Audit Inquiries and Deception Detection: Standards, Research, and Guidance

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Deception/lying is described by McElhaney (1994) as "one of our recurring sins since the dawn of time" (p. 74). The importance that the public gives to this sin is indicated by opinion polls that regularly show honesty as one of the top characteristics looked for in leaders (Saul 2008, Ekman 1996). The high level of importance may be related to the unknown ramifications that even the smallest lie may have (Stewart 1992). The negative consequences to business and society when people lack integrity are well documented (Keller et al. 2007, Smith 2003). With the average person being able to successfully detect deception only about 54% to 57% of the time, a large percentage of lies are successfully perpetrated (Bond and DePaulo 2006, Bond et al. 1985, Kraut 1980). Such a low rate of success at deception detection may adversely impact the auditor's assessment of detection risk. Moreover, the auditors' incorrect evaluation of the oral responses of auditee personnel may negatively impact audit effectiveness.

Verbal inquiries are pervasive in auditing. During each stage of the audit members of the engagement team pose numerous questions, the answers to which may affect both the course and outcome of the audit. Some examples of the plethora of audit inquiries include the reason for a particular journal entry, the procedures followed in

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opening the mail, information concerning the business environment, the obsolescence of inventory, the likelihood of collecting past due accounts, and the rationale used in making various accounting estimates. In addition, various professional guidelines (e.g., SAS 99 2002, COSO 1994, SAS 107 2006, SAS 108 2006, SAS 109 2006) directly or indirectly impose the role of *integrity judge* on the auditor. As such, the auditor is charged with determining the absence of management lying and/or the absence of management's use of deceptive techniques such as the withholding of information. In other words, is management truthfully responding to audit inquiries?

This purpose of this paper is to provide a review of audit inquiry standards and past research on deception detection. Further, this paper specifically addresses the importance of veracity judgments in four key areas of the audit: audit planning, fraud risk consideration, the understanding of internal controls and its effectiveness, and the collection of audit evidence. In addition, this paper provides guidelines that can assist auditors in making more accurate judgments of truth or deception. Knowledge of deception detection techniques can improve the auditors' ability to evaluate verbal responses to audit inquiries. Such knowledge gives auditors an additional tool by which to lessen detection risk.

A large body of literature suggests that people (even those in professions where the ability to detect deceit is critical, such as policing) are only about 4% better than chance at identifying deception (Bond and DePaulo 2006). Additionally, most people hold stereotypical views about indicators of deception, such as a lack of eye contact indicates deception. Unfortunately, these stereotypical views have not been found in the literature to be valid indicators of deception. Since the auditor's evaluation of verbal

inquiries is critical to an effective audit, auditors will benefit by gaining an understanding of the psychology of deception/lying. The reliability of oral inquiries is currently evaluated based on factors such as the responder's position, prior experience with the responder, the availability of corroborating evidence, and characteristics of interviewees (SAS 99 2002).

The remainder of this paper examines the auditor's use of audit inquiries in complying with each of the three standards of fieldwork; research regarding deception detection abilities of auditors; and, the potential use of deception detection training to improve the auditor's ability at detecting false responses by management and other entity personnel. In addition, this paper provides guidelines that can assist auditors in making more accurate judgments of truth or deception.

## **AUDIT INQUIRY STANDARDS**

Rule 202 of the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct states that "a member who performs auditing, reviews, compilations ... or other professional services shall comply with standards promulgated by bodies designated by council" (AICPA 2002b, ET Rule 202). The AICPA prescribes three standards of fieldwork that must be complied with in the conduct of an audit: (1) audit planning, (2) the understanding of internal controls, and (3) the collection of audit evidence (AICPA 2002a, AU Section 150). Verbal inquiries and the evaluation of responses to such inquiries play an important role in the auditor's compliance with each of these standards.

Adequate audit planning, along with proper supervision of assistants, is required by the first standard of fieldwork. During audit planning, an overall strategy is developed.

The basis for this strategy is in part predicated on the auditor's knowledge of the entity and its industry. The many potential sources of this knowledge include the auditor's prior experience with the entity and/or the entity's particular industry, the prior working papers from continuing audit engagements, professional guidance related to the audit of similar entities, the financial statements of similar entities, and information provided verbally by management and other entity personnel in response to questions posed by the auditor. The information obtained during audit planning underlies the development of a written audit program detailing the audit procedures to be followed in the conduct of the audit. Thus, information obtained through verbal inquiries is one source of information utilized in planning the specific audit work to be performed (PCAOB 2006, AU Section 311).

The auditor's consideration of material misstatements related to fraud is also an essential part of audit planning. AU Section 110.02 states that "the auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements, whether caused by error or fraud" (PCAOB 2006, AU Section 110.02). Frauds of concern to the auditor include material misstatements arising from fraudulent financial reporting and from the misappropriation of assets (PCAOB 2006, AU Section 316.06).

With "... fraud often ... uncovered through information received in response to inquiries ..." (PCAOB 2006, AU 316.26), generally accepted auditing standards prescribe a number of inquiries that should be addressed to management and others within the entity. Management inquiries should include questions regarding management's knowledge of actual, suspected, or alleged fraud; management's understanding of fraud risks and where fraud is likely to exists; management's

understanding and monitoring of programs and controls aimed at fraud prevention, detection, or deterrence or aimed at mitigating the effects of specific fraud risks; management's understanding and monitoring of locations or business segments that may pose a greater risk of fraud; management's method of disseminating its views of ethical behavior and acceptable business practices (PCAOB 2006, AU Section 316.20); and the extent to which management has communicated with the audit committee regarding "how the entity's internal control serves to prevent, deter, or detect material misstatements due to fraud" (PCAOB 2006, AU Section 316.21).

In addition to management inquiries, the auditor should make inquiries of the audit committee, the internal auditors, and others within the entity. The members of the audit committee should be questioned regarding their knowledge of actual or suspected fraud, their thoughts regarding the entity's fraud risks, and the degree to which they exercise oversight over management's efforts (i.e., fraud assessments, internal controls, mitigation programs, etc.) regarding fraud risks (PCAOB 2006, AU 316.22). Internal audit personnel should be questioned regarding their knowledge or suspicion of fraud, any specific procedures utilized to detect fraud and management's response to any fraud uncovered by such procedures, and their views regarding the entity's fraud risks (PCAOB 2006, AU 316.23).

As dictated by the auditor's professional judgment, inquiries regarding actual or suspected fraud and the risks of fraud should be directed to other entity personnel (PCAOB 2006, AU 316.24). Examples of entity personnel who may be in a position to supplythe auditor with fraud related information include in-house legal counsel, "operating personnel not directly involved in the financial reporting process", employees

that the auditor encounters while performing other audit procedures such as the observation of inventory, and "employees involved in the initiating, recording, or processing of complex or unusual transactions ..." (PCAOB 2006, AU 316.25).

The second standard of fieldwork states that "a sufficient understanding of internal control is to be obtained to plan the audit and to determine the nature, timing, and extent of tests to be performed" (PCAOB 2006, AU Section 319.01). Fulfillment of this standard requires the auditor to plan the audit based on an understanding of the design of internal controls and the extent to which internal controls have been placed in operation (PCAOB 2006, AU Section 312.27). Verbal inquiry is one of the audit procedures used both to gain an understanding of internal controls and to assess internal control effectiveness. The auditor's understanding of internal controls is gained through prior experience with the entity and through the application of procedures such as observation, inspection, and "... inquiries of appropriate management, supervisory, and staff personnel ..." (PCAOB 2006, AU 319.58). Tests of the effectiveness of internal controls also involve "... inquiries of appropriate entity personnel ..." (PCAOB 2006, AU 319.76).

In determining the effectiveness of internal controls, inquiries alone will generally not be sufficient *stand alone* evidence but will be used to corroborate evidential matter gained through the application of other audit procedures such as inspection, observation, and re-performance (PCAOB 2006, AU 319.95). Thus, audit inquiries and the evaluation of the responses to such inquiries play a critical role in the assessment of the effectiveness of an entity's internal controls and thereby affects the level of acceptable detection risk: the risk that the company's internal controls will not timely detect or

prevent a material misstatement of a financial statement assertion (PCAOB 2006, AU Section 321.27). The level of detection risk accepted by the auditor directly affects the timing, extent, and application of audit procedures.

The third standard of fieldwork states that "sufficient competent evidential matter is to be obtained through inspection, observation, inquiries, and confirmations to afford a reasonable basis for an opinion regarding the financial statements under audit" (PCAOB 2006, AU Section 326.01). Thus, inquiry is one of the procedures used to obtain evidence; and, the evaluation and documentation of entity personnel responses to audit inquiries is one form of evidential matter. While inquiries may in some cases provide the initial source of audit evidence, evidence gleaned form this procedure usually corroborates evidence obtained by other means. Evidence obtained indirectly through inquiry is usually considered less competent than evidence obtained directly by the auditor through procedures such as "... physical examination, observation, computation, and inspection ..." (PCAOB 2006, AU 326.21).

In recognition of the importance of audit inquiries, the Panel on Audit Effectiveness (2000) suggested the need for improving the interviewing skills of auditors and that audits include a "forensic type fieldwork phase." Subsequently, SAS 99 (2002) guided auditors to look for fraud related cues when interviewing entity personnel. These behavioral red flags included inconsistency, vagueness, and implausibility of inquiry responses. Thus, according to SAS 99, these management characteristics may be indicators of deceptive responses that may elevate the risk of fraud.

The auditor's correct evaluation of inquiry responses is often critical to an effective audit. While the correct evaluation of inquiry responses may involve the use of

other audit procedures and corroboration of additional audit evidence, the auditor's successful assessment of the responder's veracity is of major importance. This relates to whether the responder can be believed. Such veracity determinations are especially important in those instances where inquiry evidence is the only available evidential matter.

#### THE DECEPTION DETECTION ABILITIES OF AUDITORS

While several groups of professionals with a high stake in detecting deceit, such as secret service agents, federal officers, sheriffs, and deception-interested clinical psychologists, have been found very successful at detecting deception in the laboratory (Ekman and O'Sullivan 1991, Ekman et al. 1999), a positive relationship between experience related variables such as age and years on the job and success at judging veracity has generally not been found. For example, a Meta analysis conducted by Aamodt and Custer (2006) of 108 studies (16,537 subjects) related to deception detection found the variables of age (17 studies covering 2,025 subjects) and experience (13 studies covering 1163 subjects) not significantly related to lie detection success. Moreover, as presented in Table 1, professionals who regularly deal with deception had only a slightly higher mean success rate (M = 55.51%) than students (M = 54.22%) (please see Table 1).

Similar results were reported by Bond and DePaulo (2006) in a Meta analysis of 206 documents covering 24,483 subjects. The veracity judgment success rates of expert and non-expert subjects reported in 20 comparisons were not found significantly different. Interestingly, while not statistically significant, the with-in study analysis found the non-experts more successful than the experts. The within-study analysis also found

the experts and the non-experts similar in their "... tendency to perceive others as truthful" (p. 229).

With the determination of management integrity being of primary importance in the assessment of the control environment and the evaluation of the veracity of verbal responses by entity personnel being critical to almost every aspect of the audit, the independent auditor has a high stake in deception detection. Moreover, deceivers of auditors also have a high stake in perpetuating their lies. Entity personnel that are dishonest in responding to audit inquiries may, if discovered, face consequences such as the loss of their reputation, the loss of their job, substantial fines, and even imprisonment. With the serious consequences facing both auditors who fail to detect deceit and entity personnel who fail to successfully perpetuate a deceit, the authors suggest that the audit is a high stake deception detection environment.

Unfortunately, auditor specific deception detection research aimed at identifying the skill level of auditors in making veracity judgments and at determining the cues presently used (validly or invalidly) to judge truthfulness in the audit setting have been sparse. The extant literature related to the deception detection abilities and training of auditors includes a dissertation by D. H. Roberts (1995), a dissertation by C. C. Lee (2000), a working paper by Lee and Welker (2004), and a research article by Lee and Welker (2007). A short summary of the findings from each of these works follows.

The initial inquiry into the deception detection abilities of auditors was reported in a dissertation by D. H. Roberts (1995). In her study, 60 experienced auditors from four international accounting firms participated in an experiment involving the audit of the inventory and notes receivable accounts of a hypothetical sporting goods company. The

auditors were provided with various company and account information that included the prior year detailed audit program and time budget for each of the accounts, the materiality level of the potential errors in the two accounts, and an assessment of management integrity as either high or low.

In addition, the auditors were supplied with inquiry responses under two conditions: In the first condition, the auditors received only a written transcript of the questions and answers from an interview; and in the second condition, the auditors received both an audiotape and a written transcript of the interview. Thus, the auditors in the second condition were exposed to not only the informational content of the written transcript but also to potential verbal cues contained on the audiotape.

The mean accuracy rate of the auditor's veracity judgments of 64% was found to be significantly (p = .000) higher than chance. Auditors who received the written transcript and the audiotape of the interviewees' responses had a significantly higher (p = .042) veracity judgment success rate than the auditors who only received the written transcript of the interview: 66.4% compared to 61.4%. Therefore, the results indicate that the auditors gained information pertinent to more accurate deception detection from the verbal cues included on the audiotapes.

The dissertation by Lee (2000) reported the findings from two experiments with accounting students that investigated the behavioral cues related to deception and the effects of three levels of inquiry. Finding suggests that higher levels of probing "may negate the truth-bias tendency" (Lee, 2000, p. 60) and "increase deception detection accuracy" (Lee, 2000, p. 67).

Lee and Welker (2004) conducted two deception-detection studies. In the first

study, 110 accounting students (receivers) at the junior or senior level viewed videos of 22 interviewees (senders) being interviewed by a proxy auditor (an MBA student). In an experimental design similar to that used by Lee (2000), the senders (also MBA students) acting as building managers had, prior to the interview, viewed pictures of 3 buildings. Half had seen pictures of buildings in excellent condition while the other half had seen pictures of buildings in disrepair. The senders were each tasked with convincing the proxy auditor that the buildings they described were in excellent condition. Thus, half were telling the truth and half were lying. After viewing the video of each sender, the student receivers judged the veracity of the sender (truthful or lying). They also indicated their level of confidence in the judgment and rated on a scale of 1 – 7 the degree to which they had observed the sender exhibiting each of 36 credibility cues and 11 nervousness related cues. Results indicate a success rate of 51% with a confidence rate of 81%. That is, the students did only slightly better than chance at differentiating between liars and truth tellers while being moderately confident of their judgments.

In their second study, Lee and Welker (2004) compared the deception-detection ability and cue usage of 66 auditors with two or more years of experience to that of 66 undergraduate accounting majors. Each of the 132 subjects viewed a CD-ROM of the 22 senders used in the prior study. The CD-ROM viewing was unsupervised and took place on computers located at the home, work or school of the subjects. After viewing each of the 22 interviews, the subjects judged the veracity of the sender (truthful or lying), indicated their confidence in the judgment, and rated on a scale of 1 – 7 the importance they placed on the credibility and nervousness related cues identified in the prior study. The results found the deception detection success rate of the auditors higher (57.6%) than

that of the students (47.0%). However, when compared to a 50% by chance success rate, neither group reached a statistical significance (p = .11). The confidence levels of 78.6% for the auditors and 77.3% for the students were similar.

Two additional experiments conducted by Lee and Welker (2007) with proxy entry-level auditors investigated the effect of various levels of inquiry and deception detection training on veracity judgments. In the first study, the overall deception detection accuracy of these proxy entry level auditors of 55% was not found significantly higher than chance (p < .11). The success rate at each level of inquiry was as follows: representations with 4 yes or no questions, 52.5%; inquiry with 17 probing question, 55.0%; and repeat inquiry with 7 follow-up questions, 60%. While the success rates at deception detection increased at each higher level of inquiry, the increases did not reach statistical significance.

In Lee and Welker's (2007) second experiment, they investigated the effect of deception detection training on the veracity judgments of 91 senior-level accounting majors. The 91 students had an overall accuracy rate of 58.2%. Compared to a chance rate of 50%, this accuracy rate was not significant (p < .10). In addition, while the trained test group students compared to the untrained control group students were more successful at detecting both the deceptive (83% compared to 72%) and truthful (38% compared to 37%) interviewees, the training effect was not statistically significant.

The above four studies report the results from seven experiments conducted with both student and auditor subjects. Of these subjects, only the experienced auditors studied by Roberts (1995) were found more successful than chance at detecting deception in the laboratory. Some additional findings by the researchers include: (1) the use of verbal cues

improved detection successful (Roberts, 1995); (2) behavioral cues did not differentiate between truth tellers and deceivers (Lee, 2000); (3) increased questioning (probing) may or may not improve veracity judgments: while Lee (2000) reported improved deception detection accuracy at higher levels of probing, Lee and Welker (2004) found no such effect; (4) experienced auditors were not more successful than accounting students at detecting deception (Lee and Welker, 2004); and, (5) no training effect was realized from deception detection training consisting of providing the students with a written list of deception cues and having them view a 20 minute video explaining a limited number of deception related verbal and non-verbal cues. In addition to being few in number and limited to small sample sizes mainly composed of student auditor surrogates, each of the above studies failed to meet one or more of the deception detection challenges identified in the next section.

### **DECEPTION DETECTION TRAINING**

Research indicates that auditors, like other groups of professionals, are not skilled at detecting deception. Moreover, auditors may be unduly confident of their deception detection abilities. The question then arises as to whether or not auditor specific deception detection training can improve the auditor's veracity judgments and/or lessen any auditor propensity to be overly confident in their ability to assess of the veracity of oral responses. The deception detection literature suggests that training may be beneficial in both instances. A study by deTurck and Miller (1990) demonstrates that "... training people to detect deception not only enhances their ability to detect deception; it also reduces the discrepancy between confidence in their ability and actual ability ..." (p. 607). In addition, they demonstrated that deception training significantly improved the

ability to successfully detect deception perpetuated by those who had rehearsed the lie and by self-monitors: "Thus training enhanced [the] observers' ability to detect deception perpetuated by communicators whose deception is particularly difficult to detect" (p. 612).

Significant improvement in deception detection ability may be obtained without extensive training. Research by deTurck, et al. (1990) shows that training of only about 30 minutes duration is sufficient to significantly improve deception detection success. In their study, half of the deceivers and half of the observers were trained in the use of a limited number (6) of verbal and nonverbal cues. The results indicate that this training significantly improves deception detection skill.

An important part of veracity training may be connected to feedback and lying base rates. DePaulo et al. (1986) speculated that the law enforcement officers in his study did not perform significantly better than chance due to a lack of feedback. Ekman (1996) also suggests that feedback is critically important in deception detection training and that a high lying base rate level (about 75%) possibly explained the lack of deception detection ability among members of the criminal justice system. He predicts that deception detection learning from demeanor will result from the use of a lying base rate of about 50% with immediate judgmental feedback. Therefore, both a balanced base rate of lying and immediate appropriate feedback are identified as possible critical factors in the deception detection training process.

Fiedler and Walka (1993) also studied the benefits derived from deception detection training. They found that the lack of success in human lie detection is related to a lack of knowledge and understanding of nonverbal cues. "... Performance was clearly

reduced in the uninformed condition because human lie detectors lack appropriate knowledge of the meaning and diagnosticity of specific nonverbal cues" (p. 218).

A very positive deception detection training effect was reported by Porter et al. (2000) in their study of Canadian federal parole officers. The pre-test results indicated a below chance success rate of 40.7%. Subsequent training covered two days and consisted of a section on myths concerning indicators of deception, a section that focused on both the verbal and non-verbal cues associated with successful deception detection, and a final section in which the officers practiced deception judgments and received feedback. The post-test indicated a success rate of 76.7%.

An examination of 11 published deception detection studies that includes two of the above-discussed studies (deTurck et al. 1991, Fiedler and Walka 1993) conducted by Frank and Feeley (2003) reported a "... dependably positive overall effect for training." However, the increase in accuracy achieved from training across the 20 comparisons in the 11 studies was only about 4% (from 54% to 58%). Nevertheless, the authors suggest that the deficits in the methodologies used in these studies may underestimate the actual gains achievable through training.

According to Frank and Feeley (2003), all 11 of the studies they examined fail to meet one or more of the following deception training challenges: (1) Relevance: the deception detection task must replicate a realistic situation faced by a practicing professional; (2) Stakes: the deceptive scenarios viewed by the professional must involve a high stake situation that results in the sender experiencing emotions that elicit observable cues of deceit (that is a realistic, real world training stimulus); (3) Training: A training program is needed that effectively and efficiently (within the limited time

available to busy professionals) transmits deception detection knowledge; (4) Testing: Pre-test and post-test measures must be adequate; (5) Situational Generality: The training should generalize to high stake, real world situations other than the training materials. That is, the training must have external validity; and (6) Time Generality: The training effect should be lasting (Frank and Feeley, 2003).

In summary, these studies suggest that deception detection training can significantly improve veracity judgments. Such training has been found to be non-person specific, possibly related to feedback and the lying base rate, more successful if confined to a limited number of cues, and even of significant benefit at detecting lies perpetrated by the rehearsed and self-monitor groups. With potential success rates as high as 80% reported as achievable by some professionals and with the positive effects to be derived from deception detection training, the authors suggest that an auditor-specific deception detection training program should be designed that meets the specifications identified by Frank and Feeley (2003). While high success rates at detecting the deceptions of entity personnel should be the goal set for training programs, it is suggested that even a 4% improvement in the auditor's ability to detect deceit may provide a beneficial decrease in detection risk. Moreover, deception detection training may lessen the likelihood that auditors will have unrealistic confidence in their ability to detect deceit.

#### **GUIDANCE**

Detecting deception is critical to the effectiveness of audit inquiries. Unfortunately, a large body of prior research (especially Frank and Feeley 2003) indicates that people are only slightly (4%) better than chance at detecting deception. This appears to be true even for people where the ability to detect deception is considered

to be critical such as law enforcement (Bond and DePaulo, 2006). At the same time, past research (e.g. Frank and Feeley 2003, Porter et al. 2000, Fiedler and Walka 1993, deTurck and Miller 1990, deTurck, et al. 1990) also suggests that deception detection can be enhanced. Four basic guidelines are shown in Table 2. Each of these is described below (please see Table 2).

The first guideline is that there is not a single behavior that when present always indicates deception (Vrij 2004). Even highly sophisticated and sensitive physiological and neurological imaging equipment has failed to find a response that is uniquely associated with deception. Since detecting deception involves inferring that deception exists from behaviors that may be explained by other causes, it is important to consider alternative causes for these behaviors. For example, a person may avoid disclosing a policy violation not because they are involved in a defalcation, but rather because they will get in trouble for violating a policy. People may also engage in behaviors that appear deceptive because they are trying to protect loved ones or close friends (Inbau et al. 2001).

One of the authors of this study has worked on several cases where a person engaged in deception not because they had stolen money but because they either knew or suspected that a loved one did. The auditor should also consider other factors that may impair the suspect's ability to recall information such as the amount of time that has lapsed or how often the suspect performs a task. For example, a person who routinely performs a task several times a day may have difficulty remembering details about a single, particular time that he or she performed the task several weeks ago.

For many years, the research on deception has focused on nonverbal behaviors (such as eye contact and fidgetiness) as indicators of deceit. This focus on nonverbal behavior as indicative of deceit has also been adopted by the public (Bond and Rao 2004). Unfortunately, the most recent meta-analysis on cues to deceit found very few nonverbal behaviors that successfully distinguished between truth-tellers and liars (DePaulo et al. 2003). Additionally, the differences between the behaviors of truth-tellers and liars were often small; suggesting that detecting deception on the basis of these behaviors would be difficult. DePaulo et al. (2003) also found several verbal cues that were reliably indicative of deception; and, verbal differences between truth-tellers and liars were generally larger than nonverbal differences. Specifically, DePaulo et al. (2003) found that deceptive statements contained fewer details, were less plausible, and possessed less logical structures than true statements. Deceptive statements were also more likely to contain negative statements or complaints than true statements. These findings lead to a second guideline: Listen to what the person says, not how he or she looks when saying it.

If you are focusing on what a person says, it logically follows that you should give them the best possible chance to speak. This leads to the third guideline: Don't lead the interviewee but let the person talk. People tend to believe that memories are like pictures, but they are not (Wells 1993). Memory is quite malleable and improper questioning can contaminate it. Open-ended questions that give the suspect a chance to give detailed answers should be asked first and whenever possible. The interviewer should also be aware that a potential deceiver will be attempting to ascertain exactly what the interviewer knows so that the potential deceiver can integrate this information into his

or her statement (Hartwig et al. 2005). An interviewer must be extremely careful not to reveal important information to the interviewee. A good general rule of thumb to avoid both contaminating and leaking important information is to talk only about things that the interviewee has mentioned and use only the words that he or she has used to describe things.

Since there is no single cue that always indicates deception, it is important that the investigator consider multiple cues when making a judgment. The more deception behavior cues that the auditor detects, the more likely it is that the person is deceptive. It is important then that the auditor considers the cues as a whole rather than any single behavior in trying to make an assessment (Vrij 2004). This is similar to the idea of using multiple items to improve the reliability of a measurement.

Finally, most research has focused only on cues to deception that are contained solely within the message and ignores other outside information that may be useful. This is despite research that suggests that people rarely detect deception from the message itself in real life. In a study by Park et al. (2002) people were questioned about situations where they had successfully detected deception. The participants indicated that they rarely detected deception at the time of the event; rather deception was usually detected later using information from other sources such as friends or by personally verifying the information that was given. For example, verbal information received from the controller regarding the collectable status of certain receivable accounts and the related adequacy of the allowance for doubtful accounts can be corroborated by other audit evidence, that is a review of the aging of accounts receivable and the subsequent accounts receivable collection activity.

Recent research suggests that people can achieve exceptionally high levels of accuracy (as high as 85%) if they ignore less diagnostic cues and focus on comparing the statements of the suspect to outside information (Blair 2007, Hartwig et al. 2006). This leads to the fourth and final guideline: Compare a suspect's statement to other reliable information.

#### **CONCLUSIONS**

This study identifies the connection between deception detection and the auditor's evaluation of audit evidence produced by inquiry. Past research indicates that the ability to detect deception and to accrue related benefits is often lacking in auditors and other professionals. While auditors often lack reliable deception detection skills, research shows that deception detection training can significantly improve auditors' veracity judgments.

This study identifies four general deception detection guidelines that will assist in the evaluation of verbal responses to audit inquiries. These include: recognizing that no single behavior (e.g. avoiding eye contact) always indicates deception; listening to what a person says, not how he or she looks when saying it; not leading an interviewee but letting the person talk; and comparing a suspect's statement to other reliable information. Deception detection skills can be an effective tool for improving audit effectiveness.

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Table 1

Deception Detection Abilities of Various Professional Groups

| Group                 | Studies/Groups | No. Subjects | Accuracy % |
|-----------------------|----------------|--------------|------------|
| Social Workers        | 1              | 20           | 66.25      |
| Criminals             | 1              | 52           | 65.40      |
| Secret service agents | 1              | 34           | 66.12      |
| Psychologists         | 4              | 508          | 61.56      |
| Judges                | 2              | 194          | 59.01      |
| Police Officers       | 12             | 655          | 55.30      |
| Customs officers      | 3              | 123          | 55.30      |
| Federal officers      | 4              | 341          | 54.54      |
| Students              | 156            | 11,647       | 54.22      |
| Detectives            | 7              | 758          | 50.80      |
| Parole Officers       | 1              | 32           | 40.42      |
| Total                 | 193            | 14,379       | 54.50      |

Adapted from Aamodt and Custer (2006)

## Table 2

# **Deception Detection Guidelines**

- No single behavior (e.g. avoiding eye contact) always indicates deception.
- Listen to what the person says, not how he or she looks when saying it.
- Don't lead the interviewee but let the person talk.
- Compare the suspect's statement to other reliable information.