al., 2006; Moyes and Hasan, 1996; Smith and Kida, 1991). Rose (2007, 216) noted that “understanding auditor traits and experiences that lead to increased attention to indicators of fraudulent reporting is essential to improving fraud detection and prevention.” The current analysis attempts to identify how the perception of individualistic characteristics may relate to the fraud detection process. We advance our understanding by examining the primary personality trait of conscientiousness, and by showing that an individual perceived as conscientious is considered to be significantly more likely to detect fraud than one who does not exhibit such qualities. Perceptions of traits are important because people react to that which they perceive, not necessarily what is objectively real. How auditors are perceived by other members of the firm is a major factor in determining their potential effectiveness (Cropanzano et al., 1997; Ferris et al., 1994; Uecker et al., 1981; Weick, 1979).

Beyond auditor characteristics, fraud detection is also dependent on situational influences unique to the audited firm (Pincus, 1989). The presence of fraud risk factors constitutes critical evidence that signals the relative likelihood of fraud, and the quantity and the severity of those factors (e.g., red flags) are both vital to the detection process (Green and Calderon, 1996; Moyes and Hasan, 1996; Norman et al., 2010).

[†] The individual in the experimental scenarios contained herein was portrayed as an internal auditor. Because any results may be expected to generalize across professional boundaries, the generic term ‘auditor’ is used throughout.

In this research we investigate the relevance of conscientiousness on the perception of an auditor's ability to detect fraud across two levels of audit risk. Findings indicate that an auditor who is portrayed as conscientious is significantly more likely to be perceived as able to detect fraud regardless of the number of risk factors present. We consider how the number of risk factors influences the perception of fraud detection ability and examine how perceptions of risk vary with the number of risk factors present.

The remainder of the paper is organized as follows. First, we examine the salient personality trait of conscientiousness and develop a hypothesis concerning its relation to the perception of an auditor's ability to detect fraudulent behavior. Next, we discuss signals that should alert the auditor to the existence of augmented risk and hypothesize a relationship between risk level and the perception of the auditor's ability to detect fraud. We also examine how perceptions of risk may change in response to the number of risk factors present. We then turn to research methodology, results and close with a discussion, a review of limitations and suggestions for future research.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Auditor Characteristics and Risk Level

Detecting fraud is a challenging task. Perpetrators actively engage in deception in an attempt to conceal their behavior, auditors may have limited experience in fraud detection, and fraudulent activities are inherently unpredictable and difficult to detect (Herz and Schultz, 1999; Kaplan et al., 2010; Loebbecke et al., 1989; Nieschwietz et al., 2000). Hence, the organization

would be optimally served by identifying and utilizing those individuals who, because they appear to share certain unique personality traits or characteristics, may be best suited to the fraud detection task. For example, Uecker et al. (1981) used perceptions of relative aggressiveness between internal and external auditors to investigate the detection of corporate irregularities.

Internal auditors play an important role in fraud detection with most frauds identified by the internal audit function (KPMG, 2003, Norman et al., 2010). Due to the importance of effective fraud detection, any measures that can enhance the efficacy of auditors should be of value. While experience and ability are undeniably important in the detection process, certain individual characteristics may be predictive of the capacity to detect fraud (Ashton, 1999). Understanding how auditors are perceived, and how these perceptions lead to beliefs regarding their detection abilities, is an important first step in relating personality traits to the efficacy of auditors.

Conscientiousness

The five factor model of personality identifies five unique personality traits (i.e. conscientiousness, agreeableness, extraversion, neuroticism and openness to experience) present in all individuals to a greater or lesser degree (Tupes and Christal, 1961, McCrae and John, 1992). A review of the research reveals a general acknowledgment that the five factor model can be used as a descriptive mechanism for the most salient elements of an individual's personality (Judge et al., 2002).

Conscientiousness is the personality dimension primarily responsible for organizing and directing individual behavior, and conscientious individuals may be characterized as responsible,

ethical, diligent, persevering and thorough (Becker ,1998; Digman and Takemoto-Chock, 1981). Wells (2003) conducted a series of interviews with successful fraud examiners and found that these individuals exhibited a cluster of common traits including perseverance, diligence and integrity – each of which is an attribute of the conscientiousness dimension.

Within the context of the five factor model, only conscientiousness has been found to reliably predict job performance across all occupational groups (e.g., Barrick and Mount; 1991, Barrick et al., 1993; Robertson et al., 2000). Indeed, some studies have demonstrated that conscientiousness correlates with task performance just as strongly as cognitive ability (Alonso, 2000). Previous research has demonstrated a linkage between conscientiousness and task performance, and the linkage has been shown to be stable across time (Barrick et al., 1993).

Conscientiousness can affect job performance in a number of ways. Conscientious employees are generally more reliable, more motivated, and harder working; they are also likely to devote more energy to the task at hand and spend less time daydreaming (Viswesvaran, 2006). This results in greater assimilation of task related knowledge, leading to greater productivity (Ones and Viswesvaran, 2006). Conscientious individuals would be expected to pay more attention to detail and profit more from vicarious learning, thus gaining enhanced job knowledge and being more productive (Bandura, 1977; Viswesvaran, 2006). These assertions were confirmed by Colquitt et al. (2000) who showed that conscientiousness was highly correlated with motivation to learn and by Borman et al. (1991) who demonstrated a positive association with job knowledge. Consequently, the personality trait of conscientiousness provides the basis

for hypothesis development regarding the prediction of individual performance within the realm of fraud detection.

Conscientious auditors are theorized to engage in a more diligent, perseverant, organized and systematic approach to evidence evaluation than their less conscientious counterparts. In the present examination we hypothesize that an auditor portrayed with a conscientious personality will be perceived as more likely to detect fraud. Our first hypothesis is this :

H1: Auditors portrayed as conscientious will be perceived to possess a greater ability to detect fraud.

Risk Level

Recent corporate frauds (e.g., Enron, Tyco and WorldCom) and increased regulation have emphasized the importance of risk assessment. SOX Section 404, for example, requires management to perform a fraud risk assessment, and PCAOB Auditing Standard No. 5 emphasizes the importance of internal controls and risk assessment (Ugrin and Odom, 2010; PCAOB AS No. 5, 2007). These regulatory initiatives have resulted in an augmented focus on internal control systems and fraud detection. Rose and Rose (2003, 312) found that the “assessed level of fraud risk systematically affects the evaluation of evidence by auditors.” Clearly, accurate fraud risk assessments are critical to organizations (Norman et al., 2010).

According to SAS No. 99, three conditions are generally present when fraud occurs: (1) management or other employees have an incentive, or are under pressure to commit fraud; (2) situations exist (e.g., the absence of controls, ineffective controls or the ability of management to

override controls) that provide an opportunity for fraud to be perpetrated; (3) the offending party is able to rationalize committing a fraudulent act. The greater the incentive or pressure, the more likely an individual will adopt an attitude that allows them to rationalize committing fraud. Furthermore, the tone of managerial attitudes can influence the probability of organizational fraud. The current experiment contains scenarios which include a variety of risk factors associated with incentives, opportunities and attitudes.

The organizational psychology literature can provide insights into fraud detection by classifying fraudulent acts, such as theft of assets and misuse of information, as counterproductive work behavior. Sackett and DeVore (2006) note that personal and situational factors such as organizational policies and practices, organizational culture and internal control systems all serve as determinants of counterproductive work behaviors. These factors are evident in the work of Bell and Carcello (2000) who identified a number of antecedents associated with fraudulent financial reporting including such items as rapid growth, weak or ineffective internal controls, managerial preoccupation with meeting earnings projections, and aggressive managerial attitudes coupled with weak control environments.

It has been estimated that auditors only detect 5% of fraud (Zeune, 1997); therefore any tool that might assist in the detection process would be important. The identification of red flags is one such a tool. Pincus (1989, 154) characterized red flags as risk factors that serve as “warning signals for fraud based on economic factors and business structure factors.” In order to effectively detect fraud, an auditor must be sensitive to the identifiable risk factors and assess the likelihood of fraud to be higher when those factors exist than when they do not (Hoffman and

Zimbelman, 2009). Awareness of significant warning signs such as the presence of identifiable risk factors can help auditors assess fraud risk and may serve as an effective early warning system (Heiman-Hoffman and Morgan, 1996; Koornhof and Du Plessis, 2000). When evaluating organizational risk, red flags represent situational indicators that point to the need for the auditor to be more attentive than normal, and their presence should increase an auditor's sensitivity to the possibility that fraud may exist (Pincus, 1989; Uretsky, 1980).

Conscientiousness is likely to be the dominating factor above and beyond risk level. Because conscientious individuals are consistent by definition, they should be perceived to act in a diligent and painstaking manner regardless of the number of situational risk factors present. Therefore, we do not expect the level of fraud risk to influence how well conscientious individuals perform their duties; they would be expected to perform at a high level regardless of external factors. Similarly, the perception of conscientiousness may lead to an impression of reduced risk due to the competent representation of the auditor. Conversely, those that are perceived as less capable may be differentially affected as risk level changes. Thus, the level of perceived conscientiousness may affect both the perception of risk and the way one might react to that perception.

Given the foregoing, our second and third hypotheses are:

H2: A larger number of risk factors will be associated with higher perceptions of the auditor's ability to detect fraud.

H3: A larger number of risk factors will be associated with higher perceptions of risk.

I. RESEARCH METHOD

Experiment

Our experiment employs a 2×2 between-participants design. The manipulated independent variables are the level of portrayed conscientiousness (high versus low) and the level of fraud risk (low and high). Participants in all treatments assessed the overall fraud risk, as well as decomposed risks associated with attitudes, incentives, and opportunities. The actual levels of the independent variables used in this analysis are a function of the perceptions of the participants in the study.

Conscientiousness is operationalized through the use of adjectives in the case scenarios that characterize the auditor as possessing either high or low levels of the trait. These adjectives were taken from a study by Saucier and Goldberg (1996) in which they factor analyzed 436 familiar English adjectives into the five dimensions postulated by the five factor model. Each of the chosen target words demonstrated absolute values (positive values for ‘High’; negative values for ‘Low’) of factor loadings greater than 0.50 on the conscientiousness dimension and less than 0.20 on all other dimensions. The high-conscientiousness instruments included the target words organized, efficient, orderly, systematic and thorough. In contrast, the low-conscientiousness instruments identified the auditor actor in the scenarios as inefficient, disorganized, inconsistent, unreliable and haphazard.

Following Wilks and Zimbelman (2004) and Norman et al. (2010), risk is operationalized by varying the number of risk factors present in each scenario. Risk factors related to incentives and opportunities were developed from items previously used by Wilks and Zimbelman (2004). Risks associated with attitudinal factors were developed from the research of Moyes et al.

(2006). Low risk scenarios included six indicators of fraud risk, while scenarios portraying high risk situations contained thirteen red flags of potential fraud risk, (these included the same flags present in the low risk condition as well as seven additional items). The complete text of the experimental instrument is included in the Appendix.

Participants

Participants were 107 accounting students at a large southeastern university. Among these participants, 15 were members of a graduate level auditing class, 37 were students in a 5th year auditing class and 54 were members of a 4th year cost accounting course. The average participant was 27 years old and the mean GPA was 3.21. Participants possessed considerable accounting knowledge, with each student having completed an average of 8+ accounting courses. Two-thirds of the participants were currently employed with mean full time work experience of 5.4 years and mean part time experience of 4.2 years. More than half of the participants indicated that fraud had been discovered at their place of employment. Table 1 presents complete demographic data for the participants.

Prior research indicates that students are likely to be good surrogates for professionals with respect to decision-making behavior. For example, Ashton and Kramer (1980, 11) investigated the decision-making judgment of both auditors and accounting students, and found that “students were adequate surrogates for the auditors” in some situations. Similarly, Norman (1998) showed that when asked to assess fraudulent behavior, both accounting students and internal auditors provided similar opinions.

Task and Design

The experiment took place under controlled conditions and under the supervision of at least one of the authors. There are two parts to the experimental instrument. In first part, participants read the provided scenario reflecting one of the four experimental conditions. All participants were randomly assigned to a treatment condition, and received the same background information about the company in the first paragraph of the case. The remainder of the scenario contains either six or thirteen fraud cues and portrays the auditor as having either low or high levels of conscientiousness, depending upon the assigned treatment condition. After reviewing the scenario, participants assessed the ability of the auditor to detect fraud and provided estimates for the level of fraud risk related to opportunities, incentives and managerial attitudes. The participants were also requested to provide their evaluative perceptions of the overall risk present at the hypothetical company, as well as their demographic information.

To facilitate our analysis, we generated two composite variables: DETECT ($\alpha = .854$) is a summation of the responses to questions asking about the auditor's ability to detect fraud if it existed; RISK ($\alpha = .662$) is a composite of the participants' perceptions of the opportunities, incentives, attitudes and overall risk factors present at the hypothetical firm. No significant differences were noted when individual measures were used.

II. RESULTS

Potential Covariates

To identify potential covariates, demographic variables such as work experience, enrollment in undergraduate cost accounting class or a graduate level auditing course, age, accounting knowledge (measured by the number of completed accounting classes) and prior exposure to fraudulent behavior in the workplace were evaluated with regard to any association with the independent and dependent variables. Only course enrollment type was found to be influential. Graduate level auditing students evaluated that the ability of the auditor to detect fraud as lower, and the amount of risk present in the firm as higher than did the undergraduate students ($p < 0.07$). The auditing students also had significantly higher GPAs and had completed more accounting coursework. Consequently, we employ enrollment in an auditing class as a covariate in all analyses.

Hypothesis Testing

Hypothesis 1 posits that the level of portrayed conscientiousness will have a positive impact on the perceived ability of the auditor to detect fraud. An analysis of variation was conducted using conscientiousness as the independent variable (low or high level), class as a covariate and perception of fraud detection ability as the dependent variable. As shown in Table 2, the results confirm a significant relationship between conscientiousness and fraud detection ability ($p < 0.001$), such that the perceived ability to detect fraud is significantly greater for individuals that are conscientious than those that are not. These results provide preliminary support for H1.

Figure 1 provides a graphical representation of the joint effects of conscientiousness and level of fraud risk on the perceived ability to detect fraud. For those subjects in the high

conscientiousness condition, no discernable effect in the ability to detect is noted across risk level. For those in the low conscientiousness condition, however, participants judged the auditor as *less* likely to detect fraud as the level of risk increased. This result may be reflective of how risk may differentially impact the perception of risk detection across conscientiousness conditions, and is left for future research. In all cases, the perceived ability to detect is greater for those portrayed with high levels of conscientiousness.

We next performed a multiple regression analysis using the perceived ability to detect fraud as the dependent variable and the level of fraud risk, portrayed conscientiousness, and perceived level of risk and audit class as independent variables. Our regression model is:

$$\begin{aligned} \text{Perceived Ability to Detect Fraud} = & \beta_0 + \beta_1 (\text{Fraud Risk}) + \beta_2 (\text{Conscientiousness}) \\ & + \beta_3 (\text{Audit Class}) + \beta_4 (\text{Perceived Risk}) + \varepsilon \end{aligned} \quad (1)$$

Table 3 provides the results of our test. The positive coefficient on conscientiousness ($p \leq 0.001$), in tandem with the results of the previous univariate analysis, provides strong support for H1. The actual level of fraud risk present in the scenarios does not appear to be related to the perceived ability to detect fraud, but perceptions of risk show a marginally significant relation ($p = 0.053$) with the perceived ability to detect. Our model fits the data relatively well, with an adjusted R^2 of 0.375. Multicollinearity does not appear to be an issue in our model, with VIFs less than 1.20, and condition indices less than 15.

The final two hypotheses (H2 & H3) predict that the larger number of risk factors will be positively associated with perceptions of the auditor's ability to detect fraud and with perceptions of risk. We conduct an analysis of variance to test these hypotheses. The analyses include the

level of fraud risk as the independent variable and class as a covariate. Fraud detection ability and perception of risk are used as dependent variables. Our results are presented in Table 4. They indicate that the level of fraud risk has no significant impact on the perception of risk. Thus, H2 is not supported ($p = .104$). It is possible, however, that the relatively restricted sample size failed to provide adequate power to detect a statistically significant effect. Simply, the impact of the number of risk factors on the ability to detect fraud reveals no association. Thus, H3 is not supported.

III. DISCUSSION

This study provides evidence of a substantive linkage between the appraisal of an auditor's personality traits and the way that the auditor is perceived to evaluate and react to audit evidence. Individuals perceived as conscientious are thought to have a significantly greater ability to detect fraud than their less conscientious counterparts. Furthermore, perceived risk was marginally related ($p = 0.053$) to the perceived ability to detect fraud.

Financial statement fraud is injurious to all affected parties. If the financial statements include fraudulent transactions, substantial penalties can accrue to the firm, its managers, the external auditor and equity holders (ACFE, 2006; Kaplan et al., 2010). Detecting fraud before it occurs removes this threat. If it can be shown that actual differences in auditor conscientiousness impact the fraud detection process in a manner similar to that seen in the present analysis, firms may be better positioned to hire, utilize and retain those individuals who exemplify the trait as a

means to maximize the probability that any potential fraud is detected before it has a chance to adversely affect the financial statements.

We found no relationship between level of fraud and perceived risk. Indeed, the level of manipulated fraud risk had a negative (but insignificant) coefficient in our regression. This may be due to individual differences in how risk is perceived or a lack of statistical power due to a relatively limited sample size. This represents an avenue for future research. Like all research of this kind, our study is also subject to significant limitations. There are certainly additional factors that influence the fraud detection process that are not included in all analysis. Further, it is inherently difficult to project motivations and actions onto a hypothetical actor that purportedly embodies certain personality characteristics. One way to evaluate the research questions would be to use, as subjects, individuals experienced in the internal audit function, then establish the actual conscientiousness of these individuals and test how they evaluate a complex case across different levels of risk.

Gaining a greater understanding of the fraud detection process is of interest to any stakeholder who may generate, disseminate, regulate, consume or attest to the veracity of financial statements. This study provides intriguing evidence suggesting significant linkages between an auditor's personality and their subsequent ability to detect fraud. Further research is warranted both to validate this relationship as well as to identify other influential variables.

IV. APPENDIX

PART I

Randy is an internal auditor at Electromat, a mid-size firm in the Tidewater Region of Virginia. This firm manufactures widgets for the electronics industry and employs 1,200 men and women. The five people in Randy's internal auditing department are responsible for ensuring that the internal controls in place prevent the misrepresentation of the financial statements or the unauthorized use of the firm's assets. Randy is generally satisfied with his position and reports directly to the internal audit supervisor, who in turn, reports to the CFO.

[Scenario 1]

The competition for Electromat's components has been increasing in recent years, as customer demand has declined and the economy has remained in recession. The firm has been under pressure to increase R&D expenditures, but their ability to do so is hampered by existing debt covenants which dictate that leverage ratios remain below a specific level. Management is under additional pressure due to the personal guarantees they have provided for debt repayment.

Randy is an organized man and is seen as efficient in the performance of his duties. Because of Randy's orderly approach, his boss has tasked him with reviewing some of Electromat's more sensitive accounts. For example, Electromat does considerable business with firms in Japan, one of which is a company that is a wholly owned subsidiary of a company controlled by the CEO's brother. In a systematic examination of the foreign accounts, Randy documents a large number of transactions at the close of the fiscal year with the Japanese firm identified as a related party. Randy conducted a thorough investigation and noticed that many of these transactions included transfers into accounts not normally used and which were registered in the Cayman Islands. When the CFO was asked about these transactions, Randy was ordered to treat them as any other transaction and was assured that there were no problems with those accounts.

[Scenario 2]

The competition for Electromat's components has been increasing in recent years, as customer demand has declined and the economy has remained in recession. In spite of this atmosphere of increased competition and decreased demand, Electromat has remained profitable.

Randy is an organized man, and is seen as efficient in the performance of his duties. Because of Randy's orderly approach, his boss has tasked him with reviewing some of Electromat's more sensitive accounts. For example, Electromat does considerable business with a company that is a wholly owned subsidiary of a company controlled by the CEO's brother. In a systematic examination of the foreign accounts, Randy documents a large number of transactions at the close of the fiscal year with the Japanese firm identified as a related party. Randy conducted a

thorough investigation and noticed that many of these transactions included transfers into accounts not normally used and which were registered in the Cayman Islands.

[Scenario 3]

The competition for Electromat's components has been increasing in recent years, as customer demand has declined and the economy has remained in recession. The firm has been under pressure to increase R&D expenditures, but their ability to do so is hampered by existing debt covenants which dictate that leverage ratios remain below a specific level. Management is under additional pressure due to the personal guarantees they have provided for debt repayment.

Randy is an inconsistent and disorganized man, and is often seen as inefficient in the performance of his duties. Although Randy is sometimes unreliable, his boss has tasked him with reviewing some of Electromat's more sensitive accounts. For example, Electromat does considerable business with firms in Japan, one of which is a company that is a wholly owned subsidiary of a company controlled by the CEO's brother. In an examination of the foreign accounts, Randy documents a large number of transactions at the close of the fiscal year with the Japanese firm identified as a related party. Randy conducted a somewhat haphazard investigation, but still noticed that many of these transactions included transfers into accounts not normally used and which were registered in the Cayman Islands. When the CFO was asked about these transactions, Randy was ordered to treat them as any other transaction and was assured that there were no problems with those accounts.

[Scenario 4]

The competition for Electromat's components has been increasing in recent years, as customer demand has declined and the economy has remained in recession. In spite of this atmosphere of increased competition and decreased demand, Electromat has remained profitable.

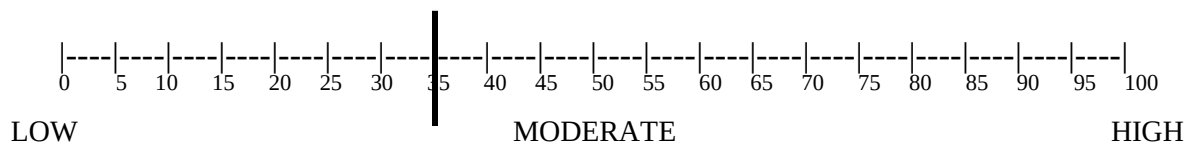
Randy is an inconsistent and disorganized man, and is often seen as inefficient in the performance of his duties. Although Randy is sometimes unreliable, his boss has tasked him with reviewing some of Electromat's more sensitive accounts. For example, Electromat does considerable business with a company that is a wholly owned subsidiary of a company controlled by the CEO's brother. Randy conducted a somewhat haphazard investigation, but still was able to notice that many of these transactions included transfers into accounts not normally used and which were registered in the Cayman Islands.

Based on the information you just read, please answer the 5 questions on the next page to the best of your ability.

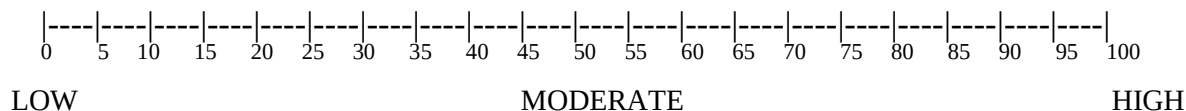
Draw a vertical line through the percentage that best indicates your judgment.

EXAMPLE:

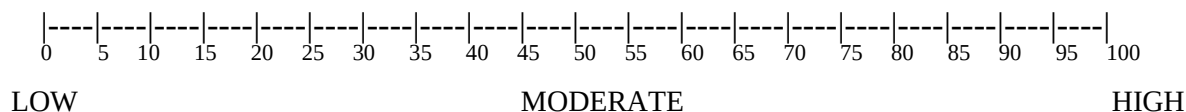
If you think the likelihood is 35%, draw a vertical line as follows:



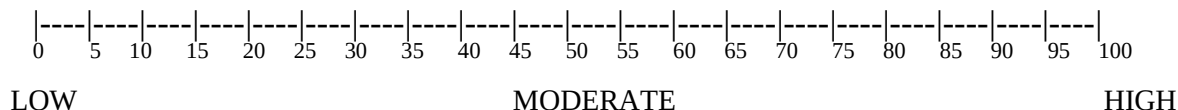
1. Do you think Randy could find financial problems if they existed at Electromat?



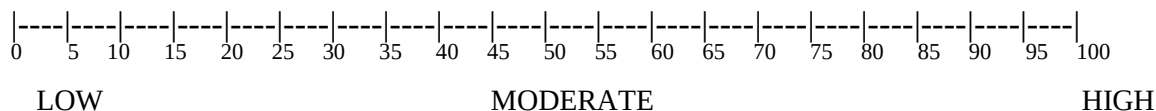
2. Do you think Randy has the ability to detect employee stealing at Electromat?



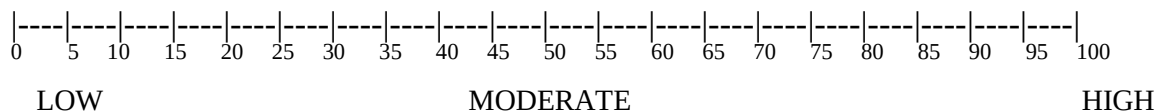
3. Do you think that Electromat's management has the opportunity to commit fraud?



4. Do you think that Electromat's management has the incentive to commit fraud?



5. Do you think that the attitude of Electromat's management creates an atmosphere where fraud could happen?



PART II

For the case you just read, what is your impression of Randy's personality?

(check one)

_____ Randy **is** a conscientious individual.

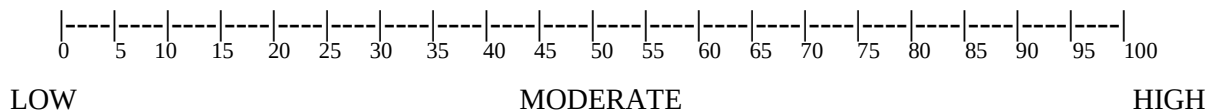
_____ Randy **is not** a conscientious individual.

1. For the case you just read, what do you think regarding fraud environment at Electromat? (check one)

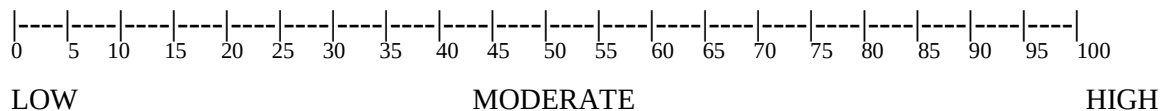
_____ There are many significant risk factors for an employee to steal at Electromat.

_____ There are few significant risk factors for an employee to steal at Electromat.

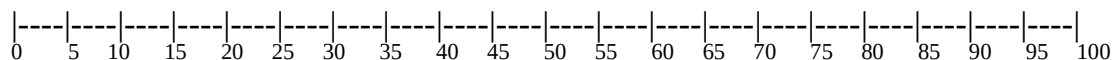
2. How would you characterize the overall risk of fraud at Electromat?



3. In the case you just read, did it seem like the circumstances would indicate to Randy that he should be suspicious?

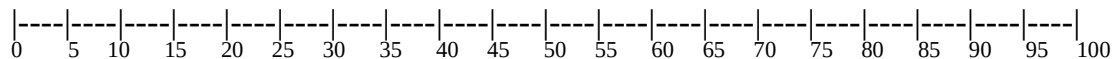


4. In the case you just read, did it seem like the circumstances would indicate to Randy that he should be skeptical?



HIGH

5. How suspicious do you think Randy actually is?



HIGH

6. Current class standing:

____ Freshman ____ Sophomore ____ Junior ____ Senior

____ 5th Year (or more) ____ Graduate Student

7. What is your overall GPA (at the start of this semester)? _____

8. **YEAR** you were born? _____

9. Are you currently employed (Circle one)? **YES** **NO**

- If **yes**, what's your position? _____

10. If you have ever worked **PART TIME**, how many years of work experience do you have working in a part time job(s)? _____

11. If you have ever worked **FULL TIME**, how many years of work experience do you have working in a full time job(s)? _____

12. Has fraud (e.g. employee stealing) ever been discovered in a place where you were working (Circle one)? YES NO

13. Please indicate which of the following accounting courses you have completed:

____ACCT 203Intro to Financial Accounting

ACCT204 Intro to Managerial Accounting

____ACCT 205 Intro Accounting Survey

____ACCT 303 Intermediate Accounting I

ACCT 304 Intermediate Accounting II

ACCT 306 Cost Accounting

ACCT 307 Accounting Systems

ACCT 401 Government & Not-for-profit Accounting

ACCT 402 Advanced Cost Accounting

ACCT 403 Management Control Systems

ACCT 405 Individual Tax

ACCT 410 Corporate Tax Accounting

____ACCT 481 Law for Accountants
____ACCT 513 Financial Reporting

____ACCT 506 Auditing

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Demographic Information
Table 1.

<u>Variable</u>	<u>Min</u>	<u>Max.</u>	<u>Mean</u>	<u>Std. Dev.</u>
Age	21	56	27	6.71
Years of Full Time experience	0	35.0	5.42	6.87
Years of Part Time experience	0	21.0	4.15	3.23
Current GPA	2	4	3.21	.46
Number of Accounting Classes	2	15	8.39	2.85
		<u>Number</u>	<u>Percent</u>	
Has fraud been discovered in their workplace?		62	57.90%	
Current employed		71	66.40%	
n=107				

**Portrayed Conscientiousness and Perceived Ability to Detect
Table 2.**

**Panel A: ANOVA Model for Effects of Perceptions of Conscientiousness on
Perceived Ability to Detect Fraud**

Source	Sum of Squares	df	Mean Square	F	Sig.
Covariate					
Class	5062.158	1	5062.15	4.612	0.034
Between subjects					
Conscientiousness	53536.344	1	53536.34	48.773	< 0.001
Error	106474.176	97	1097.67		

Panel B: Cell Means for Perceived Ability to Detect Fraud

Low Conscientiousness

96.55
(39.99)
[47]

High Conscientiousness

143.21
(27.01)
[53]

^aMean, (std.dev.), [sample size]. Cell means represent perceived fraud detection ability

Effect of Risk Level and Portrayed Conscientiousness

Table 3

$$\text{Perceived Ability to Detect Fraud} = \beta_0 + \beta_1 (\text{Fraud Risk}) + \beta_2 (\text{Conscientiousness}) \\ + \beta_3 (\text{Audit Class}) + \beta_4 (\text{Perceived Risk}) + \varepsilon$$

Variable	B	Std. Error	Beta	t	Sig.	VIF
(Constant)	60.189	18.582		3.239	0.002	
Fraud Risk Level	-13.193	6.592	-0.162	-2.001	0.048	1.037
Conscientiousness	49.336	6.617	0.605	7.456	0.000	1.042
Audit Class	17.449	6.616	0.214	2.637	0.010	1.045
Perceived Risk	0.116	0.059	0.164	1.959	0.053	1.107

n=100

Adjusted R^2 =.375

Dependent variable= Perceived Ability to Detect Fraud

Risk Level, Perceived Risk and Ability to Detect

Table 4.

Panel A: ANOVA Model for Effects of Level of Fraud Risk on Fraud Detection

Source	Sum of Squares	df	Mean Square	F	Sig.
Covariate					
Class	6142.62	1	6142.621	3.772	0.05
Between subjects					
Fraud Risk Level	2041.450	1	2041.454	1.254	0.266
Error	157969.060	97	1628.547		

Panel B: Cell Means for Perceived Ability to Detect Fraud

Low Risk

125.25

(36.19)

[51]

High Risk

117.14

(45.33)

[49]

^aMean, (std.dev.), [sample size]. Cell means represent perceived ability to detect fraud

Panel C: ANOVA Model for Effects of Level of Fraud Risk on Risk Assessment

Source	Sum of Squares	df	Mean Square	F	Sig.
Covariate					
Class	12627.205	1	12627.205	3.952	0.05
Between subjects					
Fraud Risk Level	8595.071	1	8595.07	2.690	0.104
Error	309914.889	97	3194.999		

Panel D: Cell Means for Risk Assessment

Low Fraud Risk

273.08

(64.28)

[51]

High Fraud Risk

290.31

(49.15)

[49]

^aMean, (std.dev.), [sample size]. Cell means represent risk assessment

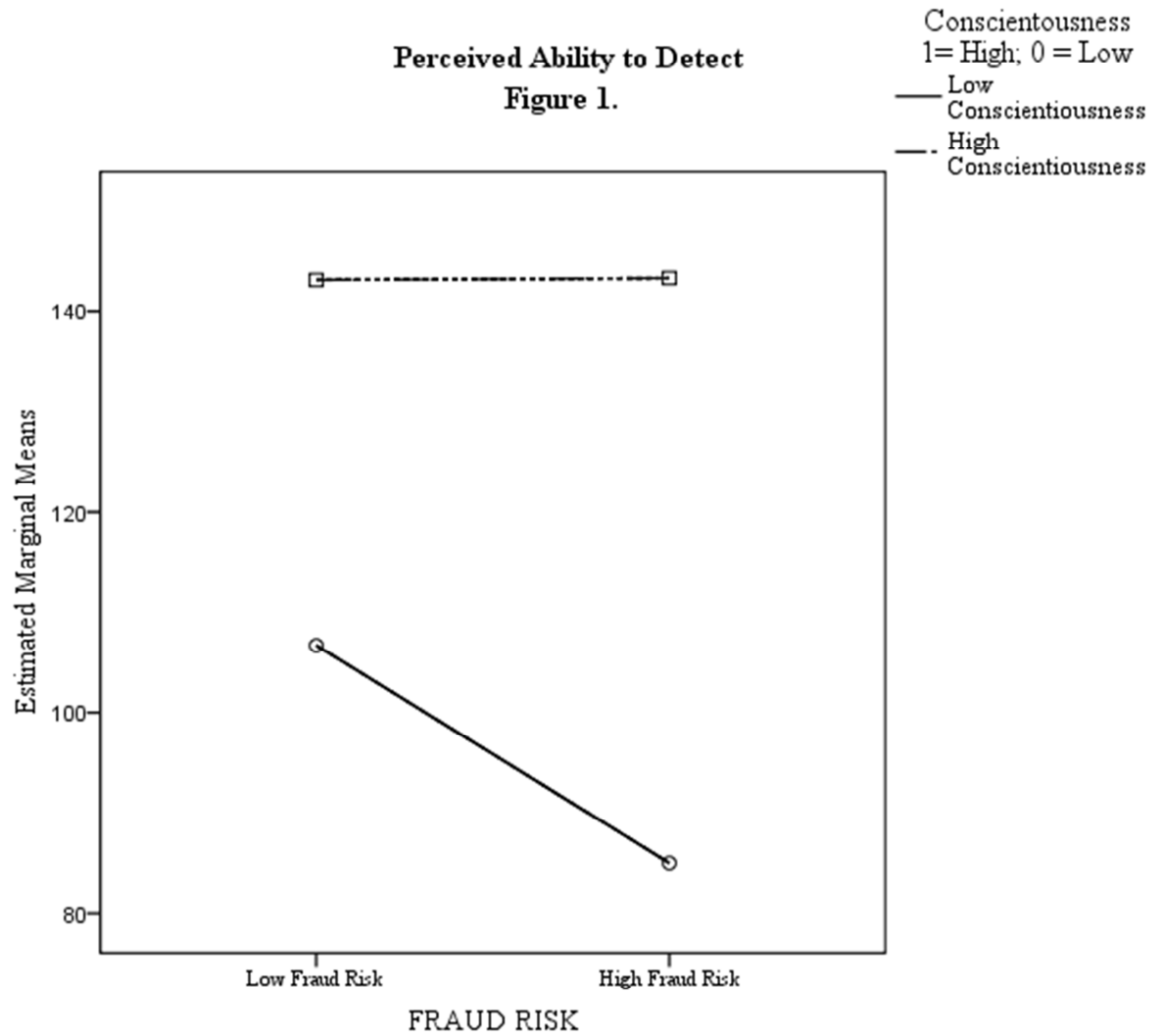


Figure 1.