Effects of Experiential and Reflective Interventions on
Novice Auditor Selection of Evidence Gathering Techniques

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ABSTRACT

Auditing literature recently identified what has been termed a “social mismatch” between novice auditors and older, more experienced, more knowledgeable client contacts (Bennett and Hatfield 2013). This phenomenon occurs when novice auditors avoid face-to-face interactions with clients and can adversely affect the audit process. In light of the importance of novice auditor-client interactions, I conduct an experiment to identify potential mechanisms to mitigate the social mismatch phenomenon. Specifically, accounting students proxying for novice auditors are randomly assigned to experimental conditions in which they participate in role-play and perspective-taking exercises and complete an audit task commonly performed by novice auditors. Initial findings indicate that role-play interventions, such as those currently used in training at large public accounting firms, may exacerbate novice auditor inhibition tendencies. Furthermore, additional results suggest that actively taking the client’s perspective prior to choosing an evidence gathering technique does not improve novice auditor decisions. Finally, auditor inherent characteristics are studied, including levels of emotional intelligence and impression management, and also do not appear to have implications for selection of evidence gathering techniques. Results of this study provide valuable insight into novice auditor-client interactions, as well as the implications of such interactions for audit evidence gathering activities.
DEDICATION

This dissertation is dedicated to my parents, Joe and Sue Speicher, and to my husband, MJ Gimbar, who have wholeheartedly supported me throughout this journey.

Dad, thank you for always picking up the phone and allowing me to “process” things with you. You are a sage advice giver and a consistently strong model of generosity, kindness, wisdom, and reliability in my life. Thank you for being my “Mr. Stevens.” This dissertation could have never been completed without you. Mom, I would have never sought out a doctorate if you didn’t have one. Your lifelong pursuit of learning has inspired me to complete this degree. Thank you for always coming when you knew I needed you and for understanding the stresses that came with this process. Thanks to you, I will never be “one man away from the welfare line.” Mom and Dad, together, you are the best parents and the perfect example for MJ and I of what a lifelong unity should be. Thank you for everything.

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

Recent accounting research finds alarming evidence that novice auditors may avoid face-to-face interactions with older, experienced client contacts due to a “social mismatch” between the parties, resulting in adverse audit outcomes, including failure to obtain appropriate audit evidence (Bennett and Hatfield 2013). This mismatch arises from novice auditors’ awareness that management contacts are older, more experienced and more knowledgeable than themselves, thus creating a perceived power disparity and inhibiting social behavior (Keltner et al. 2003). The research presented here investigates whether experiential and reflective interventions, including role-play, self-reflection, and consideration of the client’s perspective, can mitigate the effects of this social mismatch and improve interactions between novice auditors and client contacts, thus resulting in more effective audit evidence gathering. Additionally, this study identifies characteristics inherent to novice auditors who engage in effective client interactions.

Today’s novice auditors prefer immersive, experiential learning, such as interactive game-play scenarios, where learning through exploration and trial and error is encouraged (PwC 2011). Role-play is an interactive learning technique that has long been popular in educational domains such as medicine (McGaghie et al. 2010), law (Milstein 2001) and aviation (Chung 2000). Though features of the audit setting, including novice auditors’ frequent interaction with socially mismatched clients and the perceived power disparity between the parties, differ from these other domains (Bennett and Hatfield 2013; Keltner et al. 2003; Zellmer-Brun et al. 2008), role-play may still provide novice auditors with a safe environment in which to rehearse client interactions.
interaction skills (VanMents 1989). Therefore, role-play may, if appropriately exploited, have the potential to mitigate the aforementioned social mismatch. The use of role-play is further supported by Intergroup Contact Theory (ICT), which posits that the most effective way to reduce the perceived distance between groups is through contact (Allport 1954). Though primarily applied to reduce prejudice and stereotyping, ICT has been shown to be applicable within several other environments (Pettigrew and Tropp 2006). However, the benefits of role-play as a learning technique have yet to be examined in an audit context.

A second distinguishing feature of novice auditors is their desire for more frequent feedback, which can be performed subsequent to a role-play scenario in an effort to improve future auditor-client interactions (Reutter 2010). In fact, medical research argues that reflecting upon a past event, or “debriefing,” is the most important aspect of simulation-based training, as it increases knowledge retention and provides role-players with the opportunity to consider the strengths and weaknesses of their performance and make sense of the events that occurred (Fanning and Gaba 2007; Shinnick et al. 2011; Hillman et al. 1990; VanMents 1989). Reflection can take on many forms, including video playback, group feedback, and self-guided review (Fanning and Gaba 2007). Effective reflection typically includes open-ended questions, positive reinforcement, and consideration of an appropriate method (Rall et al. 2000). Because active consideration of a past event is a natural extension of a role-play scenario, I investigate whether conducting a formal self-reflection session can incrementally improve auditors’ perceptions of past interactions with socially mismatched individuals and thereby benefit future exchanges with other socially mismatched contacts.

The final characteristic of today’s novice auditors that I investigate in this study is their alleged egocentric behavior (Kiisel 2012; Twenge 2006; Stein 2013; Manly and Thomas 2009).
Emerging generations of college graduates have been labeled as having narcissistic, “me me me” tendencies (Stein 2013; Twenge and Foster 2010). If, as research indicates, today’s novice auditors are more narcissistic than their predecessors, they may have difficulty connecting with clients, which can contribute to the social mismatch. In an effort to mitigate egocentric or narcissistic tendencies, this research turns to psychology literature, which finds that perspective-taking, or putting oneself in another’s “shoes,” increases the “self-target overlap” whereby a greater percentage of self-descriptive traits are ascribed to a target (Galinsky and Moskowitz 2000). I apply this theory to an audit setting in which a novice auditor’s reflection upon the client’s perspective may help to increase self-target overlap, thus perceptually reconciling differences and mitigating the social mismatch.

Finally, this research seeks to identify characteristics inherent to auditors who are more likely to welcome face-to-face client interactions. Though existing audit literature has identified some of these characteristics, such as an internal locus of control (McKnight and Wright 2011; Donnelly et al. 2003), I attempt to identify additional traits that can play a part in a novice auditor’s willingness to approach a client contact. I specifically examine auditors’ levels of emotional intelligence (EI) and concern for impression management (IM). Mayer and Salovey (1997) define emotional intelligence as the ability to perceive emotions accurately, use emotions to enhance thinking, understand and label emotions, and regulate emotions in self and others, all of which can prove helpful in interpersonal interactions. IM is the degree to which people attempt to regulate others’ perceptions of them (Leary and Kowalski 1990; Wells et al. 2009; Kirch et al. 2001). The self-monitoring scale developed by Snyder (1974) assigns a numeric value to an individual’s level of IM. High levels of IM or EI may either inhibit or promote novice auditors’ tendencies to approach clients. Accordingly, this study not only identifies
external interventions to mitigate the effects of the social mismatch phenomenon but also attempts to find a link between select internal traits and effective audit evidence gathering.

I investigate the effects of the aforementioned interventions on novice auditor evidence gathering in a 3 x 2 experiment in which role-play (no role-play, role-play or role-play with self-reflection) and perspective-taking (absent or present) are manipulated between participants. 146 undergraduate accounting students were recruited to participate over a two-day period. The break between the first and second days simulates the lapse of time between auditor training and on-site audit procedures. On day one, after initially completing self-monitoring and emotional intelligence scales (Snyder 1974; Petrides and Furnham 2006), participants begin tasks related to their randomly assigned experimental conditions. Role-play conditions require participants to audit the fixed asset account of a hypothetical client and interact with a client “controller” played by a socially mismatched experimental confederate. The confederate is older and possesses high levels of knowledge and experience related to the assigned task, thus fulfilling Bennett and Hatfield’s (2013) social mismatch characteristics. Each role-play lasts approximately 10 minutes, during which participants have an opportunity to rehearse their client interaction skills. Subsequently, half of those in the role-play condition complete a self-reflection exercise in which they are asked to consider various aspects of the role-play interaction and reflect upon their performance.

On the second day, participants complete an accounts receivable (AR) task adapted with permission from Bennett and Hatfield (2013). All participants are provided biographies of two client contacts: an older, socially mismatched contact and a younger, less socially mismatched contact. Prior to deciding whom to contact regarding the AR task, participants in the perspective-taking condition are asked to reflect upon and document their thoughts about the
client’s perspective related to the AR issue. All participants are then given the opportunity to email or meet with either of the contacts in order to obtain the necessary audit evidence.

I consider several dependent variables in order to evaluate the impact of the experimental interventions on each participant’s evidence gathering activities, including the participant’s selection of which client contact to approach, the method of approach chosen (email or in-person meeting), the number of rounds of communication it takes to obtain sufficient appropriate audit evidence, the stage at which the auditor chooses to cease gathering evidence and document the work performed, as well as the conclusion that the auditor selects to complete the audit task. Additionally, the auditor’s perceptions of the two client contacts, including any social mismatch perceived, is assessed using measures from Bennett and Hatfield (2013).

Findings of this study inform both academic and professional practice about the preparation of accountants for auditor-client interactions and potential mitigants to the social mismatch. Academics have the responsibility to prepare accounting students for “real world” client interactions. By focusing on the needs of current and future accounting students, academics might help to mitigate the social mismatch by integrating role-play, self-reflection or alternative perspective-taking into classroom activities. Additionally, findings regarding levels of IM and EI may help to identify those students with a better baseline trait set for client interactions than other students. Further, as novice auditors have recently become more interactive with clients (i.e., “client facing”), accounting firms can benefit greatly from research that investigates measures to improve auditor-client interactions (Daugherty et al. 2012). Though training at many of the Big 4 accounting firms currently incorporates role-play scenarios, implementation methods vary greatly among firms, and the efficacy of these variant

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1 I confirmed the Big 4 firms’ use of role-play as a training technique through discussions with individuals involved in learning and development and training implementation at each of the firms.
methods is unknown. Finally, while auditor-client interaction literature focuses on negotiation settings, this study focuses on novice auditor interactions (Nelson and Tan 2005). This line of research is valuable, as novice auditors frequently interact with high-level client management (Bennett and Hatfield 2013). This study therefore provides a much-needed basis for future research on moderating the social mismatch and improving novice auditor interactions and evidence gathering.

The remainder of this paper proceeds as follows: Chapter 2 discusses theory and development of my hypotheses; Chapter 3 presents the research methodology; Chapter 4 discusses analyses performed to examine the proposed hypotheses and research questions; finally, Chapter 5 provides a discussion, the contributions and possible limitations of this research, followed by references, figures, tables and appendices.
CHAPTER TWO

BACKGROUND AND LITERATURE REVIEW

2.1 Novice Auditor Interactions and Social Mismatch

Recent accounting literature investigating auditor-client interactions focuses primarily on negotiation scenarios, while little attention has been paid to interactions between novice auditors and client management (Nelson and Tan 2005). It is important to understand such interactions, as a recent survey conducted by Bennett and Hatfield (2013) finds that staff-level auditors are often the ones who communicate most with the client during fieldwork. In the survey, staff-level respondents indicate that approximately 66 percent of their communications are with high-level members of client personnel, including the client controller or manager/director-level employees. Additionally, while novice auditors have traditionally been assigned a number of non-client-facing tasks such as confirmation testing, Daugherty et al. (2012) discuss how recent offshoring of these audit procedures has shifted only client-facing tasks to the audit team. Therefore, many client-facing tasks, once the work of the audit senior, now fall to entry-level staff, thus increasing the amount of interaction between clients and novice auditors.

Shifting more complex audit assignments to less experienced auditors may have implications for practice. Libby and Luft (1993) model auditor performance and suggest that experience is an antecedent to knowledge, which, in turn, improves performance. Alternatively, inexperience deprives the auditor of knowledge and impairs performance. Subsequent research focused on novice auditor performance confirms this model and finds that lack of experience has implications for the execution of audit tasks, including going concern judgments, identification of errors and risks, and concession to client demands (e.g., Brown and Johnstone 2009; Shelton 1999; Tubbs 1992; Choo and Trotman 1991).
More recent literature finds that inexperience may have consequences for yet another task: audit evidence gathering. Specifically, Bennett and Hatfield (2013) conduct an experiment to determine whether controller characteristics and method of communication affect novice auditors’ likelihood of requesting additional evidence or documentation of procedures performed. The authors use students to proxy as novice auditors and present them with one of three controller types: an older, more experienced and intimidating controller; an older, more experienced and unintimidating controller; or a younger, less experienced and unintimidating controller. Additionally, the authors manipulate how participants could contact the controller to request additional audit evidence: through email or through an in-person meeting.

Findings for participants assigned to the in-person meeting condition indicate that, while the intimidation level of the older, more experienced controller does not influence auditors’ likelihood of requesting additional audit documentation, participants were significantly less likely to request additional information when they were paired with an older, more experienced controller than when paired with a younger, less experienced controller (Bennett and Hatfield 2013). These findings indicate that age, knowledge and experience mismatches, not the level of intimidation, drive the auditor’s inhibition tendencies in the study’s in-person condition. Further, the authors find that, for all controller types, participants in the email condition were more likely to request additional audit evidence than those in the in-person meeting condition. This effect is even larger for those in the older, experienced client condition. Such avoidance behaviors have implications for audit quality: approximately 37 percent of participants who did not collect all necessary audit evidence ended up documenting ambiguous conclusions that did not fully reflect
the level of work performed.\textsuperscript{2} Taken together, these findings suggest that auditors avoid face-to-face interactions with older, more experienced client contacts, resulting in potentially negative audit consequences. The authors attribute these troublesome findings to a social mismatch between the parties, which results from the controller’s age, knowledge and experience (Bennett and Hatfield 2013).

Following Bennett and Hatfield’s (2013) findings, I posit that a controller’s age, degree of knowledge and experience level makes the power disparity between auditors and client contacts salient, thus inhibiting auditor behavior. Keltner et al. (2003, 265) define power as “an individual’s relative capacity to modify others’ states by providing or withholding resources.” Novice auditors’ awareness of their inferior experience and knowledge makes them feel as though the client holds the “upper hand” during interactions. A controller has the ability to provide or withhold information from the auditor and, as Bennett and Hatfield (2013) find in post-experimental discussions with participants, intimidate auditors even when the client is not overtly acting intimidating. Over 70 percent of participants in Bennett and Hatfield’s survey responded positively to the following statement: “While meeting with a client, the client made statements that suggested he had more knowledge and experience than you … You were left with the impression that he thinks that you may not know what you are doing.” Respondents who agreed with such a statement admitted to having felt somewhat insecure and intimidated during their interactions with high-level client contacts. These feelings place the auditors in what they perceive to be a position of lesser power that, in turn, results in inhibition tendencies.

One manifestation of inhibition may be to avoid an uncomfortable situation. Keltner et al. (2003) point out that a fundamental aspect of an individual’s environment is the tendency either

\textsuperscript{2} Though ambiguous audit documentation might be identified and corrected during the review process, Bennett and Hatfield (2013) argue that such vague, unclear writing also has the potential to hide shortcomings in the audit work from reviewers, who will then fail to have reviewees conduct follow-up work.
to approach or avoid situations. Avoidance instincts increase an individual’s sensitivity to threats and are activated when one is in a position of lower power (Anderson and Berdahl 2002). A threat may include interpersonal conflict triggered by feelings of inferiority and inadequacy that an auditor feels when approaching an older, more experienced and more knowledgeable client. The novice auditor’s awareness that he is in a position of lower power reduces the likelihood that he approaches the client to obtain audit evidence.

Fiske (1993) provides an additional link between control and inhibition tendencies. She suggests that power disparities encourage and maintain stereotypes, defined as “people’s beliefs [or cognitions] about an individual based on group membership” (Fiske 1993, 623). An auditor’s preconceived notion that clients are more knowledgeable, more experienced and, therefore, more powerful creates the basis for descriptive stereotypes about what a client contact is like. This stereotype provides a starting point for an auditor-client interaction in which the auditor expects to be in a position of lower power, further exacerbating avoidance tendencies (Fiske 1993). While the power disparity and related stereotypes that exist between a novice auditor and an experienced client are difficult to reconcile, this study attempts to mitigate the associated avoidance tendencies by targeting specific features of current and future accounting graduates, including preferences towards immersive, experiential learning styles, desire for feedback and egocentrism.

2.2 Learning Styles and Intergroup Contact Theory

A recent PricewaterhouseCoopers (PwC) survey finds that current novice auditors prefer immersive learning styles, including online learning modules or interactive game-play scenarios (PwC 2011). Role-play, a simulation-based technique currently employed by accounting firms as part of auditor training, provides novice auditors with a safe environment in which they learn
to cope with the uncertainties of client interactions, rehearse communication situations and develop interpersonal skills, while simultaneously catering to novices’ need for distinctive learning methods (VanMents 1989).\(^3\) Such simulation-based learning has been applied in other fields including aviation (Chung 2000) and legal education (Milstein 2001), with its most well documented successes being in medical training (McGaghie et al. 2010; Ruesseler et al. 2010). The success of simulation-based medical education is so prolific that medical licensing now requires role-play simulations as part of testing (USMLE 2014). However, benefits of this learning technique have yet to be assessed in an audit context. Similarities between the medical and audit professions, including the need to acquire pertinent information from unfamiliar individuals, the potential for clients or patients to withhold information and the heavy reliance upon acquired information to meet desired goals, suggest that role-play may also prove beneficial to auditor training.

The audit setting differs, however, in that novice auditors routinely interact with socially mismatched client contacts (Bennett and Hatfield 2013). While young medical professionals typically interact with people who have much less knowledge and experience in treating people medically, novice auditors often deal with older, more knowledgeable and more experienced clients. The auditor’s feeling of social distance may create a bias against these older, more experienced contacts, leading to avoidance behavior. Psychology’s Intergroup Contact Theory (ICT) postulates that the most effective way to reduce bias between dissimilar parties is through intergroup contact (Allport 1954). The theory posits that biases arise from one’s perception of in-groups and out-groups and distinguishes between these groups by defining an in-group as one

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\(^3\) Although I confirmed the use of role-play at the Big 4 accounting firms through discussions with individuals involved in training at each of the firms, the methods and techniques used vary widely amongst firms. Importantly, none of the methods currently employed require all trainees to engage in a one-on-one role-play interaction with a socially mismatched individual.
whose members use the term “we” with the same level of significance. Though Allport (1954) primarily applies ICT to settings with racial or ethnic prejudices, Pettigrew and Tropp (2006) conduct a meta-analysis of ICT studies and find that the theory can be effectively extended to contexts outside of racial and ethnic prejudice to include elderly, homosexual, physically disabled and mentally ill target groups. This evidence suggests that ICT might also be applicable to an audit setting in an effort to reduce the biases that underlie the social mismatch. For example, a novice auditor may be a member of many groups that he is loyal to, including his family, his firm, his audit team, and his peers. A client contact, alternatively, does not routinely share any of these groups, so the novice auditor may consider him to belong to an out-group, thus triggering the social mismatch.

Importantly, however, one’s perception of in- and out-groups is subjective and variable. An individual may redefine his in-group memberships to suit his needs (Allport 1954). Even two members of the same in-group may define its composition differently. For instance, one may define his in-group as including those coworkers with whom he interacts frequently or works in immediate proximity to, while someone else may include all individuals who work for the same company in his in-group. Therefore, it is difficult to casually define an individual’s in- and out-group boundaries. However, when applied to an audit setting, the social mismatch suggests that a novice auditor would be unlikely to include an older, more experienced client contact, with whom he shares few obvious similarities, as part of his in-group.

The possibility that novice auditors exclude client contacts from their perceived in-group is supported by more recent literature, which posits that individuals form impressions of others quickly in order to cognitively place themselves into salient social groups (Zellmer-Bruhn et al. 2008). In interactive settings, individuals use immediately available information to place
themselves into or distinguish themselves from groups in an effort to ease discomfort and uncertainty when interacting with unknown individuals (Allport 1954; Jehn et al. 1999). The degree to which one differentiates himself from an out-group and places himself into an in-group depends on the saliency and observability of group characteristics (Earley and Mosakowski 2000).

One immediately observable characteristic of a client controller is his age, which is a primary feature of the social mismatch phenomenon. Similarly, the high professional status associated with the “controller” job title suggests that he has both experience and knowledge, which are additional, immediately observable features, revealed through interaction, that inform the social mismatch. None of these salient, observable features places a client controller and a novice auditor together in similar in-groups; they only serve to highlight perceived differences between them. Meanwhile, the few features shared by auditor and client, including a common goal to issue financial statements or incentives to serve company stakeholders, are not immediately salient and will therefore not be as influential when forming in- and out-groups (Zellmer-Brun et al. 2008). The boundaries of in- and out-groups can, however, reconfigure once these similarities are exposed and become more easily identifiable. This can happen most seamlessly in the presence of optimal situational conditions that are defined by ICT and, together, constitute a “structured” interaction.

Allport (1954) identifies four situational conditions that are ideal for prejudice reduction and comprise a “structured” interaction: equal status between the parties, common goals, intergroup cooperation, and support of authorities, law, or custom. Though their status may be unequal and their common goals few, the two parties to an audit engage in intergroup cooperation with the support of custom. This setting can therefore be considered semi-
structured. Pettigrew and Tropp’s (2006) analysis finds that, while studies using more structured interactions tend to yield more significant effect sizes, contact does not need to be well structured or even lengthy to be effective at reducing intergroup conflict.

Similarly, Worchel et al. (1977) find that previous cooperative interaction between parties can increase intergroup acceptance. More recent findings indicate that even indirect contact, such as learning that an in-group member has a friend that is an out-group member or simply imagining oneself interacting with an out-group member, can improve relations between social groups (Dovidio et al. 2011). Further, research shows that exposure resulting in increased liking of one social target can generalize to other similar, yet previously unknown, social targets (Rhodes et al. 2001). This evidence suggests that exposure to one socially mismatched individual through role-play can increase liking and thus decrease the social mismatch for other similar client contacts. ICT finds that contact alone can reduce perceived differences among individuals. Therefore, it may be extrapolated that semi-structured, practiced exchanges with another party through role-play can enhance the quality of interactions.

2.3 Communication Setting

When specifically measuring the quality of a socially mismatched interaction, it is important to identify which communication channels mitigate inhibition tendencies identified by Bennett and Hatfield (2013). The authors find that novice auditor inhibition is most prevalent in face-to-face conditions in which participants were less likely to follow up with the client to obtain necessary audit evidence. In email conditions, however, participants were more likely to follow up with the client, allowing them to remain inhibited while still obtaining the required evidence. Still, face-to-face interactions provide a richer form of communication than email, in which the participant may miss certain nonverbal and informational cues (Baltes et al. 2002).
Additionally, media richness theory, which is used to describe the “richness” of various media types such as email, telephone, or face-to-face interaction, finds that email communications lack nonverbal and verbal cues, both of which can offer a plethora of information about an interaction. Supporting this theory, Kock (2005) finds that email communication increases the likelihood of message misinterpretation.

Though it can be argued that, at times, email communication is more efficient because of the time saved in approaching the client, the setting of this study places participants adjacent to client “offices” and therefore email does not provide any more efficiency than approaching the client contact. Further, Maruping and Agarwal (2004) find that email allows a communicator a setting in which to rehearse his message. In an audit setting, the repeated rehearsal of a message has the potential to become time consuming and costly, thus reducing efficiencies. Meanwhile, a brief face-to-face interaction may achieve intended goals. Additional research claims that email allows users a forum in which to express feelings that they would be reluctant to express in a face-to-face interaction (Ho and McLeod 2008). Though this claim may suffice for novice auditors engaged in low-risk audit testing, client discussion and interaction become essential once these auditors encounter higher-risk areas. Also, should any potential misstatements or control deficiencies be identified, recorded email communications could be detrimental to auditor litigation outcomes. Finally, Saiewitz and Kida (2014) find that clients who receive audit requests via email are more likely to provide responses that are biased towards their own position when compared to receiving requests via audio or visual means, thus potentially influencing auditor judgments.

Most importantly, despite the purported benefits of email, electronic communication channels do not provide an opportunity for the auditor to overcome the social mismatch and,
instead, allow the auditor to remain inhibited. Because this study specifically aims to reduce the social mismatch between the auditor and the client contact, the participant’s choice to engage in a face-to-face meeting with a client contact is regarded as superior to email communication. I hypothesize that a role-play intervention reduces the perceived social mismatch and increases the likelihood that auditors will subsequently elect face-to-face meetings with client contacts. I therefore predict the following:

H1: Role-play with a socially mismatched individual will increase the likelihood that novice auditors will subsequently request a face-to-face meeting with a socially mismatched client contact when compared to no role-play.

2.4 Feedback and Self-Reflection

Today’s emerging accounting graduates have also been shown to desire more frequent feedback (Reutter 2010). A recent PwC survey finds that these individuals want “feedback, feedback and more feedback” and “want to know how they’re doing much more regularly” (PwC 2011, 25). Semi-annual reviews and quarterly mentor meetings are not enough for modern auditors, 80 percent of whom stated in a Forbes survey that they want regular feedback from managers (Kiisel 2012). This differs from individuals from previous generations, who typically want to be told objectives and then left alone to execute them (Kiisel 2012). The desire for ongoing advice and mentoring is consistent with the current generation of novice auditors’ conditioning to expect instant gratification. Employers are now encouraged to cater to the needs of their younger employees and provide honest, structured, real-time feedback.

Feedback can have the effect of promoting self-reflection when it occurs soon after a given event (e.g., an audit engagement). Reflecting upon a past event, or “debriefing,” is said to have originated in the military to encourage individuals returning from a mission to describe the
events that had occurred (Fanning and Gaba 2007). This method was expected to help soldiers process traumatic events and reduce psychological damage in an effort to return them to the front lines. While not nearly as distressing as a combat situation, novice auditors’ interactions with socially mismatched, intimidating clients can induce feelings of stress and anxiety. After interacting with socially mismatched client contacts, auditors may avoid recollecting the experience on their own, “especially if the pressure of events prevents focusing on what just transpired” (Fanning and Gaba 2007, 117). That is, if an encounter with a client provokes feelings of anxiety or strain, the auditor may avoid reflecting upon it. Therefore, recollection of and reflection upon an interaction do not occur organically and, to ensure they confront any unpleasant feelings, novice auditors must be actively engaged in a recollection and reflection exercise. When dealing with a social mismatch situation, this exercise should incorporate aspects of the social mismatch in order to compel the auditor to confront feelings of stress or anxiety experienced during the interaction. By addressing specific features of the social mismatch, including a client’s age, knowledge and experience level, auditors are likely to overcome these barriers and be better prepared for similar future interactions.

The benefits of incorporating reflection exercises into educational exercises are well documented in extant research. Medical literature, for example, argues that debriefing is the most important aspect of simulation-based training because it can increase knowledge retention and provide role-players with the opportunity to consider the strengths and weaknesses of their performance and make sense of the events that occurred (Fanning and Gaba 2007; Shinnick et al. 2011; Hillman et al. 1990; VanMents 1989). Fanning and Gaba (2007) suggest that this process

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4 Although existing accounting literature provides evidence regarding the efficacy of feedback and self-reflection in audit contexts, much of the literature relates to outcome scenarios in which the correct judgment or decision is provided and/or explained. Little evidence exists related to post-interaction reflection. Bonner (2008) notes that such knowledge in accounting is “disjointed and limited” and provides a discussion of existing studies (233).
bridges the gap between experiencing an event and making sense of it. Crawford et al. (2001) argue that providing feedback subsequent to a role-play experience can enhance the positive effects of role-play, allowing for modified future behavior. Collectively, these findings suggest that active consideration of a past event can enhance learning and improve subsequent performance.

Several elements of effective reflection have been identified in existing literature. Bonner (2008) notes that feedback should be timely because learning effects decrease as the lag between a decision and subsequent feedback about that decision increases. Medical research finds debriefing to be most effective when it includes open-ended questions and positive reinforcement (Rall et al. 2000). Additionally, reflection upon a past event should be conducted in an unthreatening setting with attention to the appropriate technique, whether it is self-reflection or a facilitator-mediated response (Fanning and Gaba 2007).

Taking into consideration the aforementioned best practices, it is expected that novice auditors who self-reflect upon interactions with and features of a socially mismatched client subsequent to a role-play experience will improve their perceptions of the interaction. This reflection can benefit future exchanges with other socially mismatched contacts.

H2: Self-reflection after a role-play experience that focuses on features of the social mismatch will increase the likelihood that novice auditors will subsequently request a face-to-face meeting with a socially mismatched client contact when compared to no self-reflection.

2.5 Egocentrism and Perspective-Taking

The final characteristic that this study explores is the egocentrism attributed to graduates who are now entering the workforce (Kiisel 2012; Twenge 2006; Stein 2013; Manly and Thomas
Egocentric behavior, often characterized as one’s preoccupation with oneself, may make it difficult for novice auditors to connect with clients. Novice auditors have recently been labeled as products of a “me me me” and the “gimme gimme gimme” generation (Stein 2013; Kiisel 2012). This description is somewhat expected, as recent medical research suggests that narcissism is most prevalent in the 20–29 years age range (Stinson et al. 2008). Though these egocentric characteristics can be said to be present in most generations of twenty-somethings, psychology research posits that, as American culture has become more individualistic over the past few decades, contemporary graduates in particular exhibit higher levels of entitlement than did previous generations (Twenge 2006; Twenge and Foster 2010). Twenge and Foster (2010) define narcissism as “an inflated sense of self” characterized by overconfidence, by a lack of interest in forming intimate bonds and by taking more for oneself when faced with common resources. If, as these findings indicate, novice auditors are more egocentric or narcissistic, they may have difficulty connecting with others, including clients, which can contribute to the social mismatch.

To mitigate the potentially harmful effects of egocentrism, psychology research provides evidence that perspective-taking, or the active consideration of another’s viewpoint, can provide benefits in intergroup interaction. Galinsky and Moskowitz (2000) find that perspective-taking increases the “self-target overlap” whereby a greater percentage of self-descriptive traits are ascribed to a target (e.g., a socially mismatched client). In three experiments, the authors demonstrate that this overlap effect applies not only to interpersonal interactions, but also to intergroup interactions and can therefore decrease stereotypic biases. When applied to an audit setting, these findings suggest that a novice auditor’s reflection upon the client’s point of view

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5 Due to the parallelism between media reports and academic literature, the terms “narcissism” and “egocentrism” are used synonymously here.
and ways in which the client differs from him can increase the self-target overlap, thus perceptually reconciling differences and reducing the social mismatch. Further, negotiation literature in psychology (Bazerman et al. 2000) and accounting (Trotman et al. 2005) finds that it is beneficial to keep a counterpart’s perspective in mind when negotiating. Though incentives differ between negotiating and evidence-gathering contexts, these findings may be applicable to novice auditors, as consideration of the client’s perspective prior to an interaction may prove helpful in identifying and mitigating perceived differences. Based on these discussions, I predict the following:

H3: Taking the client’s perspective will increase the likelihood that novice auditors will subsequently request a face-to-face meeting with a socially mismatched client contact when compared to not taking the client’s perspective.

2.6 Inherent Characteristics

In addition to exploring the efficacy of various intervention methods, this research attempts to identify characteristics inherent to auditors who are more successful evidence gatherers. Previous audit literature attempts to identify some of these characteristics. For example, in a review of auditor performance evaluations, McKnight and Wright (2011) find that high-performing auditors tend to maintain an internal locus of control. Further, auditors who self-reported having an external locus of control were found to be more accepting of dysfunctional behavior, including failing to gather sufficient audit evidence (Donnelly et al. 2003). However, additional traits may play a part in a novice auditor’s willingness to approach a client contact, including the level of concern with impression management (IM) or one’s level of emotional intelligence (EI) (Leary and Kowalski 1990; Wells et al. 2009; Kirch et al. 2001). Neither IM nor EI have been investigated with respect to novice auditor evidence gathering.
When investigating individual characteristics such as IM and EI in accounting studies, Nelson and Tan (2005) suggest that it is important to consider the relevance of individual characteristics to the issue. Both EI and IM have direct implications for auditor evidence gathering activities due to the highly interactive nature of auditor-client relationships. Further, the probable significant disparity in IM and EI levels held by socially mismatched parties makes the auditor’s levels of these constructs a key feature of the interaction.

2.6.1 Impression Management

IM, a method of self-monitoring, is defined as the degree to which people attempt to regulate others’ perceptions of them (Leary and Kowalski 1990). However, it is unknown whether high levels of IM will enhance or inhibit the likelihood that a novice auditor will approach a client contact. On one hand, higher levels of IM may allow an auditor to feel more comfortable in interactions with socially mismatched clients because he feels confident that he can effectively manage the client’s impression of him. On the other hand, the use of these management tactics may be an effort to disguise one’s true characteristics as evidenced by such self-monitoring scale items as “I’m not always the person I appear to be” (Snyder 1974).

Interaction with a more knowledgeable, more experienced individual may make IM difficult, adding to the inhibition tendencies resulting from the social mismatch. For example, if a novice auditor engages in IM to give the impression that he knows more about auditing or the audit process than he truly does, it may be difficult to maintain this impression in the presence of a client who has the knowledge and experience to recognize the auditor’s shortcomings. Because the effect of IM on evidence gathering activities is unknown, I perform an exploratory analysis to determine whether auditors’ IM levels have implications for evidence gathering decisions.
2.6.2 Emotional Intelligence

Similarly, a participant’s level of EI may correlate to his likelihood of approaching a socially mismatched client. Mayer and Salovey (1997) define EI as having four features: the ability (1) to accurately perceive emotions, (2) to access and generate emotions so as to assist thought, (3) to understand emotions and emotional knowledge, and (4) to effectively regulate emotions. One’s attainment of these four features indicates higher levels of EI. Several articles discuss the importance of EI in an accounting context and promote EI education in the undergraduate classroom (e.g., Kirch et al. 2001; Smigla and Pastoria 2000). Accounting research investigates the role of EI in interviewing and suggests that auditors use emotion evaluation when interviewing clients about a possible fraud (Ramamoorti 2008). Additionally, Cook et al. (2011) find that more accounting experience is related to higher levels of EI. As with IM, it is unknown what effect EI will have on evidence gathering activities. Higher EI might initially be thought of as an advantage when dealing with a socially mismatched client because of the auditor’s ability to identify his feelings of inhibition or anxiety, address them, and be better prepared to approach an older, more knowledgeable and experienced client. Alternatively, high levels of EI might suggest that the auditor is in touch with his feelings of intimidation and anxiety but, if the final feature of regulating emotions has not yet been developed or achieved, is unable to control these emotions. Because there is not yet theory supporting either one of these possibilities, I perform an exploratory analysis to determine whether auditors’ EI levels have implications for evidence gathering decisions.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Research Design and Experimental Materials

I address the hypotheses presented above using a 3 x 2 experimental design in which role-play and perspective-taking are manipulated between participants. I conducted my experiment over a two-day period. Figure 1 provides a flowchart of the experimental procedures and Appendices A though O present the experimental materials. On day one, participants arrived in 15-minute intervals. The first task was to complete a 25-item self-monitoring scale developed by Snyder (1974). The scale asked participants to rate statements as true or false in order to measure their level of impression management (IM). Examples of these statements include “I would probably make a good actor” or “In order to get along and be liked, I tend to be what people expect me to be rather than anything else,” to which positive responses would indicate higher levels of IM (Snyder 1974, 531). In addition, participants were provided with the Short Form of the Trait Emotional Intelligence Questionnaire (TEIQue-SF) (Petrides and Furnham 2006), which has been used in the psychology literature to measure individuals’ EI (e.g., Sevdalis et al. 2007; Petrides et al. 2007; Vernon et al. 2008). Participants were not provided with their scores on either of these assessments.

Participants were then given the next task based upon their random assignment to one of the three levels of the role-play manipulation: no role-play, role-play without self-reflection or role-play with self-reflection.6 See Table 1 for a summary of the research design and cell sizes. In the role-play conditions, participants were introduced to role-play as a practice tool and told

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6 In an effort to ease the logistical demands of the experiment, participants received a nametag upon arrival with their name and participant number designating their experimental condition. Participants began the experiment on Monday, Tuesday or Wednesday and returned to complete the experiment on Tuesday, Wednesday or Thursday, respectively. This schedule ran for two consecutive weeks with approximately 73 students participating each week.
that they should use the upcoming opportunity to rehearse their client interaction skills. They were then provided with background information about a fictional client, Shoe Zoo, Inc., and told that they had identified issues in the process of auditing the property, plant and equipment account that require a meeting with the client.\footnote{This case was adapted from Bagley and Harp’s (2012) educational case materials.} They met individually with the client, played by an older, socially mismatched experimental confederate who was located in a separate room. The role of the client was played by a partner from an accounting firm with more than 40 years of accounting and auditing experience.\footnote{The confederate met with approximately 50 students per week for approximately 10 minutes each, making up approximately 8 hours of role-play per week. This schedule ran for two consecutive weeks with the confederate meeting with a total of 97 participants.} All participants in role-play conditions met with the same confederate. During the meeting, the participants asked questions about changes to the property, plant and equipment accounting policy and discussed significant fixed asset additions. Participants also obtained audit evidence for significant additions and disposals, as well as the updated property, plant and equipment depreciation policy. Each role-play meeting lasted approximately 10 minutes and was audio recorded in order to ensure consistency of the confederate’s performance as well as each participant’s experience.\footnote{Note that in an initial review of these audio recordings, the confederate presented a consistent performance to each participant.}

Subsequent to the meeting, participants exited the role-playing room, and those in the role-play only condition were finished with their day one exercise. However, those in the role-play with self-reflection condition then completed a self-facilitated reflection exercise. Appendix C presents this manipulation. The exercise provided positive reinforcement about the role-play experience and asked the participant questions so that he considered aspects of the experience specifically relating to the social mismatch. These items were both open-ended and scaled questions. Open-ended questions included “Was I nervous or tense about having to talk
with Mr. Stevens?” and “How did Mr. Stevens’ age, knowledge and experience influence my discussion with him?” Participants were also asked to answer several questions about the role-play using an 11-point Likert scale, including the level of intimidation they felt when meeting with the client (0 = Not at all intimidated, 10 = Extremely intimidated), whether meeting with the client made them more comfortable with the client (0 = No more comfortable, 10 = Much more comfortable), and their perceptions of the client’s knowledge and experience (0 = Not at all knowledgeable/experienced, 10 = Extremely knowledgeable/experienced). This exercise occurred in a room separate from the role-play in order to provide a relaxed environment in which the participant may consider his performance (Fanning and Gaba 2007). The self-reflection session lasted approximately 5 minutes. Those in the no role-play condition did nothing further after having completed the IM and EI inventories. This ended the first day for all participants. Day one lasted approximately half an hour for participants in the no role-play conditions and approximately an hour for those in the role-play conditions.

In order to simulate the lapse of time between auditor training and assignment to clients and to clearly distinguish between the first and second audit settings, there was a one-day break between the first task, described above, and the following task.

The following day, experimental materials introduced participants to a new, fictional audit client, New Technologies, Inc. (NTI), and explained that they were responsible for auditing accounts receivable (AR) confirmations. The instrument for the day two exercise, adapted with permission from Bennett and Hatfield (2013), is presented in Appendices E through M. Participants were provided workpapers indicating that an AR confirmation was returned to the audit team with a note from the customer stating, “We do not owe this invoice at 12/31/13.” Participants were told that their task was to resolve the discrepancy and were then introduced to
two of NTI’s client contacts via two biographies with attached photos.\textsuperscript{10} One biography depicted an older, more experienced and socially mismatched contact who is a veteran within the AR department. The other contact was a younger individual, newer in the AR department, thus less experienced and not socially mismatched. Both contacts were portrayed as equally competent in their technical abilities, with equal education levels, yet they differed in their knowledge and experience levels. In addition, both were male in order to control for potential gender effects (Gold et al. 2009).

Prior to attempting to resolve the AR discrepancy, half of the participants were asked to spend time considering the client’s perspective regarding the resolution of the AR discrepancy. Appendix F provides this manipulation. During this time, participants reflected upon and documented their thoughts about the client’s point of view using both open-ended and scaled questions, such as “I believe that the client will be helpful in resolving the issue at hand” (0 = Strongly disagree, 10 = Strongly agree) and “I believe that the client has an incentive to help me complete my audit testing.” (0 = Strongly disagree, 10 = Strongly agree). Participants were also asked to write a brief description of goals that they share with the client related to resolving the AR discrepancy. The other half of the participants did not consider the client’s perspective subsequent to reading the biographies and continued on to the next step, described below.

Next, participants were asked to decide how to resolve the AR discrepancy. Participants could choose to take no further action, in which case they continued on to document their conclusion, or they could choose to either email or meet with one of the two client contacts. Those who chose to meet with the socially mismatched client contact were told that he was unable to meet and were instructed to draft an email to the contact requesting the appropriate audit evidence. In response, the socially mismatched contact sent along the shipping documents,

\textsuperscript{10} The order in which the biographies of the two contacts were presented was counter-balanced between participants.
invoice and shipping terms to the participant. Together, these items constituted sufficient audit evidence to support NTI’s AR balance. Participants were then asked to document their conclusion.

Those participants who chose to either email the socially mismatched client contact or engage in a face-to-face meeting with the non-socially mismatched client contact were asked to draft an email requesting the appropriate audit evidence. An open text box was provided for participants to draft and “send” their email. This “email” was recorded, although it was not actually sent to another party. In this instance, the client’s response only included shipping documents and the invoice but not the shipping terms, thus constituting insufficient audit evidence. These participants then chose whether to finish the task and document their conclusion or to contact the client a second time via email to request the shipping terms. If emailed again, client contacts responded via email with the shipping terms attached. Participants were then asked to document their conclusion.

Finally, those participants who chose to email the non-socially mismatched client contact were asked to draft an email to him. They were subsequently told that he did not reply to their communication and they must return to the initial audit choice in order to choose from one of the three remaining options.

When participants chose to document their conclusion, they were able to select from one of four provided conclusions, which is consistent with the method used by Bennett and Hatfield (2013):

\[\text{Conclusion 1:} \quad \text{Developer made social error.} \]
\[\text{Conclusion 2:} \quad \text{Developer completed social error.} \]
\[\text{Conclusion 3:} \quad \text{Developer did not make social error.} \]
\[\text{Conclusion 4:} \quad \text{Developer made social error and completed social error.} \]

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\(^{11}\) Participants who chose a face-to-face meeting with the non-socially mismatched contact were told that he was unable to meet and they should, instead, draft an email to him.

\(^{12}\) Participants were informed during a post-experimental review that any emails composed were not, in fact, sent to the client contact.
1. Based on a review of the accounts receivable confirmation, the “proper cut-off” assertion has been violated. The Company erroneously included this invoice in sales and accounts receivable at year-end. Exception noted. Additional testwork required.

2. This shipment was in-transit at year-end. According to the shipping terms with the customer (FOB shipping point), the customer took possession of the goods on 12/31/13. The Company has properly accounted for the sale and receivable at year-end. No exception noted.

3. According to the shipping terms (FOB shipping point), the customer took possession of the goods on 12/31/13. Shipping terms were verified with a copy of the current contract between the two parties. Shipment dates were verified to invoice and shipping documents. The Company properly accounted for the sale and receivable at year-end. No exception noted.

4. Based on a conversation with the client, this shipment was in-transit at year-end. According to the shipping terms (FOB shipping point), the customer took possession of the goods on 12/31/13. Therefore, the Company properly accounted for the sale and receivable at year-end. No exception noted.

Participants were then asked about their perceptions of the client contacts, including their age, knowledge, and experience, thus measuring the level of perceived social mismatch.

Finally, participants were asked manipulation check questions regarding whether they were given the opportunity to request additional information from the client in order to resolve the AR issue and how long the client contacts had been with the client company. Additionally, participants were asked questions regarding the role-play and perspective-taking manipulations. Following this, participants responded to demographic questions. Day two took approximately one hour for each participant.

3.2 Pilot Testing

Pilot testing was conducted in order to ensure that the instrument was reliable, readable, and to refine variables of interest. Participants were recruited from one section of the same senior-level auditing course that the live testing participants were to be recruited from. This course is the second of two auditing courses these accounting majors are required to take and they were therefore of appropriate skill and knowledge level to complete the assigned auditing tasks. In total, 48 participants participated in the pilot testing.
As a result of pilot testing, clarifications were made to the instrument instructions, as well as the wording of questions related to dependent variables. Additional questions pertaining to the role-play experience were added to assess participants’ perceptions of the experimental confederate.

3.3 Dependent Variables

This study considers several dependent variables, the primary one being the participant’s initial selection of whom at the client to approach. I also investigate the method of communication chosen and the number of rounds (i.e., requests for information) it takes for the participant to stop audit testing and select one of the provided conclusions (0, 1, 2 or 3). These data provide evidence about the direct impact of the experimental interventions on auditors’ evidence gathering decisions. Further, consideration of the stage at which the auditor chooses to cease audit work and document the work performed as well as the conclusion selected provide insight into participants’ persistence in obtaining the requisite level of evidence. Finally, the auditor’s perceptions of the two client contacts and any perceived social mismatch is evaluated using three measures consistent with Bennett and Hatfield (2013), including the client contact’s accounting knowledge, professional accounting experience and industry-specific knowledge in relation to the participant (1 = Client does not have any more than me, 10 = Client has significantly more than me).

3.4 Participants

Participants include 146 undergraduate accounting students proxying for novice auditors, as prior research has shown that novices are those who engage in frequent client interaction yet perceive a social mismatch and therefore may avoid face-to-face contact (Bennett and Hatfield 2013). Importantly, the students recruited for this study are required to take two semesters of
undergraduate auditing courses. Participants had completed the first course and were enrolled in the second course and therefore held the requisite knowledge, skills and abilities to complete the assigned audit tasks. Though using students as proxies for auditors is inappropriate for complex tasks (Lehmann and Norman 2006), students are considered suitable surrogates in this study given the low complexity of the experimental task and the students’ similarities to novice auditors (Peecher and Solomon 2001; Ashton and Kramer 1980). This methodology is consistent with recent studies that have successfully used undergraduate students as proxies (e.g., Bennett and Hatfield 2013; Robertson 2010).

Table 2 provides detailed participant characteristics, indicating that participants have sufficient knowledge and experience to complete the experimental materials. The majority of participants (64%) are between the ages of 20-21 years. More than half of participants have had an internship experience (52%), with 30% of respondents having had audit-specific internship experience.

Because the case materials were highly applicable to the substance of the auditing course that the students were taking, participation in this experiment was included in the course syllabi and counted as one of several case studies included in the final course grade.
CHAPTER FOUR
DATA ANALYSIS

4.1 Manipulation Checks

Prior to conducting tests of my hypotheses, I examined participant responses to the manipulation check questions in order to ensure appropriate understanding of the manipulations. To ensure appropriate attention was placed on case details, participants were asked, “Before you documented your conclusion related to the accounts receivable confirmation testing, were you given an opportunity to request additional information from the client contacts?” and “When you were introduced to Mr. Thomas and Mr. Peters, who had been employed at NTI for a longer period of time?” A total of 26 and 8 participants, respectively, responded incorrectly to these questions. To assess my role-play manipulation, I asked, “When you began this activity yesterday, were you given an opportunity to participate in a role-play exercise?” Two participants responded incorrectly to this question. I then assessed the self-reflection exercise by asking participants, “If you did participate in a role-play exercise yesterday, were you asked to spend time after the role-play documenting your thoughts about what had occurred during your interaction with Mr. Stevens?” Thirteen participants did not pass this manipulation check. Finally, I evaluated my perspective-taking manipulation by asking participants, “During today’s activity, were you asked to spend time considering and documenting what you believed to be the client’s point of view about the accounts receivable audit issue?” A total of 53 participants failed this manipulation check, the majority of whom stated that they did consider the client’s point of view, although they had not received the perspective-taking manipulation.

The population included in the below analysis excludes individuals who failed questions “When you were introduced to Mr. Thomas and Mr. Peters, who had been employed at NTI for a
longer period of time?” “When you began this activity yesterday, were you given an opportunity to participate in a role-play exercise?” and “If you did participate in a role-play exercise yesterday, were you asked to spend time after the role-play documenting your thoughts about what had occurred during your interaction with Mr. Stevens?” After eliminating the 20 participants who failed these manipulation checks, the final sample consists of 126 participants.13 Table 3 provides sample sizes for each cell.

4.2 Preliminary Analysis

Analysis of variance (ANOVA) models are used to test the hypotheses regarding role-play, self-reflection and perspective taking. Preliminary analyses test whether the data meet the three basic assumptions of an ANOVA model: independent observations, normal distribution of the dependent variables, and homogeneity of variance (Keppel 1991, 97). The first assumption, independent observations, is addressed in the experimental design by randomly assigning the case participants to one of six experimental conditions (see Table 1 for all six experimental cells).

In order to ensure the second assumption holds, I performed a visual examination of the boxplots and normal probability plots of these data. This investigation raised concerns about the normality of the data for the primary dependent variables, including the participant’s choice of whom to contact using which method, the number of items obtained from the client and the number of rounds before the participant ceased audit work. For example, the boxplot for the “choice” variable presents an uneven distribution, clearly favoring the decision to request an in-

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13 Note that the additional manipulation check question, “Before you documented your conclusion, were you given an opportunity to request additional information from the client contacts?” was deemed ambiguous and ineffective, as the timing of “Before you documented your conclusion” has a high likelihood of misinterpretation. The final question, also with potential for misinterpretation, was “During today’s activity, were you asked to spend time considering and documenting what you believed to be the client’s point of view about the accounts receivable audit issue?” This was deemed ineffective due to the high fail rate (36%). I perform additional analysis related to this last question in Section 4.7. Neither of these questions is considered in the ensuing discussion.
person meeting with the socially mismatched client. Further, both the Kolmogorov-Smirnov and Shapiro-Wilk tests of normality show that the distribution of each of the three dependent variables is significantly different from a normal distribution. Although a normal distribution is ideal, it is not uncommon to encounter this issue when the dependent variable is categorical, such as is the case with my dependent variables. Further, ANOVA is robust to modest violations of this assumption (Ferguson 1981, 245). Specifically, although the concern raised by non-normality is a higher type I error rate, studies testing several non-normal distributions suggest that violation of this assumption does not significantly increase the rate of false positives (cf., Lix et al. 1996).

Finally, with regard to the last assumption, homogeneity of variance, I use the Levene’s statistic for the dependent variables and find no evidence of unequal variance (p > 0.10) for two of the three variables. The number of items obtained variable, however, shows evidence of unequal variance (p < 0.00). To determine the severity of this finding, I performed the non-parametric Levene’s statistic, a newer test which is believed to be the most robust and most powerful when the data are not normally distributed (Nordstokke and Zumbo 2010), as is the case with the “items” variable. This method first assigns a ranking to each group. The mean of the rankings for each condition is then calculated and the difference between the rank score and the group mean rank is calculated (Nordstokke and Zumbo 2010). I then performed an ANOVA on the difference scores between groups. Results suggest that the unequal variance identified in the initial Levene’s test is not found in this test (p > 0.05). Therefore, the data do not violate standard guidelines regarding this assumption.

Prior to testing my hypotheses, I graphed the means for each cell based on my primary dependent variable, contact decision in order to gain an initial understanding of how my
interventions may have influenced auditor actions. Participants who selected to meet with the socially mismatched controller were labeled a “4” while those who decided not to continue audit procedures were given a “0”. A decision to contact the socially mismatched controller via email was labeled a “3”, to meet with the non-socially mismatched controller a “2” and to send an email to the non-socially mismatched controller a “1”. Table 3 provides cell sizes and means and Figure 3 provides a graphic of cell means. An ocular review of Figure 3 suggests that my findings differ from Figure 2’s expected results. Non-perspective-taking participants, for example, exhibited increased inhibition tendencies as role-play and role-play with self-reflection exercises were added to the audit task. Meanwhile, novice auditors that participated in a perspective-taking exercise also avoided the older controller after a role-play exercise, but some of this effect was mitigated with the introduction of a self-reflective task. While this visual assessment of Figure 3 is useful for a preliminary assessment, it does not allow me to determine whether significant differences exist between cells. I therefore test below whether these findings support my hypotheses.

4.3 Tests of H1

Hypothesis 1 examines the efficacy of role-play in improving audit evidence gathering techniques. Specifically, I investigate whether role-play increases the likelihood that novice auditors will request a meeting with, as opposed to sending an email to, a socially mismatched individual. To test this hypothesis, I first compare my primary dependent variable (contact decision) between individuals in the no role-play and the role-play only groups. As evidenced by the ANOVA in Table 3, Panel B, there are no significant differences between role-play groups. Panel A of Table 3 shows the overall mean for the no role-play and role-play only groups of 2.5, suggesting that auditors were most likely to email the older client contact (a “3” as noted above)
or request an in-person meeting with the younger controller (a “2”). Review of Figure 4 suggests that, though insignificant, participants who were not exposed to role-play were more likely to request a face-to-face meeting with the socially mismatched client contact than were those in the role-play only condition. This finding is inconsistent with expected results.

In order to further investigate these results, I tested differences between means of the dependent variable “contact decision” between role-play groups within both the no perspective-taking and perspective-taking conditions individually. In testing the differences between these cell means, I find a significant difference within the perspective-taking condition, such that those in the no role-play condition (mean = 2.79) were more likely to contact the socially mismatched client contact (p < 0.05) than those in the role-play only condition (mean = 2.00). This suggests that, in the presence of a perspective-taking activity, the addition of role-play might exacerbate the effects of the social mismatch. This could be a result of perspective-taking overwhelming the auditor with feelings of anxiety or inadequacy that he may have already been feeling from the role-play experience.

I further investigated the difference between role-play groups for the number of rounds that participants returned to the client for audit evidence. A score of “0” indicates that the auditor did not reach out to the client for audit evidence, while “1” suggests that he went to the client once for evidence and so on. A maximum of three rounds was possible. As Table 4, Panel B, suggests, there are no significant differences between the no role-play (mean = 1.65) and the role-play (mean = 1.73) groups for the “rounds” variable. I further investigated the multiple comparisons on this variable and did not find significant differences between the no role-play and the role-play conditions when looking at the no perspective-taking and perspective taking
groups individually. These findings suggest that novice auditors in the no role-play condition were just as persistent in their evidence gathering efforts as those in the role-play only condition.

Finally, I examined differences between role-play groups for the number of items of audit evidence obtained. Participants could have obtained 0, 2 or 3 pieces of audit evidence, with 3 pieces providing full support for the balance tested. As Table 5, Panel B suggests, there are no significant differences between the no role-play (mean = 2.90) and role-play (mean = 2.62) groups for this dependent variable. Further investigation of multiple comparisons shows that the difference in means between the no role-play (mean = 2.96) and the role-play only groups (mean = 2.39) within the perspective-taking condition is significant at the 0.05 level. Similar to the “choice” variable, auditors in the perspective-taking conditions who were not exposed to role-play outperformed (i.e., they obtained more pieces of audit evidence) those in the role-play only condition. While this does not support H1, it does suggest that role-play may thwart auditor efforts to pursue all necessary forms of audit evidence.

Taken together, these results do not support H1, as I do not find significant differences between the no role-play and the role-play only conditions for each of the three dependent variables.

4.4 Tests of H2

Hypothesis 2 further investigates the benefits of role-play by incorporating a post-role-play reflective exercise to determine whether such an exercise increases the likelihood that novice auditors will request a meeting with, as opposed to sending an email to, a socially mismatched individual. To test this hypothesis, I start by comparing my primary dependent variable (contact decision) between individuals in the role-play only and the role-play with self-reflection groups. Panel B of Table 3 indicates that there are no significant differences between
the role-play conditions (p = 0.258), including the role-play only (mean = 2.24) and the role-play with self-reflection (mean = 2.51) conditions, providing initial evidence that self-reflection does not appear to change auditor evidence gathering activities.

I next investigate the influence of self-reflection on the number of rounds the auditor returned to the client for audit evidence. As Table 4, Panel B, indicates, there are no significant differences between the role-play only (mean = 1.73) and the role-play with self-reflection (mean = 1.66) groups for the “rounds” variable. I further investigate the multiple comparisons for this variable and do not find significant differences between the role-play only and the role-play with self-reflection conditions when looking at the no perspective-taking and perspective taking groups individually. These findings suggest that novice auditors in the role-play only conditions did not return to the client any more or less than those in the role-play with self-reflection condition.

In a final test of H2, I consider the number of items of audit evidence obtained between participants in the role-play only group (mean = 2.62) and the role-play with self-reflection group (mean = 2.66). As Table 5, Panel B, suggests, there are no significant differences between role-play groups for this dependent variable. Further investigation of multiple comparisons does not indicate significant differences in means between the role-play only and the role-play with self-reflection groups within either of the perspective-taking conditions.

Collectively, these results do not support H2, as I do not find significant differences between the role-play only and the role-play with self-reflection conditions for each of the three dependent variables.
4.5 Tests of H3

Hypothesis 3 examines the efficacy of perspective-taking in improving the likelihood that novice auditors will request a meeting with a socially mismatched individual. To test this hypothesis, I first compare my primary dependent variable (contact decision) between individuals in the no perspective-taking and the perspective-taking groups. As Table 3, Panel A, indicates, significant differences in contact decision do not exist between individuals in the no perspective-taking (mean = 2.48) and the perspective-taking (mean = 2.52) conditions.

I next examine whether perspective-taking influenced the number of rounds that novice auditors returned to the client to obtain audit evidence. Similar to the contact decision variable, Table 4, Panel A, shows no significant differences in rounds between the no perspective-taking (mean = 1.69) and the perspective-taking auditors (mean = 1.66).

Finally, I examine whether differences exist for the “items obtained” variable and find, as shown in Panel A of Table 5, that auditors in the perspective-taking conditions (mean = 2.72) are just as likely to obtain all available audit evidence as those in the no perspective-taking conditions (mean = 2.76). However, examination of multiple comparisons shows that differences do exist in the number of items obtained between participants in the role-play only with no perspective-taking condition (mean = 2.84) and participants in the role-play only with perspective-taking condition (mean = 2.39) at the 0.05 level, such that the addition of the perspective-taking task results in less items of evidence obtained. A possible explanation for this finding is that the perspective-taking task biases novice auditors into judging the client as overly trustworthy and reliable, such that the two pieces of audit evidence provided are deemed sufficient to support the final accounts receivable balance. Novice auditors may therefore believe that the final piece of audit evidence is unnecessary and do not pursue it. Such a finding suggests
that role-play alone might result in a more appropriate audit evidence gathering approach than role-play with the addition of perspective-taking.

Considering these results, I am unable to reject the null hypothesis that perspective-taking does not improve audit evidence gathering decisions. H3 is therefore not supported.

4.6 Inherent Characteristics

I perform a chi-square analysis on participant IM and EI scores to determine whether these inherent characteristics have any influence on the selection of evidence gathering technique. Table 6, Panel A presents descriptive statistics for these data. Because of the wide range of scores for these scales and the assumption of chi-square tests is that the expected count in each cell must be more than 5, I rank participants as having high, medium or low IM and EI scores by assigning them a 3, 2 or 1, respectively. As can be seen in Table 6, Panel B, the Pearson chi-square test did not reveal any significant differences in evidence gathering technique for those in the various IM and EI groupings (all p values > 0.10).

I then added both IM and EI scores as covariates to the univariate ANOVA analysis to determine whether auditor scores on these scales relate to the dependent variable “contact decision” as shown in Table 6, Panel C. Tests of between-subjects effects shows that IM scores, when ranked as 1, 2 or 3 as done above, are a significant (p < 0.05) covariate, suggesting that an individuals’ level of impression management is influential in their evidence gathering choices.

4.7 Additional Analyses

In order to further investigate the relationship between the identified interventions and audit evidence gathering techniques, I performed a cross tab analysis. Figures 12 and 13 provide graphical displays of the cross tab analysis performed for the non-perspective taking and perspective taking conditions. As can be seen in both of the graphs, a popular selection for
individuals in the no role-play conditions was to request an in-person meeting, suggesting that the absence of role-play is ideal for client contact decisions. It is also noteworthy that, when comparing the role-play with self-reflection conditions between perspective-taking and non-perspective-taking, the majority (53%) of participants in the no perspective-taking conditions selected an in-person meeting, while 64% of those who did receive a perspective-taking task preferred emailing the client. Further, Figures 12 and 13 also highlight the fact that only those individuals who received an intervention, whether it was role-play, self-reflection or perspective-taking, chose not to pursue additional audit evidence and, instead, proceeded to document their conclusion. This supports the conclusion that the interventions may have increased auditor anxiety related to contacting the client, despite having the option to do so via email or in-person.

I next performed an ordinal logistic regression on my data. This type of analysis has the potential to provide richer insight into the nature of the results. Because my dependent variable is ordinal, the consideration of means, while worthwhile, does not necessarily provide the cleanest interpretation. Ordinal logistic regression analysis converts β values into odds ratios. For example, a β value of 0 has an odds ratio of 1, meaning that participants in the compared conditions are equally as likely to have the high and low scores. The table below explains this analysis:

<table>
<thead>
<tr>
<th>β Value</th>
<th>Odds Ratio = e^β</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 0</td>
<td>&lt; 1</td>
<td>Higher cumulative scores are more likely</td>
</tr>
<tr>
<td>= 0</td>
<td>= 1</td>
<td>Equally as likely to have high and low scores</td>
</tr>
<tr>
<td>&lt; 0</td>
<td>&gt; 1</td>
<td>Lower cumulative scores are more likely</td>
</tr>
</tbody>
</table>

This analysis is useful for data where the dependent variable is ordinal, as is the case with “contact decision” (cf., Agresti 2002). Upon review of the results, I find that there is no significance and that participants in each cell are equally as likely to have high (i.e., contact the

40
socially mismatched controller) and low (i.e., cease audit work or contact the non-socially mismatched controller) scores.

4.8 Reassignment Analysis

Due to the high failure rate of certain manipulation check questions, I performed an analysis in which participants were reassigned to experimental conditions based upon their responses to the following questions: “During today’s activity, were you asked to spend time considering and documenting what you believed to be the client’s point of view about the accounts receivable audit issue?” and “If you did participate in a role-play exercise yesterday, were you asked to spend time after the role-play documenting your thoughts about what had occurred during your interaction with Mr. Stevens?” Participants who stated they had spent time considering and documenting the client’s point of view were moved from the no perspective-taking condition to the perspective-taking condition within their role-play cell. Likewise, participants who answered they had spent time documenting their thoughts about what had occurred during their interaction with Mr. Stevens were moved from the role-play only condition to the role-play with reflection condition. Clear disadvantages to this approach include loss of independent observations, which is a primary assumption of ANOVA modeling, and uneven distribution of participants amongst cells (Andrews 1988). However, this method of reassignment, also known as an “internal analysis,” does provide a more accurate representation of participant task performance and has been effectively used in existing literature to deal with similar manipulation check issues (e.g., Busch and Wilson 1976). Tables 7 through 9 provide cell sizes after this redistribution and Figure 14 provides a graphic of cell means for the contact decision variable.
4.8.1 Tests of H1

Similar to my primary analysis, I test this hypothesis by comparing the primary dependent variable (contact decision) between individuals in the no role-play and the role-play only groups. Cell means are presented in Table 7, Panel A. Findings indicate, contrary to my expectations, that those participants who were not exposed to role-play (mean = 2.69) were significantly more likely (p < 0.10) to request a face-to-face meeting with the socially mismatched client contact than were those in the role-play only conditions (mean = 2.21). This finding indicates that role-play might exacerbate the effects of the social mismatch, thus making auditors more inhibited and less likely to approach a client contact.

Similar to my primary hypotheses tests, I further investigated the difference between role-play groups for the number of rounds that participants returned to the client for audit evidence. As Table 8, Panel B, suggests, there are no significant differences between the no role-play (mean = 1.65) and the role-play (mean = 1.69) groups for the “rounds” variable. I further investigated by conducting multiple comparisons on this variable and did not find significant differences between the no role-play and the role-play conditions when looking at the no perspective-taking and perspective taking groups individually. These findings again suggest that novice auditors in the no role-play condition were equally as persistent in their evidence gathering efforts as those in the role-play only condition.

Finally, I examined differences between role-play groups for the number of items of audit evidence obtained. As Table 9, Panel B suggests, I did find significant differences between the no role-play (mean = 2.90) and role-play (mean = 2.56) groups for this dependent variable (p < 0.05), such that those in the no role-play conditions obtained more items of audit evidence. Further investigation of multiple comparisons shows that the difference in means between the no
role-play (mean = 2.82) and the role-play only groups (mean = 2.31) within the no perspective-taking condition is significant at the 0.05 level. Similar to the “contact decision” variable, auditors in the no perspective-taking conditions who were not exposed to role-play outperformed (i.e., they obtained more pieces of audit evidence) those in the role-play only condition. While this does not support H1, it supports the aforementioned notion that role-play may hinder auditor efforts to pursue all necessary forms of audit evidence.

Taken together, these collective results do not support H1, as I do not find significant improvement in evidence gathering activities with the introduction of a role-play exercise for each of the three dependent variables.

4.8.2 Tests of H2

I similarly test hypothesis 2 by comparing the primary dependent variable (contact decision) between individuals in the role-play only (mean = 2.21) and the role-play with self-reflection groups (mean = 2.43). As is presented in Panel B of Table 7, findings indicate that the addition of the self-reflective task has no significant influence on participant contact decisions. I therefore cannot reject the null hypothesis that self-reflection will not improve novice auditor evidence gathering decisions.

Note, however, that significant differences exist for individuals who did not participate in a perspective-taking task. Non-perspective-taking participants who received a self-reflection task after the role-play experience (mean = 2.78) were significantly more likely (p < 0.10) to request a face-to-face meeting with the socially mismatched client contact than were those in the role-play only conditions (mean = 1.81). This suggests that self-reflection may be useful in certain domains and only when used on its own, in the absence of other techniques.
I next investigate whether self-reflection influences the number of rounds the auditor returned to the client for audit evidence. As Table 8, Panel B, indicates, there are no significant differences between the role-play only (mean = 1.69) and the role-play with self-reflection (mean = 1.67) groups for the “rounds” variable. Multiple comparisons tests also do not indicate any significance. Similar to my primary tests, these findings suggest that novice auditors in the role-play with self-reflection conditions did not return to the client any more or less than those in the role-play only conditions.

In a final test of H2, I consider the number of items of audit evidence obtained between participants in the role-play only group (mean = 2.56) and the role-play with self-reflection group (mean = 2.63) in Table 9. Note that these means are not statistically different. Further investigation of multiple comparisons does not indicate significant differences in means between the role-play only and the role-play with self-reflection groups within either of the perspective-taking conditions.

Collectively, these results do not support H2, as I do not find significant differences between the role-play only and the role-play with self-reflection conditions for each of the three dependent variables.

4.8.3 Tests of H3

Hypothesis 3 examines the efficacy of perspective-taking in improving the likelihood that novice auditors will request a meeting with a socially mismatched individual. Similar to the primary analysis, I compare the primary dependent variable (contact decision) between individuals in the no perspective-taking (mean = 2.24) and the perspective-taking groups (mean = 2.55). Findings indicate, as can be seen in Panel B of Table 7, that the addition of a perspective-taking has no significant influence on participant contact decisions. I therefore
cannot reject the null hypothesis that perspective-taking will not improve novice auditor evidence gathering decisions.

Significant differences do, however, exist for individuals within the role-play only cells. Role-play only participants who received a perspective-taking task prior to determining how to resolve the given audit issue were significantly more likely (p < 0.10) to request a face-to-face meeting with the socially mismatched client contact than were those who did not receive a perspective-taking task, suggesting minimal value of this technique.

I next examine whether perspective-taking influenced the number of rounds that novice auditors returned to the client to obtain audit evidence. Similar to the contact decision variable, Table 8, Panel B, shows no significant differences in rounds between the no perspective-taking (mean = 1.67) and the perspective-taking auditors (mean = 1.67).

Finally, I examine whether differences exist for the “items obtained” variable and find, as shown in Panel B of Table 9, that auditors in the perspective-taking conditions (mean = 2.74) are just as likely to obtain all available audit evidence as those in the no perspective-taking conditions (mean = 2.62). However, examination of multiple comparisons shows that differences exist in the number of items obtained between participants in the role-play only with no perspective-taking condition (mean = 2.31) and participants in the role-play only with perspective-taking condition (mean = 2.74) at the 0.10 level, such that the addition of the perspective-taking task results in more items of evidence obtained. This result is consistent with the aforementioned findings within this reassignment analysis that participants in the role-play only group were more likely to contact the socially mismatched client contact if they had performed a perspective taking task when compared to those who did not engage in perspective-taking. Interestingly, however, these findings differ from those found in the primary analysis,
which, as discussed, suggests that perspective-taking might bias novice auditors toward the client’s point of view and result in decreased audit evidence gathering. This could be due to the current analysis’ approach, which reassigned participants to perspective-taking cells based upon their responses to “During today’s activity, were you asked to spend time considering and documenting what you believed to be the client’s point of view about the accounts receivable audit issue?” The findings here depend upon reliability of participant self-reporting to this query, while the initial analysis benefits from independent observations and true random assignment.

Considering these results, I am unable to reject the null hypothesis that perspective-taking does not improve audit evidence gathering decisions. H3 is therefore not supported.
CHAPTER FIVE

DISCUSSION, CONTRIBUTIONS AND LIMITATIONS

5.1 Discussion

This research sought to mitigate the social mismatch, which has been shown in prior literature to pose obstacles for novice auditors in their evidence gathering activities (Bennett and Hatfield 2013). Specifically, the disparities in age, knowledge and experience between novice auditors and their client contacts prevent auditors from approaching the client in a face-to-face manner and trigger them to become inhibited, thus resulting in adverse audit outcomes. I posited that novice auditors who engage in role-play, self-reflection and perspective-taking would become more comfortable and thus overcome the social mismatch, allowing them to make improved evidence gathering decisions.

Interestingly, experimental findings do not support my hypotheses. Auditors who participated in role-play, self-reflection and perspective-taking exercises did not exhibit performance superior to those who did not receive these interventions, as the main effect of each of these interventions is insignificant. With regard to role-play, I find that the experience resulted in neither decreased inhibition tendencies nor an increased number of evidence items obtained. This could be because participants did not view the role-play experience as practice for future interactions, as they were instructed to do. Instead, they may have viewed the interaction as a true audit case and focused on their performance as opposed to learning goals (Cianci et al. 2014). If such were the case, I would expect participants to be more anxious and uptight than they would be in a scenario in which they knew they were practicing or rehearsing in a scenario where mistakes were allowed and, in fact, welcomed. Unfortunately, however, posttest questions do not address this possibility. Further, the approximate 10-minute duration of the role-play
might not have been long enough to constitute “structured, practiced interaction” as per Allport’s (1954) theory. However, more recent findings indicate that more casual interactions can be just as effective (Pettigrew and Tropp’s 2006).

Additional analyses provide perhaps the most interesting finding of this study: the primary intervention of role-play has the opposite effect on novice auditor performance than expected. Participants who were not placed in a role-play scenario performed decidedly better than those who interacted with an experimental confederate playing a client controller. Role-play may have, in fact, exacerbated the elements of the social mismatch, making them more salient to the auditors, as the experience places auditors in direct, face-to-face contact with an older, more experienced and more knowledgeable client. This finding will likely be of interest to auditing firms, many of whom include role-play as a training tool for incoming auditors.

The failure of the self-reflective exercise to mitigate the negative effects of social mismatch may have resulted from the questions included with the manipulation. The goal of this intervention was to ease auditor anxieties related to the role-play and have them reflect upon the event in an insightful manner in a safe environment. However, upon review of the questions asked, including “Was I nervous or tense about having to talk with Mr. Stevens? If so, why was I nervous or tense?” may not have worked to ease the auditor’s mind, as the recollection of anxious feelings could have strengthened them. I also asked, among other questions, “What did not go well during my interaction with Mr. Stevens? How will I change this in future interactions?” This question attempted to have auditors address their feelings, although it may have also exacerbated apprehension or unease. This notion is supported by both psychiatry and psychology research, which suggest that recollection of a traumatic or anxiety-filled event can induce stress and negative moods (Gil et al. 2005; VanEck et al. 1998).
Finally, the unsuccessful perspective-taking manipulation suggests that this generation of novice auditors is perhaps not as egocentric or narcissistic as many have claimed (e.g., Stein 2013). Interestingly, the question “During today’s activity, were you asked to spend time considering and documenting what you believed to be the client’s point of view about the accounts receivable audit issue?” 67% of participants responded positively, while only 51% were actually assigned to the perspective-taking condition. I believe that those who responded positively to this question did spend time considering what the client was thinking or would be thinking related to the audit issue. This may provide an explanation for why perspective-taking was ineffective: novice auditors are already engaging in perspective-taking as part of their client interactions. Further, differences in the number of evidence items (i.e., the amount of evidence) obtained between the role-play only no perspective-taking individuals and the role-play only perspective-taking individuals within my preliminary analysis suggest that perspective-taking may introduce a bias into novice auditor judgments. Specifically, the finding that those in the perspective-taking condition obtained significantly fewer items of audit evidence suggests that performance of a perspective-taking task leads auditors to be overly sympathetic towards client positions. Auditors may therefore believe that obtaining the final, required piece of audit evidence is not necessary to obtain comfort over the stated balance.14

Although the interventions proposed here do not show promising results, the possible methods to mitigate the effects of the social mismatch are numerous and should be explored. For example, several firms have started to shift to web-based training modules for all staff levels.

14 Interestingly, means for those in the role-play only no perspective-taking conditions are also higher than the means for those in the role-play only perspective-taking conditions for both the “contact decision” and “rounds” dependent variables. This suggests that this bias may exist with regard to these variables as well, as auditors who did not participate in a perspective-taking task were more likely to approach the older client contact and return to the client for more rounds of testing, respectively, although these differences are not statistically significant.
which may provide an environment in which electronic role-play using avatars or other means could be implemented. The efficacy of electronic interaction between novice auditors and clients to reduce effects of the social mismatch is an interesting area for future research. Also, investigating the pieces of the social mismatch individually might prove successful, as some novice auditors might react to certain elements of the social mismatch and not others. That is, helping auditors overcome a client’s age, knowledge and experience one at a time could allow them to then aggregate those tools and become more comfortable with clients, as opposed to attempting to reduce the social mismatch as a whole, as I have done here.

5.2 Contributions

Results of this study provide unique insights into the development of successful auditor-client interactions. Novice auditors tend to interact with client contacts almost as frequently as senior associates, making their communications among the most important on the audit team (Bennett and Hatfield 2013). However, current accounting graduates show a strong preference towards electronic rather than face-to-face or telephone communication (PwC 2011), bringing about the potential to miss critical verbal and nonverbal cues offered through direct face-to-face interaction (Baltes et al. 2002). This study provides results of the first attempt of which I am aware to focus on the distinct characteristics of current and future accounting graduates, including the need for interactive learning and feedback, as well as their egocentrism, in an effort to improve auditor-client interactions and, in turn, improve audit quality.

Additionally, results are applicable to accounting firms as they train novice auditors to work effectively at client sites. Recent discussions with each of the Big 4 accounting firms confirmed that, though executed differently between organizations, role-play has been integrated into their training programs. While role-play interventions have been successful in other
domains such as medicine (e.g., Nestel and Tierney 2007), negotiation research in accounting has found mixed support for its effectiveness (Trotman et al. 2005). By investigating whether interactive role-play helps auditors to acquire or refine interpersonal skills to improve evidence gathering, this research provides insight into how novice auditors learn and improve, as this has been lacking in the literature (Nelson and Tan 2005). Determining which training interventions are most impactful for this group of auditors is an important endeavor with direct implications for practice. Results suggest that role-play, as currently used by many large, public accounting firms, may not be effective in helping novice auditors overcome fears and anxieties they experience when interaction with client contacts. This is important in light of the time and effort firms currently invest in their learning and educational materials, including the commitments made by partners to play the role of “clients” in role play scenarios. Additionally, the use of self-reflective exercises and perspective-taking does not appear to be useful when improving novice auditor communications and evidence gathering. Identifying both effective and ineffective learning tools is of interest to those involved in implementation of training programs at these firms.

Finally, this research informs academia about the value of preparing accounting students for socially mismatched clients. Knechel (2000) highlights the importance of “dynamic and interactive learning experiences” (709) and the development of interpersonal skills in accounting students. If these skills are highlighted in the classroom, novice auditors may be better prepared for practice. Further, identifying whether IM or EI influences a student’s evidence gathering abilities has implications for both audit education and firm hiring practices. My findings indicate that IM and EI scores do not influence auditor evidence gathering. This suggests that other inherent traits not explored here might be more important or more useful in client interactions.
and that firms should not necessarily be concerned with levels of IM or EI in their new trainees if evidence gathering is a primary concern.

5.3 Limitations

Due to the nature of experimental design, this study is subject to certain limitations. For instance, while the characteristics of the experimental confederate were structured to induce a social mismatch, they may differ from the characteristics of actual client personnel who participants encounter in practice. Similarly, the nature of interpersonal interaction is highly complex, and, while this study attempted to place participants in routine audit scenarios, actual discussions would not be as tailored or scripted as they were in this setting. Finally, the experimental setting may not precisely replicate situational factors, such as client, time or budget pressures, common in actual audit settings.

Additionally, the time allotted to each role-play participant with the experimental confederate was limited due to time constraints and participant availability. Results might be improved had participants had several repeated interactions with the client contact as opposed to just one interaction. Additionally, a role-play that lasts longer than 10 minutes might be needed to mitigate the effects of the social mismatch. An alternative is to investigate whether results improve in less resource-intensive scenarios, such as group role-play. Future research is needed to see whether and how the efficacy of the role-play intervention can be improved.
References


FIGURE 1
FLOWCHART OF EXPERIMENTAL PROCEDURES

---DAY 1---

Experimental instructions
IM Self-monitoring scale
EI Test (TEIQue-SF)

Role-Play
Instructions
Client background
Introduction to PPE addition testing
15 minutes: Meet with actor to obtain understanding of changes to PPE accounting policy, obtain updated policy, discuss large additions, obtain support for selected additions

Feedback
Participant responds to open-ended and Likert-scaled questions related to role-play experience

---End Day 1---

---DAY 2---

Experimental Instructions
Client background
Client contact biographies

Audit Task: AR confirmation testing, Review of confirmation with discrepancy

Perspective-Taking Task

Audit decision, choice:

Face to face meeting with socially mismatched client contact
Email to socially mismatched client contact
Face to face meeting with non-socially mismatched client contact
Email to non-socially mismatched client contact

Receive sufficient audit evidence:
1. Invoice
2. Shipping document
3. Shipping terms

Receive insufficient evidence:
1. Invoice
2. Shipping document

No Response
Decide between 3 remaining alternatives

Choice:

Document conclusion
Email client contact for shipping terms
Receive shipping terms

Conclusion Selection
Perceptions of Client Contacts
Manipulation Check
Demographic Information

---End Day 2---
FIGURE 2
PREDICTED EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON EVIDENCE GATHERING TECHNIQUES
FIGURE 3
EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON CONTACT DECISION

FIGURE 4
EFFECTS OF ROLE-PLAY ON CONTACT DECISION (H1 and H2)
FIGURE 5

EFFECTS OF PERSPECTIVE-TAKING ON CONTACT DECISION (H3)
FIGURE 6

EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON ROUNDS OF EVIDENCE GATHERING

FIGURE 7

EFFECTS OF ROLE-PLAY ON ROUNDS OF EVIDENCE GATHERING (H1 and H2)
FIGURE 8
EFFECTS OF PERSPECTIVE-TAKING ON ROUNDS OF EVIDENCE GATHERING (H3)
FIGURE 9
EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON ITEMS OF EVIDENCE OBTAINED

FIGURE 10
EFFECTS OF ROLE-PLAY ON ITEMS OF EVIDENCE OBTAINED (H1 and H2)
FIGURE 11
EFFECTS OF PERSPECTIVE-TAKING ON ITEMS OF EVIDENCE OBTAINED (H3)
FIGURE 12
CROSSTABULATION OF NON-PERSPECTIVE TAKING PARTICIPANTS

FIGURE 13
CROSSTABULATION OF PERSPECTIVE TAKING PARTICIPANTS
FIGURE 14

REASSIGNMENT ANALYSIS: EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON CONTACT DECISION

![Graph showing the effects of role-play and perspective-taking on the likelihood of requesting a face-to-face meeting with a socially mismatched client contact. The graph depicts a decrease in likelihood with role-play and an increase with perspective-taking.]
**TABLE 1**

**SUMMARY OF EXPERIMENTAL RESEARCH DESIGN AND CELL SAMPLE SIZES**

<table>
<thead>
<tr>
<th></th>
<th>No Role-Play</th>
<th>Role-Play Only</th>
<th>Role-Play with Self-Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Perspective-Taking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell A</td>
<td>25 Participants</td>
<td></td>
<td>Cell C</td>
</tr>
<tr>
<td>Cell B</td>
<td>23 Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perspective-Taking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell D</td>
<td>24 Participants</td>
<td></td>
<td>Cell E</td>
</tr>
<tr>
<td>Cell E</td>
<td>24 Participants</td>
<td></td>
<td>Cell F</td>
</tr>
</tbody>
</table>
TABLE 2

PARTICIPANT CHARACTERISTICS

<table>
<thead>
<tr>
<th></th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>78 (53%)</td>
</tr>
<tr>
<td>Average age&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.4</td>
</tr>
<tr>
<td>Internship experience</td>
<td>76 (52%)</td>
</tr>
<tr>
<td>Audit-specific internship experience</td>
<td>44 (30%)</td>
</tr>
<tr>
<td>Average months of audit experience&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1.1</td>
</tr>
<tr>
<td>Role-play as part of internship experience</td>
<td>32 (22%)</td>
</tr>
</tbody>
</table>

1. Participants chose from the following categories: 1 = 18-19 years (1%), 2 = 20-21 years (64%), 3 = 22-23 years (28%), 4 = Over 24 years (6%)
2. Participants who had an audit-specific internship experience chose from the following categories: 1 = 1-3 months (92%), 2 = 4-6 months (6%), 3 = More than 6 months (2%)
### TABLE 3

**EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON CONTACT DECISION**

**Panel A:** Means (Standard Deviations)

<table>
<thead>
<tr>
<th>Variable</th>
<th>No Role-Play</th>
<th>Role-Play Only</th>
<th>Role-Play with Self-Reflection</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>No Perspective-Taking</td>
<td>2.58 (1.18)</td>
<td>2.47 (1.22)</td>
<td>2.37 (1.26)</td>
<td>2.48 (1.20)</td>
</tr>
<tr>
<td>n = 24</td>
<td>n = 19</td>
<td>n = 19</td>
<td></td>
<td>n = 62</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>2.79 (1.22)</td>
<td>2.00 (1.46)</td>
<td>2.64 (1.18)</td>
<td>2.52 (1.30)</td>
</tr>
<tr>
<td>n = 24</td>
<td>n = 18</td>
<td>n = 22</td>
<td></td>
<td>n = 64</td>
</tr>
<tr>
<td>Totals</td>
<td>2.69 (1.19)</td>
<td>2.24 (1.34)</td>
<td>2.51 (1.21)</td>
<td>2.50 (1.24)</td>
</tr>
<tr>
<td>n = 48</td>
<td>n = 37</td>
<td>n = 41</td>
<td></td>
<td>n = 126</td>
</tr>
</tbody>
</table>

**Panel B:** ANOVA Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>120</td>
<td>2.12</td>
<td>1.369</td>
<td>0.258</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>120</td>
<td>0.00</td>
<td>0.000</td>
<td>0.997</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>120</td>
<td>1.65</td>
<td>1.065</td>
<td>0.348</td>
</tr>
</tbody>
</table>
TABLE 4

EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON ROUNDS OF EVIDENCE GATHERING

Panel A: Means (Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>No Role-Play</th>
<th>Role-Play Only</th>
<th>Role-Play with Self-Reflection</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Perspective-Taking</td>
<td>1.67 (0.64) n = 24</td>
<td>1.84 (0.76) n = 19</td>
<td>1.58 (0.77) n = 19</td>
<td>1.69 (0.71) n = 62</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1.63 (0.65) n = 24</td>
<td>1.61 (1.04) n = 18</td>
<td>1.73 (0.77) n = 22</td>
<td>1.66 (0.80) n = 64</td>
</tr>
<tr>
<td>Totals</td>
<td>1.65 (0.64) n = 48</td>
<td>1.73 (0.90) n = 37</td>
<td>1.66 (0.76) n = 41</td>
<td>1.67 (0.76) n = 126</td>
</tr>
</tbody>
</table>

Panel B: ANOVA Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>120</td>
<td>0.08</td>
<td>0.134</td>
<td>0.875</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>120</td>
<td>0.05</td>
<td>0.091</td>
<td>0.764</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>120</td>
<td>0.35</td>
<td>0.592</td>
<td>0.555</td>
</tr>
</tbody>
</table>
TABLE 5
EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON ITEMS OF EVIDENCE OBTAINED

Panel A: Means (Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>No Role-Play</th>
<th>Role-Play Only</th>
<th>Role-Play with Self-Reflection</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Perspective-Taking</td>
<td>2.83 (0.38)</td>
<td>2.84 (0.37)</td>
<td>2.58 (0.96)</td>
<td>2.76 (0.62)</td>
</tr>
<tr>
<td></td>
<td>n = 24</td>
<td>n = 19</td>
<td>n = 19</td>
<td>n = 62</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>2.96 (0.20)</td>
<td>2.39 (1.14)</td>
<td>2.73 (0.70)</td>
<td>2.72 (0.77)</td>
</tr>
<tr>
<td></td>
<td>n = 24</td>
<td>n = 18</td>
<td>n = 22</td>
<td>n = 64</td>
</tr>
<tr>
<td>Totals</td>
<td>2.90 (0.31)</td>
<td>2.62 (0.86)</td>
<td>2.66 (0.82)</td>
<td>2.74 (0.69)</td>
</tr>
<tr>
<td></td>
<td>n = 48</td>
<td>n = 37</td>
<td>n = 41</td>
<td>n = 126</td>
</tr>
</tbody>
</table>

Panel B: ANOVA Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>120</td>
<td>1.02</td>
<td>2.185</td>
<td>0.117</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>120</td>
<td>0.11</td>
<td>0.239</td>
<td>0.626</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>120</td>
<td>1.13</td>
<td>2.424</td>
<td>0.093</td>
</tr>
</tbody>
</table>
### TABLE 6

**CHI-SQUARE TESTS OF IMPRESSION MANAGEMENT AND EMOTIONAL INTELLIGENCE**

**Panel A: Descriptive Statistics**

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>126</td>
<td>-67.00</td>
<td>78.00</td>
<td>34.03</td>
<td>20.93</td>
</tr>
<tr>
<td>IM</td>
<td>126</td>
<td>4.00</td>
<td>20.00</td>
<td>12.25</td>
<td>3.33</td>
</tr>
</tbody>
</table>

**Panel B: Chi-Square Tests of Contact Decision x Score**

<table>
<thead>
<tr>
<th></th>
<th>Pearson Chi-Square Value</th>
<th>Asymp. Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>10.21</td>
<td>0.422</td>
</tr>
<tr>
<td>IM</td>
<td>4.55</td>
<td>0.919</td>
</tr>
</tbody>
</table>

**Panel C: ANOVA Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>120</td>
<td>2.67</td>
<td>1.759</td>
<td>0.177</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>120</td>
<td>0.01</td>
<td>0.009</td>
<td>0.924</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>120</td>
<td>1.43</td>
<td>0.941</td>
<td>0.393</td>
</tr>
<tr>
<td>EI Score</td>
<td>1</td>
<td>118</td>
<td>0.30</td>
<td>0.195</td>
<td>0.660</td>
</tr>
<tr>
<td>IM Score</td>
<td>1</td>
<td>118</td>
<td>6.65</td>
<td>4.376</td>
<td>0.039</td>
</tr>
</tbody>
</table>
# TABLE 7

**REASSIGNMENT ANALYSIS: EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON CONTACT DECISION**

**Panel A:** Means (Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>No Role-Play</th>
<th>Role-Play Only</th>
<th>Role-Play with Self-Reflection</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Perspective-Taking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.35 (1.22)</td>
<td>1.81 (1.22)</td>
<td>2.78 (1.20)</td>
<td></td>
<td>2.24 (1.25)</td>
</tr>
<tr>
<td>n = 17</td>
<td>n = 16</td>
<td>n = 9</td>
<td></td>
<td>n = 42</td>
</tr>
<tr>
<td><strong>Perspective-Taking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.87 (1.15)</td>
<td>2.48 (1.41)</td>
<td>2.35 (1.89)</td>
<td></td>
<td>2.55 (1.24)</td>
</tr>
<tr>
<td>n = 31</td>
<td>n = 23</td>
<td>n = 40</td>
<td></td>
<td>n = 94</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.69 (1.19)</td>
<td>2.21 (1.36)</td>
<td>2.43 (1.19)</td>
<td></td>
<td>2.46 (1.25)</td>
</tr>
<tr>
<td>n = 48</td>
<td>n = 39</td>
<td>n = 49</td>
<td></td>
<td>n = 136</td>
</tr>
</tbody>
</table>

**Panel B: ANOVA Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>130</td>
<td>2.51</td>
<td>1.665</td>
<td>0.193</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>130</td>
<td>1.72</td>
<td>1.137</td>
<td>0.288</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>130</td>
<td>2.83</td>
<td>1.877</td>
<td>0.157</td>
</tr>
</tbody>
</table>
TABLE 8
REASSIGNMENT ANALYSIS: EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON ROUNDS OF EVIDENCE GATHERING

Panel A: Means (Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>No Perspective-Taking</th>
<th>Perspective-Taking</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Role-Play</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role-Play Only</td>
<td>1.76 (0.66)</td>
<td>1.58 (0.62)</td>
<td>1.65 (0.64)</td>
</tr>
<tr>
<td>n = 17</td>
<td>n = 31</td>
<td>n = 48</td>
<td></td>
</tr>
<tr>
<td>Role-Play with Self-Reflection</td>
<td>1.56 (0.96)</td>
<td>1.78 (0.90)</td>
<td>1.69 (0.92)</td>
</tr>
<tr>
<td>n = 16</td>
<td>n = 23</td>
<td>n = 39</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.76)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>n = 136</td>
</tr>
</tbody>
</table>

Panel B: ANOVA Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>130</td>
<td>0.00</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>130</td>
<td>0.01</td>
<td>0.010</td>
<td>0.921</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>130</td>
<td>0.42</td>
<td>0.698</td>
<td>0.500</td>
</tr>
</tbody>
</table>


TABLE 9

REASSIGNMENT ANALYSIS: EFFECTS OF ROLE-PLAY AND PERSPECTIVE-TAKING ON ITEMS OF EVIDENCE OBTAINED

Panel A: Means (Standard Deviations)

<table>
<thead>
<tr>
<th>Variable</th>
<th>No Role-Play</th>
<th>Role-Play Only</th>
<th>Role-Play with Self-Reflection</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Perspective-Taking</td>
<td>2.82 (0.39)</td>
<td>2.31 (1.20)</td>
<td>2.78 (0.44)</td>
<td>2.62 (0.82)</td>
</tr>
<tr>
<td></td>
<td>n = 17</td>
<td>n = 16</td>
<td>n = 9</td>
<td>n = 42</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>2.94 (0.25)</td>
<td>2.74 (0.69)</td>
<td>2.60 (0.93)</td>
<td>2.74 (0.72)</td>
</tr>
<tr>
<td></td>
<td>n = 31</td>
<td>n = 23</td>
<td>n = 40</td>
<td>n = 94</td>
</tr>
<tr>
<td>Totals</td>
<td>2.90 (0.31)</td>
<td>2.56 (0.94)</td>
<td>2.63 (0.86)</td>
<td>2.71 (0.75)</td>
</tr>
<tr>
<td></td>
<td>n = 48</td>
<td>n = 39</td>
<td>n = 49</td>
<td>n = 136</td>
</tr>
</tbody>
</table>

Panel B: ANOVA Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Num. df</th>
<th>Den. df</th>
<th>Mean Square</th>
<th>F-stat</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-Play</td>
<td>2</td>
<td>130</td>
<td>1.28</td>
<td>2.327</td>
<td>0.102</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>1</td>
<td>130</td>
<td>0.39</td>
<td>0.712</td>
<td>0.400</td>
</tr>
<tr>
<td>Role-Play x Perspective-Taking</td>
<td>2</td>
<td>130</td>
<td>0.76</td>
<td>1.389</td>
<td>0.253</td>
</tr>
</tbody>
</table>
Welcome!

Thank you for participating in this project! This research will provide valuable insight into auditor evidence gathering activities and will advance current knowledge about novice auditors. Your participation is greatly appreciated.

(RP Conditions:) This study will take place over a two-day period. On day one, you will be asked a series of questions and take part in a role-play exercise with a fictional client contact. Day two will involve resolving an audit discrepancy related to an audit client. It is expected that the study will take approximately one hour on each day.

(No RP Condition:) This study will take place over a two-day period. On day one, you will be asked a series of questions. Day two will involve resolving an audit discrepancy related to an audit client. It is expected that the study will take approximately one hour on each day.

Please note that your participation in this experiment is voluntary and you have the option to withdraw at any point.

At the conclusion of the experiment on both days, please check out with the experimenter prior to leaving the testing site. Please do not discuss this experiment with others until testing has been completed.

If at any time you have questions or concerns about the study, please contact Christine Gimbar, PhD Candidate, at gimbar@vt.edu.

Alternatively, if at any time you have questions or concerns for the Institutional Review Board (IRB) at Virginia Tech, please contact Dr. David M. Moore, IRB Chair, at moored@vt.edu.

Thank you in advance for your valuable time! If you have any questions about the experiment, please ask at any time.
**Self-Monitoring Scale**

*Instructions:* The statements below concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is **TRUE** or **MOSTLY TRUE** as applied to you, select “True.” If a statement is **FALSE** or **NOT USUALLY TRUE**, as applied to you, select “False.” It is important that you answer as frankly and as honestly as you can. Your answers will be kept in the strictest confidence.

<table>
<thead>
<tr>
<th>Statement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I find it hard to imitate the behavior of other people. *</td>
<td></td>
</tr>
<tr>
<td>2. My behavior is usually an expression of my true inner feelings, attitudes, and beliefs. *</td>
<td></td>
</tr>
<tr>
<td>3. At parties and social gatherings, I do not attempt to do or say things that others will like. *</td>
<td></td>
</tr>
<tr>
<td>4. I can only argue for ideas which I already believe. *</td>
<td></td>
</tr>
<tr>
<td>5. I can make impromptu speeches even on topics about which I have almost no information.</td>
<td></td>
</tr>
<tr>
<td>6. I guess I put on a show to impress or entertain other people.</td>
<td></td>
</tr>
<tr>
<td>7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.</td>
<td></td>
</tr>
<tr>
<td>8. I would probably make a good actor.</td>
<td></td>
</tr>
<tr>
<td>9. I rarely need the advice of my friends to choose movies, books, or music. *</td>
<td></td>
</tr>
<tr>
<td>10. I sometimes appear to others to be experiencing deeper emotions than I actually am.</td>
<td></td>
</tr>
<tr>
<td>11. I laugh more when I watch a comedy with others than when alone.</td>
<td></td>
</tr>
<tr>
<td>12. In a group of people I am rarely the center of attention. *</td>
<td></td>
</tr>
<tr>
<td>13. In different situations and with different people, I often act like a very different person.</td>
<td></td>
</tr>
<tr>
<td>14. I am not particularly good at making other people like me. *</td>
<td></td>
</tr>
<tr>
<td>15. Even if I am not enjoying myself, I often pretend to be having a good time.</td>
<td></td>
</tr>
<tr>
<td>16. I am not always the person I appear to be.</td>
<td></td>
</tr>
<tr>
<td>17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor. *</td>
<td></td>
</tr>
<tr>
<td>18. I have considered being an entertainer.</td>
<td></td>
</tr>
<tr>
<td>19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.</td>
<td></td>
</tr>
<tr>
<td>20. I have never been good at games like charades or improvisational acting. *</td>
<td></td>
</tr>
<tr>
<td>21. I have trouble changing my behavior to suit different people and different situations. *</td>
<td></td>
</tr>
<tr>
<td>22. At a party I let others keep the jokes and stories going. *</td>
<td></td>
</tr>
<tr>
<td>23. I feel a bit awkward in company and do not show up quite as well as I should. *</td>
<td></td>
</tr>
<tr>
<td>24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).</td>
<td></td>
</tr>
<tr>
<td>25. I may deceive people by being friendly when I really dislike them.</td>
<td></td>
</tr>
</tbody>
</table>

* = **Reverse coded items**
### Emotional Intelligence Scale

**Instructions:** Please answer each statement below by rating your degree of agreement or disagreement with each statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from “Completely Disagree” (number 1) to “Completely Agree” (number 7).

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expressing my emotions with words is not a problem for me.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I often find it difficult to see things from another person’s viewpoint.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>On the whole, I’m a highly motivated person.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I usually find it difficult to regulate my emotions.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I generally don’t find life enjoyable.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I can deal effectively with people.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I tend to change my mind frequently.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Many times, I can’t figure out what emotion I’m feeling.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I feel that I have a number of good qualities.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I often find it difficult to stand up for my rights.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I’m usually able to influence the way other people feel.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>On the whole, I have a gloomy perspective on most things.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Those close to me often complain that I don’t treat them right.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I often find it difficult to adjust my life according to the circumstances.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>On the whole, I’m able to deal with stress.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I often find it difficult to show my affection to those close to me.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I’m normally able to “get into someone’s shoes” and experience their emotions.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I normally find it difficult to keep myself motivated.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I’m usually able to find ways to control my emotions when I want to.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>On the whole, I’m pleased with my life.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I would describe myself as a good negotiator.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>I tend to get involved in things I later wish I could get out of.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I often pause and think about my feelings.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I believe I’m full of personal strengths.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I tend to “back down” even if I know I’m right.</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I don’t seem to have any power at all over other people’s feelings.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>I generally believe that things will work out fine in my life.</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I find it difficult to bond well even with those close to me.</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Generally, I’m able to adapt to new environments.</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Others admire me for being relaxed.</td>
<td></td>
</tr>
</tbody>
</table>

* = Reverse coded items
APPENDIX B
DAY 1 ROLE-PLAY MANIPULATION

------------------------Role-Play 15------------------------

Instructions
In the following case, you will take on the part of a staff-level auditor on an audit engagement. You will participate in a role-play scenario in which you will meet with and obtain audit evidence from a client contact. The role-play provides you with an opportunity to rehearse your communication skills with client contacts. You are encouraged to use the occasion to hone your client interaction abilities and become comfortable communicating with the client. The controller will be given the opportunity to provide feedback on your performance if and when you interact with him. You may use the pen and paper provided to take any notes as you feel are necessary.

Client Background
Shoe Zoo, Inc. was founded 20 years ago by a young entrepreneur interested in providing high-fashion shoes to the public at an affordable price. What started as one small storefront in My Town, GA has since expanded into a thriving business with 15 store locations in large cities throughout the southeast region of the country and two office/distribution facilities.

Shoe Zoo owns the two office/distribution facilities and rents storefront space for their 15 locations in popular indoor or outdoor malls. Over the past 20 years, Shoe Zoo has strived to maintain its original goal, to provide brand name shoes for the whole family, including casual shoes, dressy shoes, boots, sandals, and athletic shoes, at an affordable price.

Shoe Zoo is a family owned business; Kerzman and Lee LLP has audited Shoe Zoo’s financial statements for the last three years. Over those three years, Shoe Zoo has consistently reported positive earnings and has had a small but steady increase in revenues, consistent with the industry trend.

Introduction to PP&E Testing
As a staff auditor with Kerzman and Lee LLP, you have been assigned to perform two tasks related to the audit of Property, Plant, and Equipment (PPE) for Shoe Zoo, Inc as of December 31, 2013. Materiality for the PPE accounts has been set at $1,000. There have been no material misstatements in the PPE account in previous years and no changes in personnel or accounting methods.

The two procedures are as follows:

1. Substantive detail testing of PPE additions

You will need to test and obtain supporting evidence for all property, plant and equipment additions costing in excess of $1,000. You have identified three assets to test that cost in excess of your $1,000 materiality level:

Note that the instructions, client background, and introduction to testing narratives were adapted from Bagley and Harp (2012). All tables and client evidence are original.
Shoe Zoo, Inc.

Fixed Asset Additions in Excess of $1,000
For the Year Ended December 31, 2013

<table>
<thead>
<tr>
<th>Purchase Date</th>
<th>Account #</th>
<th>Account Title</th>
<th>Department</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/15/2013</td>
<td>3005</td>
<td>Equipment</td>
<td>Finance</td>
<td>Computer</td>
<td>$2,545</td>
</tr>
<tr>
<td>5/9/2013</td>
<td>3006</td>
<td>Automobiles</td>
<td>Warehouse</td>
<td>Delivery truck</td>
<td>$11,548.95</td>
</tr>
<tr>
<td>6/23/2013</td>
<td>3005</td>
<td>Equipment</td>
<td>Retail</td>
<td>Shoe racks</td>
<td>$1,387.50</td>
</tr>
</tbody>
</table>

First, you must obtain evidence that the three additions selected for testing actually exist. To do this, you must verify the physical existence of the additions selected. To perform this step you must discuss the asset’s existence with the client.

In order to further audit these additions, you will need to obtain 3 items from the client controller supporting each addition:
1. Shoe Zoo’s Purchase Order for the asset
2. Asset Purchase Approval Form with manager signoff
3. The vendor Invoice

2. Substantive analytical procedures to test depreciation expense

The substantive analytical procedures you will use to audit this balance involve calculating an ‘‘expectation’’ for December 31, 2013 depreciation expense. Once you have calculated your expectation of December 31, 2013 depreciation expense, compare your expectation to actual recorded December 31, 2013 depreciation expense. The difference between your calculated expectation and the actual amount recorded by the client should be compared to the pre-determined threshold. The pre-determined threshold is our previously noted materiality amount, $1,000. Any difference between the expectation and the recorded amount that is greater than the pre-determined threshold will need to be further investigated with the help of the client.

In performing this procedure, you identified a difference between the Shoe Zoo’s depreciation expense and your expected amount for the Automobiles and Machinery accounts. These differences are in excess of your $1,000 materiality level. In order to resolve the discrepancy, you will need to discuss your calculation with the client and inquire as to why your figure may differ from the client’s calculation.

Shoe Zoo, Inc.

Depreciation Expense Analytical Procedures
For the Year Ended December 31, 2013

<table>
<thead>
<tr>
<th>Account # (TB)</th>
<th>Account Title (TB)</th>
<th>Balance at 12/31/2013 (TB)</th>
<th>Life in Years (A)</th>
<th>Expected 2013 Depreciation Expense (RC)</th>
<th>Actual Depreciation Expense (TB)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>3005</td>
<td>Equipment</td>
<td>$80,598.25</td>
<td>5</td>
<td>$16,119.65</td>
<td>$16,119.65</td>
<td>$0</td>
</tr>
<tr>
<td>3006</td>
<td>Automobiles</td>
<td>$40,698.20</td>
<td>10</td>
<td>$4,069.82</td>
<td>$5,087.28</td>
<td>($1,017.46)</td>
</tr>
<tr>
<td>3007</td>
<td>Machinery</td>
<td>$100,948.74</td>
<td>15</td>
<td>$6,729.92</td>
<td>$10,094.87</td>
<td>($3,364.96)</td>
</tr>
</tbody>
</table>
This completes the description of the two tasks you are responsible for performing. When you talk to the client, be ready to discuss both your fixed asset addition testing and your depreciation expense analytic.

Be prepared to explain which fixed asset additions you are testing and what evidence you will need.

Also, be ready to explain how you calculated your depreciation expense expectation and ask him for ideas as to why the expectation is materially different than the recorded balance. This investigation may result in you discovering a misstatement in the depreciation expense account; alternatively, it may result in you discovering that you need to revise your calculation of the expected depreciation expense based on a valid reason.

Remember, you must get evidence corroborating any client explanations.

Your main contact at the client is the controller, Joe Stevens, pictured below. Mr. Stevens has been with the company since its inception 20 years ago and he is very knowledgeable about the company’s operations. He should be able to answer any questions you may have.

You can impress both your senior and the client through your communications with the client. You want to be sure that you are fully prepared and professional in your communications with the client. This includes properly greeting the client, acting in a friendly and professional manner, asking clear and concise questions that you prepared prior to your meeting, and asking follow-up questions if necessary. Also, remember that obtaining evidence solely through verbal inquiry of the client is not sufficient audit evidence. Therefore, you must corroborate all client explanations by examining documents that validate what he is telling you.

You may now visit Joe Stevens in his office to discuss your questions related to testing of the PP&E accounts. Mr. Stevens' office is just around the corner in Pamplin 3109 and his name is

---

16 Permission obtained from Joseph K. Speicher, CPA, to use his photo for this instrument.
on the door. If you have any questions about how to contact Mr. Stevens, please see the proctor.

While you are meeting with Mr. Stevens in his office, please make sure to obtain the code from him that is required for you to proceed with the case and enter it below:

(Enter code here)

Audit evidence for 3 fixed asset additions (to be given by Mr. Stevens to auditor):

1. Purchase orders

![Purchase Order Image]
**Shoe Zoo, Inc.**

**PURCHASE ORDER**

---

**Address:** 214 Sider Parkway  
**City, State, Zip:** Any Town, GA 90234

---

The following number must appear on all invoices, bills of lading, and acknowledgements relating to this PO:

PURCHASE ORDER:

---

**TO:** [Customer Information]  
**P.O. DATE:** May 1, 2013  
**SHIP VIA:** N/A  
**ADDRESS CORRESPONDENCE TO:** Name: Max Morgan  
**Email:** mmorgan@shoezoo.com  
**Phone:** 604-885-9901  
**FAX:** 404-555-1000

---

**Sales Tax Rate:** 5.00%

---

<table>
<thead>
<tr>
<th>QTY</th>
<th>UNIT</th>
<th>DESCRIPTION</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Unit</td>
<td>Shoe Racks</td>
<td>135</td>
<td>1,350</td>
</tr>
</tbody>
</table>

---

**PLEASE NOTIFY US IMMEDIATELY IF THIS ORDER CANNOT BE SHIPPED COMPLETE ON OR BEFORE:** July 15, 2013

---

**SHIP TO:** Shoe Zoo, Inc.  
**214 Sider Parkway**  
**Any Town, GA 90234**

---

*Signature*

---

**APPROVED BY:**

---

**P.O. DATE:** June 5, 2013  
**SHIP VIA:** Fedex/Express  
**ADDRESS CORRESPONDENCE TO:**  
**Name:** Cynthia Dollam  
**E-mail:**  
**Phone:** 604-885-2281  
**FAX:** 404-555-3210

---

**Sales Tax Rate:** 5.00%

---

<table>
<thead>
<tr>
<th>QTY</th>
<th>UNIT</th>
<th>DESCRIPTION</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Unit</td>
<td>Shoe Racks</td>
<td>135</td>
<td>1,350</td>
</tr>
</tbody>
</table>

---

**PLEASE NOTIFY US IMMEDIATELY IF THIS ORDER CANNOT BE SHIPPED COMPLETE ON OR BEFORE:** July 15, 2013

---

**SHIP TO:** Shoe Zoo, Inc.  
**214 Sider Parkway**  
**Any Town, GA 90234**

---

*Signature*

---

**APPROVED BY:**

---

**TOTAL:** $1,267.52
2. Asset purchase approval forms

### Purchase Approval Form 1

<table>
<thead>
<tr>
<th>Date</th>
<th>3/15/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requestor</td>
<td>Shirley Craig</td>
</tr>
<tr>
<td>Department</td>
<td>c/o Finance Department</td>
</tr>
<tr>
<td>Item Description</td>
<td>Desktop Computer Specific: Precision R4830 Computer with 27&quot; flat panel monitor</td>
</tr>
<tr>
<td>Supplier</td>
<td>Advanced Computer Company</td>
</tr>
<tr>
<td>Address</td>
<td>43200 Processor Parkway</td>
</tr>
<tr>
<td>City, State, Zip</td>
<td>Palo Alto, CA 05810</td>
</tr>
<tr>
<td>Unit Price</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
<tr>
<td>Shipping</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>Tax</td>
<td>$26.00</td>
</tr>
<tr>
<td>Total</td>
<td>$2,456.00</td>
</tr>
</tbody>
</table>

Authorized Approval Limits:
- Under $1,000: Department Manager
- $1,001-$2,000: Scott Curfew, Purchasing Manager
- $2,001-$5,000: Michelle Adams, Controller
- Over $5,000: Roger Ryan, CFO

Approved by: March 15, 2013

### Purchase Approval Form 2

<table>
<thead>
<tr>
<th>Date</th>
<th>5/1/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requestor</td>
<td>Max Morgan</td>
</tr>
<tr>
<td>Department</td>
<td>c/o Warehouse</td>
</tr>
<tr>
<td>Item Description</td>
<td>Delivery Truck, automatic transmission; for local deliveries</td>
</tr>
<tr>
<td>Supplier</td>
<td>Southern Georgia Used Truck Sales</td>
</tr>
<tr>
<td>Address</td>
<td>379 Kensington Pike</td>
</tr>
<tr>
<td>City, State, Zip</td>
<td>Peach, GA 02236</td>
</tr>
<tr>
<td>Unit Price</td>
<td>$10,999.00</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
<tr>
<td>Shipping</td>
<td>$10,999.00</td>
</tr>
<tr>
<td>Tax</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>$11,998.00</td>
</tr>
</tbody>
</table>

Authorized Approval Limits:
- Under $1,000: Department Manager
- $1,001-$2,000: Scott Curfew, Purchasing Manager
- $2,001-$5,000: Michelle Adams, Controller
- Over $5,000: Roger Ryan, CFO

Approved by: May 1, 2013
3. Vendor invoices

![Invoice Image]

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Qty</th>
<th>Unit Price</th>
<th>Discount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>91037A</td>
<td>Precision 480i Monitor with 27&quot; Flat panel monitor</td>
<td>1</td>
<td>$2,400.00</td>
<td>N/A</td>
<td>$2,400.00</td>
</tr>
</tbody>
</table>

Invoice Total: $2,400.00
Tax Rate: 5.00%
Sales Tax: $120.00
Other: $25.00
Deposit Received
Total: $2,545.00

Make all checks payable to Advanced Computer Company.
Total due in 30 days, Overdue accounts subject to a service charge of 5% per month.
## Southern Georgia Used Truck Sales

**Invoice**

Date: May 3, 2013  
Invoice #: 89401  
Customer ID: S2901-11

**To:** Max Morgan  
Shoe Zoo, Inc.  
224 Baxter Parkway  
Any Town, GA 00234  
404-555-1941

**Ship to:** Max Morgan  
Shoe Zoo, Inc.  
224 Baxter Parkway  
Any Town, GA 00234  
404-555-1941

<table>
<thead>
<tr>
<th>Salesperson</th>
<th>Job</th>
<th>Shipping Method</th>
<th>Shipping Terms</th>
<th>Delivery Date</th>
<th>Payment Terms</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike</td>
<td>Delivery</td>
<td>N/A</td>
<td>N/A</td>
<td>5/3/13</td>
<td>Upon delivery</td>
<td>5/9/14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qty</th>
<th>Item #</th>
<th>Description</th>
<th>Unit Price</th>
<th>Discount</th>
<th>Line Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>CHEVO19</td>
<td>White box truck, automatic transmission, for local</td>
<td>$10,999.00</td>
<td>$ -</td>
<td>$10,999.00</td>
</tr>
</tbody>
</table>

Total Discount $ -  
Subtotal $10,999.00  
Sales Tax 5%  
Total $11,548.95

Make all checks payable to Southern Georgia Used Truck Sales.  
Thank you for your business!  
379 Kensington Pike, Peach, GA 90238

---

## USA Retail Distributors, Inc.

**Invoice**

Date: 6/13/13  
Customer ID: S2197

**To:** Cynthia Caldwell  
Shoe Zoo Inc.  
234 Banker Parkway  
Any Town, GA 00234  
404-555-2881

<table>
<thead>
<tr>
<th>Salesperson</th>
<th>Job</th>
<th>Payment Terms</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gary.</td>
<td>0000.01</td>
<td>Paid 30</td>
<td>3/12/14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Unit Price</th>
<th>Line Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Retail display 50 Tennessee hoes hooks</td>
<td>$10.00</td>
<td>$180.00</td>
</tr>
</tbody>
</table>

Subtotal $180.00  
Sales Tax @ 6.00% $10.80  
Shipping $0.00  
Total $190.80

Make all checks payable to USA Retail Distributors.  
THANK YOU FOR YOUR BUSINESS.
4. Update to fixed asset policy

Update # 2013-1
Date January 1, 2013
Update Document Fixed Asset Policy

Amendment:
As of January 1, 2013, the following changes will be made to the existing fixed asset policy:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Former Useful Life</th>
<th>Useful Life as of 1/1/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobiles</td>
<td>10 years</td>
<td>8 years</td>
</tr>
<tr>
<td>Machinery</td>
<td>15 years</td>
<td>10 years</td>
</tr>
</tbody>
</table>

The above changes have been made based on ongoing experience with the above asset classes.

Approvals

Michelle Adams, Controller 1/3/13

Roger Ryan, CFO 1/3/13
APPENDIX C
DAY 1 SELF-REFLECTION MANIPULATION

Dear [Name],

Well done! Approaching a client such as Mr. Stevens isn’t always easy. Congratulations on a successful meeting!

Please consider the following questions regarding your interaction with Mr. Stevens. Where there is an open box, please write your answer. When presented with a scale, please circle the point on the scale that most accurately reflects your answer:

1. Was I nervous or tense about having to talk with Mr. Stevens? If so, why was I nervous or tense?

2. What went well during my interaction with Mr. Stevens?

3. What did not go well during my interaction with Mr. Stevens? How will I change this in future interactions?

4. How did Mr. Stevens’ age, knowledge and experience influence my discussion with him?

5. How can I use this experience to prepare for future interactions with client contacts like Mr. Stevens?

Best wishes,

[Your Name]
6. Did I obtain all of the documentation that I was asked to collect from Mr. Stevens?

☐ Yes, I obtained all of the evidence that I needed.
☐ No, I did not obtain all of the audit evidence that I was asked to collect. I only obtained a portion of it.
☐ No, I did not obtain any of the audit evidence that I was asked to collect.

7. Did Mr. Stevens make me feel intimidated?

Not at all Somewhat Extremely
Intimidated Intimidated Intimidated
0--------1--------2--------3--------4--------5--------6--------7--------8--------9--------10

8. How would I rate Mr. Stevens’ experience level?

Not at all Somewhat Extremely
Experienced Experienced Experienced
0--------1--------2--------3--------4--------5--------6--------7--------8--------9--------10

9. How would I rate Mr. Stevens’ knowledge level?

Not at all Somewhat Extremely
Knowledgeable Knowledgeable Knowledgeable
0--------1--------2--------3--------4--------5--------6--------7--------8--------9--------10

10. Did speaking with Mr. Stevens make me more comfortable with him than I was prior to speaking with him?

No More Somewhat Much
Comfortable More Comfortable More Comfortable
0--------1--------2--------3--------4--------5--------6--------7--------8--------9--------10
APPENDIX D
DAY 1 COMPLETION

------------------------Day 1 Completion Screen------------------------

Thank you for your participation!

Please hit the next button below and give all experimental materials to the proctor.

See you tomorrow!

------------------------End Day 1------------------------
Welcome back!

This computer program will guide you through a simulated audit task for a hypothetical client, New Technologies, Inc. For the purposes of this project, please assume the role of a staff-level auditor assigned to this audit engagement.

During this case, you will be asked to make decisions regarding an audit task. In making your decisions, you should be able to draw on your accounting and auditing knowledge and experiences from any previous internship experiences you may have had.

After completing the case, you will receive feedback on your work paper documentation, similar to review notes in practice. In addition, the controller will be given an opportunity to provide feedback regarding his perception of your performance, if and when you interact with him on this case.

It is very important that you do not discuss any details of this case with your classmates until everyone has had a chance to participate.

Use the button at the bottom of the screens to navigate between screens.

---

17 The experimental instructions, client background, audit task, audit evidence materials, emails from client contacts, and questions related to conclusion selection and perceptions of client contacts were adapted with permission from Bennett and Hatfield (2013). The introduction to client contacts and consideration of client perspective are original. 18 The researcher will visit participant classrooms after the experiment to provide feedback about the task.
For several years, New Technologies, Inc. (NTI) has been an audit client of the accounting firm you work for. NTI manufactures electronic parts used in a variety of computers and other electronics. Its customer base includes both domestic and international customers. NTI has a 12/31 year end.

NTI's sales processes are highly automated. Customer orders are received electronically via the company’s website. Orders are reviewed daily and then routed in the system to the warehouse for processing. To ensure accuracy of both customer orders and inventory management, all inventory items are barcoded and tracked in the system.

When an order is complete and a shipment has been sent, the system automatically processes an invoice to be sent to the customer. The Accounts Receivable ledger is automatically updated at that time as well.
Below are biographies of your client contacts, Mr. Peters and Mr. Thomas.\textsuperscript{19}

\begin{itemize}
\item \textbf{Name:} Mr. Colin Peters \\
\textbf{Department:} Accounts Receivable \\
\textbf{Time at NTI:} 4 years \\
\textbf{Credentials:} BS, Accounting CPA, State of Georgia \\
\textbf{Previous positions held at NTI:} \\
Tax Associate \\
Financial Reporting Manager
\end{itemize}

\begin{itemize}
\item \textbf{Name:} Mr. Craig Thomas \\
\textbf{Department:} Accounts Receivable \\
\textbf{Time at NTI:} 20 years \\
\textbf{Credentials:} BS, Accounting CPA, State of Georgia \\
\textbf{Previous positions held at NTI:} \\
Tax Associate \\
Budgeting Associate \\
Accounts Receivable Associate \\
Financial Reporting Manager
\end{itemize}

\textsuperscript{19} The order in which these biographies are presented were randomized.
You have been assigned to Accounts Receivable testwork. Specifically, you have been asked to complete testwork and to conclude on accounts receivable confirmations.

The audit senior has asked you to review the returned accounts receivable confirmations. If any discrepancies are noted on the confirmations, determine the reason why there may be a discrepancy between NTI’s Accounts Receivable balance and the response noted on the confirmation. She has asked you to evaluate and document all discrepancies noted, and to document your conclusion on Accounts Receivable once you’ve finished testwork.

The following is the audit program step that your senior has asked you to complete:

```
Review completed accounts receivable confirmations and follow up with the client on all discrepancies noted by customer. Conclude based on the results of confirmation and additional testwork.

Assertions tested: Existence of A/R balance
                  Proper cut-off at Year-End
                  Rights to Receivable
```

In reviewing the confirmations, you find that the confirmation sent to one customer, Electronics International, was returned with a notation describing a discrepancy between its records and NTI’s records.

The representative for Electronics International noted the following for Invoice #096882 for $12,500:

“We do not owe this invoice at 12/31/13.”

Click the button below to see a copy of the returned accounts receivable confirmation.
Discrepancies on returned confirmations are not always caused by an error on the part of the audit client. For instance, the customer that responded to the confirmation might have made an error, such as confirming the wrong invoice number or confirming the invoices as of a different date than requested.

Typically an auditor will gather additional information and audit evidence regarding the discrepancy to determine if the confirmed amount has been misstated in the client’s records. The client contacts whom you were introduced to earlier may have additional information that could be used in determining whether the discrepancy indicates a misstatement in the client’s records.

The choice to gather more audit evidence is a matter of the auditor’s professional judgment.
As you consider your next course of action, you should consider the client’s point of view in dealing with an audit issue such as this one. When responding to the questions below, take the client’s perspective and visualize how he will feel in this situation.

1. I believe that the client is well versed in dealing with account receivable confirmation discrepancies, as he has probably dealt with them in the past.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-----1------2----3------4------5------6------7------8------9------10</td>
<td></td>
</tr>
</tbody>
</table>

2. I believe the client has an incentive to help me complete my audit testing.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-----1------2----3------4------5------6------7------8------9------10</td>
<td></td>
</tr>
</tbody>
</table>

3. I believe the client has an incentive to issue financial statements that are free of material misstatement.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-----1------2----3------4------5------6------7------8------9------10</td>
<td></td>
</tr>
</tbody>
</table>

4. I believe that the client will be helpful in resolving the issue at hand.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-----1------2----3------4------5------6------7------8------9------10</td>
<td></td>
</tr>
</tbody>
</table>

5. Think about the client’s perspective and write a brief description of what goals you share when it comes to dealing with the returned accounts receivable confirmation.
APPENDIX G
DAY 2 AUDIT DECISION

-----------------------Choice of Action-----------------------

Based on your review of the A/R confirmation, what is your choice of action?\textsuperscript{20}

<table>
<thead>
<tr>
<th>Choice of Action</th>
<th>(Continue to Appendix)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return to A/R Confirmation</td>
<td>H</td>
</tr>
<tr>
<td>Meet with Mr. Thomas to request additional information</td>
<td>I</td>
</tr>
<tr>
<td>Send an email to Mr. Thomas to request additional information</td>
<td>J</td>
</tr>
<tr>
<td>Meet with Mr. Peters to request additional information</td>
<td>K</td>
</tr>
<tr>
<td>Send an email to Mr. Peters to request additional information</td>
<td>L</td>
</tr>
<tr>
<td>Document your conclusion of testwork based on given information</td>
<td>M</td>
</tr>
</tbody>
</table>

\textsuperscript{20} The order in which these choices are presented will be randomized.
APPENDIX H
RETURN TO A/R CONFIRMATION

NTI
NEW TECHNOLOGIES INCORPORATED

Electronics International
8417 New Industrial Parkway
London, England

To Whom It May Concern:

Please examine the accompanying statement carefully and either confirm its correctness or report any differences directly to our auditors. Your prompt attention to this request will be appreciated. An enclosed envelope is included for your reply.

Sincerely,

[Signature]

Evan Smith
Chief Financial Officer, New Technologies, Inc.

---

Confirmation:
The following invoices receivable from us, as of December 31, 2013, are correct, except as noted below:

<table>
<thead>
<tr>
<th>Invoice No</th>
<th>Invoice Date</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>INV095329</td>
<td>12/14/2013</td>
<td>$10,700</td>
<td>OK</td>
</tr>
<tr>
<td>INV096682</td>
<td>12/31/2013</td>
<td>$12,500</td>
<td>We Do Not Agree</td>
</tr>
</tbody>
</table>

This invoice at 12/31/13

---

Electronics International
Date 1/21/14 By Harold Barber
Title Accounts Payable Manager

Continue
APPENDIX I
MEET WITH MR. THOMAS TO REQUEST ADDITIONAL INFORMATION

Please go see the proctor in order to meet with Mr. Thomas. Once your meeting is complete, please obtain the code required for you to proceed with the case and enter it below.21

(Enter code here)

Ready to Proceed

As it turns out, Mr. Thomas is currently unavailable for a face-to-face meeting. However, he can respond via email to questions and requests once he is available. Use the space below to draft an email to Mr. Thomas:

To: Mr. Thomas
From: Auditor

After reviewing your email requesting additional documentation, Mr. Thomas replied with the following:

To: Auditors
From: Mr. Thomas

Attached you will find a copy of the invoice and a copy of the shipping documentation relating to the accounts receivable confirmation you had a question about.

The dates on the shipping manifest clearly show that the shipment was in-transit at year-end. The information on the invoice shows that it was the same shipment that was invoiced on 12/31.

I have also included the page in our contract with the customer that defines the shipping terms as FOB shipping point.

This should be all you need to complete your testwork.

21 The proctor will inform participants who select this option that Mr. Thomas is unable to meet but that they can send him an email requesting information. The proctor will provide the code to move on to the next screen.
Attachments:

*Invoice*

**NTI**

**NEW TECHNOLOGIES INCORPORATED**

**Invoice**

**DATE:** 12/5/13  
**INVOICE #: 09882**

**BILL TO:** Accounts Payable  
Electronics International  
8417 New Industrial Parkway  
London, England

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>AMOUNT</th>
</tr>
</thead>
</table>
| Order # 787533  
1,000 boxes of Wire A6781-1 @ 12.60/box | 12,600.00 |

**TOTAL:** 12,600.00

Make all checks payable to New Technologies, Inc.

*Shipping Documents*

**NTI**

**NEW TECHNOLOGIES INCORPORATED**

**Shipping Doc**

**Shipment Date:** 12/5/13  
**Order Date:** December 20, 2013  
**Order Number:** 787533  
**Customer Account:** 5428

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Unit Type</th>
<th>Order Quantity</th>
<th>Ship Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire A6781-1</td>
<td>box</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

**Total:** 1000  

Comments: Shipped via freight on 12/01/13.

Please contact the Customer Service department at 800-655-0100 with any questions or concerns.

Thank you for your business!
Contract with Customer Shipping Terms

This is the last page of the sales contract, which states shipping terms and has both parties’ signatures.

Section IV: Shipping Terms

For all common carrier shipments, it is the customer’s responsibility to unload goods upon delivery. Additional freight charges will be applicable for re-consigned or residential deliveries or any special requests.

Shipping terms for all orders, unless specified and agreed to otherwise by both parties in advance, will be FOB Origin/Shipping Point. Goods pass to the customer as soon as they leave our distribution point. Customers must file all claims for loss and damage directly with the carrier; however, we will be glad to assist you in any way possible by tracking, filing freight claims, or sending replacement orders. This unique service is available for the convenience of the customer at no additional charge.

Section V: Effect of Agreement

This agreement shall inure to the benefit of and be binding on the heirs, executors, assignees and successors of the respective parties.

Agreement is made this 10th day of July, 2013, between New Technologies Incorporated and Electronics International.

IN WITNESS WHEREOF, the parties have executed this agreement on

[Signatures]

T. L. Miller  R. R. Brown
Sales Representative  Purchasing Officer
New Technologies, Inc.  Electronics International

Page 3 of 3

Now that you have received the appropriate audit evidence from Mr. Thomas, click on the button below to document your testwork and conclusion.

Document your conclusion of testwork based on given information

(Continue to Appendix M)
APPENDIX J
SEND AN EMAIL TO MR. THOMAS TO REQUEST ADDITIONAL INFORMATION

Use the space below to draft an email to Mr. Thomas:

To: Mr. Thomas
From: Auditor

After reviewing your email requesting additional documentation, Mr. Thomas replied with the following:

To: Auditors
From: Mr. Thomas

Attached you will find a copy of the invoice and a copy of the shipping documentation relating to the accounts receivable confirmation you had a question about.

The dates on the shipping manifest clearly show that the shipment was in-transit at year-end. The information on the invoice shows that it was the same shipment that was invoiced on 12/31.

Most of NTI’s customer orders are FOB Shipping Point. That means that the customer takes ownership when the product is shipped. Even though the customer does not physically have the product, they do owe for the shipment. Most international shipments take at least a week to arrive.

This should be all you need to complete your testwork.
Attachments:

Invoice

Shipping Documents
In his email, Mr. Thomas stated that the shipping terms with Electronics International were “FOB Shipping Point.” This would indicate that Electronic International, not NTI, legally owned these items in transit as of 12/31/13 (year-end) and that the receivable is properly accounted for at year-end.

Prior to documenting your conclusion, you have the opportunity to ask Mr. Thomas to verify his statements regarding shipping terms by asking for additional information (e.g. sales contract).

Based on the available information (email from Mr. Thomas; review of related invoice and shipping documentation), you could either (1) document your conclusion without obtaining a copy of the contract or (2) request the contract in order to verify that his description of the shipping terms is accurate.

Which course of action would you choose?²²

- Review A/R Confirmation
  (Return to Appendix H)

- Send a follow-up email to Mr. Thomas to request additional information
  (Continue to Appendix J.1)

- Document your conclusion of testwork based on given information
  (Continue to Appendix M)

²² The order in which these choices are presented will be randomized.
APPENDIX J.1
SEND A FOLLOW-UP EMAIL TO MR. THOMAS TO REQUEST ADDITIONAL INFORMATION

Use the space below to draft an email to Mr. Thomas:

To: Mr. Thomas
From: Auditor

After receiving your email requesting additional documentation, Mr. Thomas has provided a copy of the contract between NTI and Electronics International.

*Contract with Customer Shipping Terms*
*This is the last page of the sales contract, which states shipping terms and has both parties’ signatures.*

Now that you have received the appropriate audit evidence from Mr. Thomas, click on the button below to document your testwork and conclusion.

Document your conclusion of testwork based on given information
(Continue to Appendix M)
APPENDIX K
MEET WITH MR. PETERS TO REQUEST ADDITIONAL INFORMATION

Please go see the proctor in order to meet with Mr. Peters. Once your meeting is complete, please obtain the code required for you to proceed with the case and enter it below.23

(Enter code here)

Ready to Proceed

As it turns out, Mr. Peters is currently unavailable for a face-to-face meeting. However, he can respond via email to questions and requests once he is available. Use the space below to draft an email to Mr. Peters:

To: Mr. Peters
From: Auditor

Send

After reviewing your email requesting additional documentation, Mr. Peters replied with the following:

To: Auditors
From: Mr. Peters

Attached you will find a copy of the invoice and a copy of the shipping documentation relating to the accounts receivable confirmation you had a question about.

The dates on the shipping manifest clearly show that the shipment was in-transit at year-end. The information on the invoice shows that it was the same shipment that was invoiced on 12/31.

Most of NTI’s customer orders are FOB Shipping Point. That means that the customer takes ownership when the product is shipped. Even though the customer does not physically have the product, they do owe for the shipment. Most international shipments take at least a week to arrive.

This should be all you need to complete your testwork.

23 The proctor will inform participants who select this option that Mr. Peters is unable to meet but that they can send him an email requesting information. The proctor will provide the code to move on to the next screen.
Attachments:

**Invoice**

![Invoice Image]

**Shipping Documents**

![Shipping Documents Image]
In his email, Mr. Peters stated that the shipping terms with Electronics International were “FOB Shipping Point.” This would indicate that Electronic International, not NTI, legally owned these items in transit as of 12/31/13 (year-end) and that the receivable is properly accounted for at year-end.

Prior to documenting your conclusion, you have the opportunity to ask Mr. Peters to verify his statements regarding shipping terms by asking for additional information (e.g. sales contract).

Based on the available information (email from Mr. Peters; review of related invoice and shipping documentation), you could either (1) document your conclusion without obtaining a copy of the contract or (2) request the contract in order to verify that his description of the shipping terms is accurate.

Which course of action would you choose?24

- Review A/R Confirmation
  (Return to Appendix H)

- Send a follow-up email to Mr. Peters to request additional information
  (Continue to Appendix K.1)

- Document your conclusion of testwork based on given information
  (Continue to Appendix M)

---

24 The order in which these choices are presented will be randomized.
APPENDIX K.1
SEND A FOLLOW-UP EMAIL TO MR. PETERS TO REQUEST ADDITIONAL INFORMATION

Use the space below to draft an email to Mr. Peters:

To: Mr. Peters  
From: Auditor

After receiving your email requesting additional documentation, Mr. Peters has provided a copy of the contract between NTI and Electronics International.

Contract with Customer Shipping Terms
This is the last page of the sales contract, which states shipping terms and has both parties’ signatures.

Now that you have received the appropriate audit evidence from Mr. Peters, click on the button below to document your testwork and conclusion.

Document your conclusion of testwork based on given information
APPENDIX L
SEND AN EMAIL TO MR. PETERS TO REQUEST ADDITIONAL INFORMATION

Use the space below to draft an email to Mr. Peters:

To: Mr. Peters  
From: Auditor

Send

After sending the email to Mr. Peters, he does not respond. Please select your next course of action:

- Review A/R Confirmation  
  (Return to Appendix H)

- Meet with Mr. Thomas to request additional information  
  (Return to Appendix I)

- Send an email to Mr. Thomas to request additional information  
  (Return to Appendix J)

- Meet with Mr. Peters to request additional information  
  (Return to Appendix K)

Document your conclusion of testwork based on given information  
(Continue to Appendix M)

---

25 The order in which these choices are presented will be randomized.
Which of the following best documents the conclusion you have reached regarding this accounts receivable testwork, based on the work you performed?

- Based on a review of the accounts receivable confirmation, the “proper cut-off” assertion has been violated. The Company erroneously included this invoice in sales and accounts receivable at year-end. Exception noted. Additional testwork required.

- The shipment was in-transit at year-end. According to the shipping terms with the customer (FOB shipping point), the customer took possession of the goods on 12/31/13. The Company has properly accounted for the sale and receivable at year-end. No exception noted.

- According to the shipping terms (FOB shipping point), the customer took possession of the goods on 12/31/13. Shipping terms were verified with a copy of the current contract between the two parties. Shipment dates were verified to invoice and shipping documents. The Company properly accounted for the sale and receivable at year-end. No exception noted.

- Based on a conversation with the client, this shipment was in-transit at year-end. According to the shipping terms (FOB shipping point), the customer took possession of the goods on 12/31/13. Therefore, the Company properly accounted for the sale and receivable at year-end. No exception noted.
Perceptions of Client Contacts

1. How confident are you in your conclusion about the accounts receivable testwork?

<table>
<thead>
<tr>
<th>Not at all Confident</th>
<th>Somewhat Confident</th>
<th>Extremely Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-2</td>
<td>3-4</td>
</tr>
<tr>
<td>5</td>
<td>6-7</td>
<td>8-9</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. I believe that the client and I had shared goals in this process.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-2</td>
</tr>
<tr>
<td>3-4</td>
<td>5-6</td>
</tr>
<tr>
<td>7-9</td>
<td>10</td>
</tr>
</tbody>
</table>

1. What was your perception of Mr. Thomas’ level of accounting experience, relative to your own?

<table>
<thead>
<tr>
<th>Much Less Experience Than Me</th>
<th>Equally As Experienced As Me</th>
<th>Much More Experience Than Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-2</td>
<td>3-4</td>
</tr>
<tr>
<td>5</td>
<td>6-7</td>
<td>8-9</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What was your perception of Mr. Thomas’ level of accounting knowledge, relative to your own?

<table>
<thead>
<tr>
<th>Much Less Knowledgeable Than Me</th>
<th>Equally As Knowledgeable As Me</th>
<th>Much More Knowledgeable Than Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-2</td>
<td>3-4</td>
</tr>
<tr>
<td>5</td>
<td>6-7</td>
<td>8-9</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What was your perception of Mr. Thomas’ age, in respect to your own?

<table>
<thead>
<tr>
<th>Much Younger Than Me</th>
<th>Much Older Than Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-2</td>
</tr>
<tr>
<td>3-4</td>
<td>5-6</td>
</tr>
<tr>
<td>7-9</td>
<td>8-9</td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
1. What was your perception of Mr. Peters’ level of accounting experience, relative to your own?

<table>
<thead>
<tr>
<th>Much Less Experience Than Me</th>
<th>Equally As Experienced As Me</th>
<th>Much More Experience Than Me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0--1--2--3--4--5--6--7--8--9--10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What was your perception of Mr. Peters’ level of accounting knowledge, relative to your own?

<table>
<thead>
<tr>
<th>Much Less Knowledgeable Than Me</th>
<th>Equally As Knowledgeable As Me</th>
<th>Much More Knowledgeable Than Me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0--1--2--3--4--5--6--7--8--9--10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What was your perception of Mr. Peters’ age, in respect to your own?

<table>
<thead>
<tr>
<th>Much Younger Than Me</th>
<th>Much Older Than Me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>0--1--2--3--4--5--6--7--8--9--10</td>
<td></td>
</tr>
</tbody>
</table>

You will be asked a series of questions about the two client contacts you were introduced to, Mr. Thomas and Mr. Peters.

The following questions relate to **Mr. Thomas**. Select “Not Applicable” if you did not select to meet with or email Mr. Thomas:

1. Please provide feedback on Mr. Thomas by answering the following questions (0 – strongly disagree, 10 – strongly agree):
   - Mr. Thomas was approachable.
   - Mr. Thomas was impatient.
   - Mr. Thomas was annoyed with my interruptions.
   - Mr. Thomas was easy to work with during this case.
   - Mr. Thomas treated me with respect.
   - Mr. Thomas was intimidating.
   - Mr. Thomas was willing to help.
   - Mr. Thomas was credible.
   - I liked Mr. Thomas.
The following questions relate to Mr. Peters. Select “Not Applicable” if you did not select to meet with or email Mr. Peters:

2. Please provide feedback on Mr. Peters by answering the following questions (0 – strongly disagree, 10 – strongly agree):

- Mr. Peters was approachable. _________
- Mr. Peters was impatient. _________
- Mr. Peters was annoyed with my interruptions. _________
- Mr. Peters was easy to work with during this case. _________
- Mr. Peters treated me with respect. _________
- Mr. Peters was intimidating. _________
- Mr. Peters was willing to help. _________
- Mr. Peters was credible. _________
- I liked Mr. Peters. _________

If you engaged in a role-play exercise as part of yesterday's case materials, you met with Mr. Stevens. His picture is below. Please answer the following three questions about your interaction with Mr. Stevens.

If you did not interact with Mr. Stevens yesterday, please select "Not Applicable."

1. Please rate your impression of Mr. Stevens' approachability.

Not at all Approachable 0       Not at all Intimidated 0
---------------2-------3--------4--------5--------6--------7--------8--------9--------10
---------------2-------3--------4--------5--------6--------7--------8--------9--------10

2. Please rate the level of intimidation you felt when meeting with Mr. Stevens.

Not at all Intimidated 0       Extremely Intimidated 10
---------------2-------3--------4--------5--------6--------7--------8--------9--------10
---------------2-------3--------4--------5--------6--------7--------8--------9--------10

3. Did your role-play experience with Mr. Stevens make you more or less comfortable meeting with individuals in positions of authority?

Much Less Comfortable 0       Much More Comfortable 10
---------------2-------3--------4--------5--------6--------7--------8--------9--------10
---------------2-------3--------4--------5--------6--------7--------8--------9--------10

26 Permission obtained from Joseph K. Speicher, CPA, to use his photo for this instrument.
How clear were the instructions in this case?

<table>
<thead>
<tr>
<th>Extremely Unclear</th>
<th>Extremely Clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>0------1---------2------3------4------5------6------7------8------9------10</td>
<td></td>
</tr>
</tbody>
</table>

How realistic did you find this audit situation?

<table>
<thead>
<tr>
<th>Very Unrealistic</th>
<th>Very Realistic</th>
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</thead>
<tbody>
<tr>
<td>0------1---------2------3------4------5------6------7------8------9------10</td>
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</table>
APPENDIX N
MANIPULATION CHECK QUESTIONS

------------------------Manipulation Check Questions------------------------

1. Before you documented your conclusion related to the accounts receivable confirmation testing, were you given an opportunity to request additional information from the client contacts, Mr. Thomas and Mr. Peters?

☐ Yes
☐ No

2. When you were introduced to Mr. Thomas and Mr. Peters, who had been employed at NTI for a longer period of time?

☐ Mr. Thomas
☐ Mr. Peters

3. During today’s activity, were you asked to spend time considering and documenting what you believed to be the client’s point of view about the accounts receivable audit issue?

☐ Yes
☐ No

4. When you began this activity yesterday, were you given an opportunity to participate in a role-play exercise?

☐ Yes
☐ No

5. If you did participate in a role-play exercise yesterday, were you asked to spend time after the role-play documenting your thoughts about what had occurred during your interaction with Mr. Stevens?

☐ Yes
☐ No
☐ N/A
APPENDIX O
DEMOGRAPHIC INFORMATION

------------------------Demographic Information------------------------

1. Have you had internship experience with an accounting firm?
   - Yes
   - No

2. If you have had internship experience, what area did you intern in?
   - Audit / Assurance
   - Tax
   - Advisory
   - Other
   - N/A – I have not had any internship experience.

3. If you have had internship experience, did any part of your intern training involve role play exercises?
   - Yes
   - No
   - N/A – I have not had any internship experience.

4. How many months of audit experience do you have?
   - 1-3 months
   - 4-6 months
   - More than 6 months

5. What is your age?
   - 18-19 years
   - 20-21 years
   - 22-24 years
   - Over 24 years

6. In comparison to my peers, I perceive myself in terms of accounting knowledge to be…

   Much Less          Much More
   Knowledgeable      Knowledgeable
   Than My Peers      Than My Peers
   0--------1--------2--------3--------4--------5--------6--------7--------8--------9--------10
7. In comparison to my peers, I perceive myself in terms of **my professional** accounting/auditing experience (includes internship experience) to be…

<table>
<thead>
<tr>
<th>Much Less Experienced Than My Peers</th>
<th>Much More Experienced Than My Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0----------------------------------</td>
<td>-------------------------------------</td>
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</table>

8. In comparison to my peers, I perceive myself in terms of **my ability to make decisions regarding audit tasks** to be…

<table>
<thead>
<tr>
<th>Much Less Confident Than My Peers</th>
<th>Much More Confident Than My Peers</th>
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<tbody>
<tr>
<td>0------------------------</td>
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------------------------Day 2 Completion Screen------------------------

Thank you for your participation! This completes day 2 of this exercise.

Please hit the next button below and give all experimental materials to the proctor.

------------------------End Day 2------------------------