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# **Supervisor-Subordinate Communication in the Contemporary Audit Environment**

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctoral of Philosophy in Business at Virginia Commonwealth University.

by

Devon P. Jefferson

Ph.D. Candidate

Department of Accounting, School of Business  
Virginia Commonwealth University

Chair: Lindsay M. Andiola, Ph. D., Associate Professor, Virginia Commonwealth University

Co-Chair: Alisa G. Brink, Ph.D., Department Chair, Virginia Commonwealth University

Committee Members: Bowe Hansen, Associate Professor, Virginia Commonwealth University,  
Mayoor Mohan, Associate Professor, Virginia Commonwealth University, and  
Kim D. Westermann, Professor, Cal-Poly, San Luis Obispo

Virginia Commonwealth University  
Richmond, Virginia

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## DISSERTATION INTRODUCTION

Just five years ago I was working as an Audit Manager in person (in the office or at the client site), amongst each of my subordinates, which made common work practices like knowledge sharing, responding to questions, and building team morale easy. Since then, remote work has become the new norm, which has significantly changed the communication dynamics between supervisors and subordinates. This dissertation is my personal pursuit to understanding how supervisor and subordinate auditors are currently interacting to achieve desired work outcomes, and identifying specific areas where challenges may exist. I accomplish this objective through four papers, including a literature review, two qualitative interview analyses, and an experiment. The literature review synthesizes audit literature examining contextual factors affecting downward communication between supervisors and subordinates. The qualitative papers provide an in-depth analysis of how communication between supervisor and subordinate auditors unfolds in the remote audit environment. In particular, the first qualitative paper examines the specific types of computer-mediated communication (e.g., video calls, email, instant messaging) that support interactions between supervisors and subordinates, and their perceptions of each medium. The second qualitative paper is an interpretive piece leveraging self-determination and communication accommodation theories to understand how supervisors and subordinates use communication to meet work goals when working remotely. The final paper is an experiment investigating two communication strategies (supervisor expression and psychological ownership) supervisors may strategically use to motivate subordinates' proactivity in the remote audit environment.

# **Part I: Supervisor-Subordinate Communication in the Audit Environment: A Review and Synthesis of Contextual Factors Affecting Subordinate Behavior<sup>1</sup>**

## **I. INTRODUCTION**

Effective communication is paramount to performing high-quality audits and is essential for operational success. One critical aspect of auditor communication is the downward communication from supervisors including managers and senior associates to their subordinates (hereafter *supervisor-subordinate communication*). Supervisor-subordinate communication is a powerful and continuous interaction fundamental to the audit supervision aspect of audit quality (Lurie 1982; Bobek et al. 2012). Regulatory standards require that supervisors inform engagement team members of their responsibilities, direct subordinates to behave proactively (e.g., bring audit issues to the attention of audit supervisors), and, through engagement review, ensure subordinates draw appropriate audit conclusions (AICPA 2001; PCAOB 2010). However, to optimize these requirements, supervisors should make high-quality communication decisions (e.g., tone, timing of communication; Byron and Balridge 2007; Kramer 2017), as each choice can have short- (e.g., proactivity, performance) and long-term (e.g., job satisfaction, turnover) effects on the subordinate (Lee 2005; Grant and Ashford 2008; Kramer 2017). Unfortunately, supervisor-subordinate communication failures persist (e.g., demotivating review experiences—Andiola and Bedard 2018; supervisors emphasizing completion over skepticism—Clor-Proell et al. 2023), and are likely to increase as the pace, volume, and complexities of interpersonal communication at work continue to grow and evolve (Deloitte 2016; Downey et al. 2020; PCAOB 2020).

The purpose of this paper is to synthesize the audit literature on supervisor-subordinate communication to review the findings to date and suggest future research opportunities. This review is necessary for two important reasons. First, audit regulators continue to report deficiencies

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<sup>1</sup> Citation: Jefferson, D. 2024. Supervisor-Subordinate communication in the audit environment: A review and synthesis of contextual factors affecting subordinate behavior. *Journal of Accounting Literature* (forthcoming): 1-30. DOI 10.1108/JAL-01-2023-0011.

in the area of audit supervision (PCAOB 2019; SEC 2022), and communication failures are a viable root cause given the implications of supervisor-subordinate communication on subordinates' learning and performance (Westermann et al. 2015; Nelson et al. 2016; Kadous et al. 2019). Specifically, subordinates' behavioral response to feedback, proactive voice behavior, performance improvement, and acclimation to organizational culture and team norms are dependent on the messages supervisors convey and the channel by which they choose to deliver them (e.g., Brazel et al. 2004; Lambert and Agoglia 2011; Nelson et al. 2016; Proell et al. 2022). Further, communication is cyclical and, like other tacit skills, subordinates are likely to observe and mimic their supervisors' communication practices (Bol et al. 2018; Andiola et al. 2019). However, because the audit research cited above is fragmented across audit topics (e.g., workpaper review-Andiola et al. 2019; speaking up-Clor-Proell et al. 2023), it is difficult to assess common and conflicting findings, and challenging to identify areas where more research is needed. Synthesizing research on the contextual factors that impact supervisor-subordinate communication (both positively and negatively) can help guide audit practice, as well as identify areas where additional research is warranted.

Second, the audit environment, including its communication practices, is evolving as firms are uniformly more supportive of flexible work arrangements (e.g., fully remote, hybrid) where core engagement team members (i.e., audit supervisors and their subordinates) more frequently work in separate physical locations including at home, the client-site, or in the office (Bauer et al. 2021; McCabe 2021). This shift has not only increased supervisors use of (or functionality within) traditional forms of computer-mediated communication (CMC) like email and video conferencing, but also forced them to incorporate newer forms of CMC that more conveniently facilitate communication with their subordinates including chatrooms and discussion boards (Sidgman et



al. 2021).<sup>2</sup> However, the level of social presence varies by communication medium (e.g., video conferencing versus email; Short et al. 1976), and the appropriateness of each is situational, varying by context; an important factor that audit supervisors may not always consider (Fogarty 2000; Brazel et al. 2004; Bailey et al. 2023). Furthermore, audit partners are concerned CMC may not always be professionally appropriate and may reduce learning opportunities and auditor skepticism over time (Westermann et al. 2015). As a result, regulators have expressed interest in how physical distance and increased technology affect team dynamics, and firms may need to reassess their approach to audit supervision (PCAOB 2013; PCAOB 2020). Thus, synthesizing what we know about the effects of CMC specifically will provide practical insights for firms to more effectively train audit supervisors to make CMC choices that improve audit quality.

To accomplish this paper’s objectives, I first leverage communication literature to establish a framework that identifies key contextual factors important to the study of communication in organizational settings. Next, I define the supervisor-subordinate communication construct to appropriately identify relevant audit studies, focusing on contextual factors where communication choices are present: the message (i.e., *what* is conveyed) and channel (i.e., *how* it is conveyed). Velentzas and Broni (2014, 117) define communication as “the activity of conveying information through the exchange of thoughts, messages, or information as by speech, visuals, signals, writing, or behaviors”. Communication is further described as an interactive process where a communicator conveys information with an expected behavioral response from a receiver (Mcquail and Windahl 2013). In this review, consistent with these definitions, supervisor-subordinate communication refers to a supervisor’s conveyance of verbal and/or nonverbal information resulting in a

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<sup>2</sup> Individuals rely on CMC to interact with others at work. This review acknowledges that CMC, such as email, is used even when working in person but as remote work increases, so does individuals’ reliance on CMC. In this review, use of the term “remote work” describes the environment in which employees are not working in the same physical location, and therefore rely on CMC to communicate with one another (e.g., McGloin et al. 2022).

behavioral response from their subordinates. Finally, I suggest future research opportunities that may assist in developing an understanding of the behavioral effects of supervisor communication practices on subordinate auditors, with a particular emphasis on CMC that is increasingly prevalent due to auditors' ability to work remotely.

I identify and synthesize 50 studies that reveal several important observations relating to supervisor-subordinate communication in the audit environment. These include a majority of studies investigating the message, including 54 percent focusing on message content and 18 percent focusing on message treatment, and 28 percent investigating the channel. Concerning the message collectively (content and treatment), research tends to focus on three areas: engagement review and feedback, fraud brainstorming, and factors affecting subordinates' willingness to speak up about audit issues (i.e., voice behavior). Within these areas, many of the themes characterizing the message are limited to a few distinct communication choices (e.g., message framing and nonverbal cues) that are beneficial or detrimental to subordinate auditor behavior and organizational and/or audit outcomes (e.g., increased intrinsic motivation, increased costs) (Nelson et al. 2016; Kadous et al. 2019; Clor-Proell et al. 2022). My review reveals that supervisor-subordinate communication research in audit is understudied as it is limited to specific areas of the audit and communication choices.

Furthermore, many of these studies are designed to understand how supervisors' message choices (e.g., body language, personal disposition) are perceived and interpreted by subordinate auditors in the traditional face-to-face work environment. Thus, it is not well understood how these findings might translate to the current hybrid or fully remote audit work environment. While some recent studies acknowledge that reduced ability to observe nonverbal cues is detrimental to the development of novice auditors (Bailey et al. 2023), very few studies to date empirically examine

how the absence of distinct aspects of nonverbal communication may hinder auditor learning and audit quality, and none explore how communication strategies may be implemented to overcome these obstacles.

Concerning the channel, my synthesis identifies that CMC is an important element of communication; yet, how it manifests in audit supervisor-subordinate communication specifically is less clear. Specifically, most audit studies compare the performance outcomes of auditors receiving electronic review note feedback or participating in electronic fraud brainstorming to those in a face-to-face control group. While the results of studies examining electronic review suggest negative consequences to audit quality, including poor performance and less effort (Brazel et al. 2004), several studies investigating the effectiveness of CMC to conduct fraud brainstorming find engagement teams that interact electronically perform well (e.g., Lynch et al. 2009). This observation suggests CMC effectiveness is situation and context-specific highlighting the need to explore CMC in areas beyond those identified.

The results of this review advance researchers' understanding of supervisor-subordinate communication within the audit setting and the suggested research directions can help guide future academic work. Section 2 describes the framework used for identifying relevant studies and synthesizing the literature. Section 3 discusses the method for conducting the review. Section 4 discusses contextual factors affecting communication, reviews the literature on communication in the audit context, and provides a relevant research agenda. Section 5 concludes this review.

## **II. APPLYING A COMMUNICATION FRAMEWORK TO THE EVOLVING AUDIT ENVIRONMENT**

Leveraging seminal communication models (Lasswell 1948; Shannon and Weaver 1949; Berlo 1960) and communication literature extending these models (e.g., Byron 2008; Mcquail and Windahl 2013; Salterio et al. 2021), I establish a framework to examine supervisor-subordinate

communication in the audit environment (see Figure 1.1). These models are useful as they focus on simple, linear, one-way communication, such as the downward communication from supervisors to subordinates, and emphasize the communicator's role in the act of communication, particularly the communicator's intentional initiation of communication to influence another's behaviors (Dissanyake 1984). Consistent with this research, my framework models that effective and efficient communication depends on four factors that address four basic questions, including the *communicator* (who?), *message* (says what?), *channel* (how?), and *receiver* (to whom?). Each of these factors affects the *receiver's behavioral response* addressing a final question "with what effect?". In this review, an audit supervisor (i.e., the communicator) conveys a message to an audit subordinate (i.e., a receiver), and each of the supervisor's choices regarding the message and channel affects the quality of communication, directly impacting the subordinate's behavioral outcomes.

[INSERT FIGURE 1.1]

Consistent with communication literature, the framework I establish also suggests that choices impacting the quality of communication include the details of the message (e.g., content, treatment) and the channel through which the message is communicated (e.g., face-to-face, email) (Mcquail and Windahl 2013). Though the choices surrounding each of these elements can depend on the personal characteristics of both the communicator and the receiver, I focus this review on the message (i.e., *what* is conveyed) and channel (i.e., *how* it is conveyed) because they are malleable contextual factors whereby firm personnel can encourage and train communicators to make higher-quality communication decisions. These factors may also vary by organization, uniquely differ by industry (e.g., knowledge-intensive industries serving the public interest often require a greater level of professionalism; Sawatsky et al. 2020), and serve as communication areas with the greatest potential for research and practice in terms of examining and implementing

effective communication strategies.<sup>3</sup>

Finally, the intuitive and process-driven nature of the communication framework, particularly its inclusion of the channel as a specific communication choice, makes it well-suited to examine communication in the evolving audit environment (Pavitt and Johnson 2002; Byron 2008). Many public accounting firms have implemented policies supporting flexible work (e.g., hybrid, fully remote) increasing auditors' reliance on CMC, and critically impacting the 'what' and 'how' supervisors choose to communicate with their subordinates (Downey et al. 2020; Bauer et al. 2021). This shift has fundamentally changed the level of daily presence and involvement supervisors may have with their subordinates, and regulators are increasingly interested in how team distribution affects team dynamics and performance (PCAOB 2013; Bauer et al. 2021). Importantly, there are alternative forms of CMC (e.g., email, video conferencing, instant messaging), and each form varies in formality and the level of presence a supervisor can offer (Powell et al. 2004). Given this drastic and sudden shift, supervisors may be reconsidering their communication choices; however, they may not be adept at doing so, which may exacerbate or introduce new negative consequences to audit quality (Bol et al. 2018; Downey et al. 2020).<sup>4</sup> Furthermore, communication using technology requires increased coordination, and in some cases, requires greater monitoring to ensure accountability, which is inherently challenging (Hanes 2013; Downey and Bedard 2019; Downey et al. 2020). Thus, this review not only synthesizes what we know about the message and channel individually, but also proposes that the two inherently overlap. Therefore, the opportunities for future research suggested in this review consider how

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<sup>3</sup> Although I limit the scope of this review to message and channel, this does not reduce the importance of examining the effects of personal characteristics of both the supervisor and the subordinate (e.g., feedback orientation - Andiola and Bedard 2018; Andiola 2023) on communication processes and outcomes. Future research should continue to explore the behavioral effects of person-centric characteristics on the effects of downward communication in the audit environment.

<sup>4</sup> Due to the COVID-19 pandemic in 2020, audit firms were forced to transition to fully remote audits. Since then, many firms are committed to maintaining a culture supportive of flexible work-from-home arrangements (McCabe 2021).

CMC advancements could also affect the message and channel collectively.

### **III. METHOD AND SAMPLE DESCRIPTION**

In this section, I describe my approach to systematically identifying and analyzing the audit literature on supervisor-subordinate communication. This review encompasses articles published in the last 20 years from January 2003 through October 2023 in the following leading accounting and auditing journals: *Journal of Accounting Research*, *The Accounting Review*, *Contemporary Accounting Research*, *Accounting, Organizations and Society*, *Auditing: A Journal of Practice & Theory*, *Accounting Horizons*, *Behavioral Research in Accounting*, *Journal of Information Systems*, *Managerial Auditing Journal*, and *International Journal of Auditing*.

To compose this literature review, I follow the guidelines outlined by Andiola et al. (2017). First, I read prior reviews and empirical studies synthesizing and examining communication as a general construct in the broader literature, and also those more specifically synthesizing supervisor-subordinate communication and/or CMC (e.g., Derks et al. 2008; Bonaccio et al. 2016; Meyers 2016; Kramer 2017). Second, I performed a search in Google Scholar to directly identify studies related to “audit” or “public accounting” and “communication”, “feedback”, “review”, “discussion”, “coaching”, or “CMC”. From those studies, I reviewed all reference lists to identify any associated studies not picked up through the Google Scholar search. This search also revealed that deploying objective search terms and phrases did not sufficiently capture the supervisor-subordinate communication construct as defined in the broader communication and management literature. For example, I found that the search term “communication” is used infrequently in audit research despite its prevalence in everyday audit practices (e.g., coaching, review, task deployment). As a result, I also reviewed the titles and abstracts of each article in each named accounting journal by issue for all of the included years (2003-2023), including articles listed as “early view” or “accepted”, to ensure I obtained a complete pool of articles related to supervisor-

subordinate communication in auditing.

Relevant articles are those that empirically explore topics where communication between a supervisor and subordinate is typically present. These topics often arise as part of studies focused on a specific subordinate auditor behavioral outcome (e.g., speaking up about audit issues; Nelson et al. 2016) or a specific type of supervisor-to-subordinate communication (e.g., workpaper review, performance feedback; Lambert and Agoglia 2011; Andiola and Bedard 2018).<sup>5</sup> For each paper I identified, I also reviewed their reference lists to consider any additional downward communication studies that may be relevant.<sup>6, 7</sup> Appendix A summarizes the 50 papers included in this synthesis, categorized by each section where the work is discussed in this review (i.e., message-content, message-treatment, and channel), and ordered by author name.<sup>8</sup>

#### **IV. COMMUNICATION FACTORS AND THEIR AFFECTS**

##### **The Message**

The message is defined as the actual physical product that the communicator provides the receiver which can be verbal (e.g., oral or written) or nonverbal (e.g., gestures, facial expression) (Mcquail and Windahl 2013). Consistent with communication research, I identify content and treatment as key factors characterizing the message (e.g., Berlo 1960; Mcquail and Windahl 2013).

In the sections below, I define and review message content and treatment.

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<sup>5</sup> The management accounting literature also examines supervisor-subordinate communication topics, such as feedback effectiveness (Erickson et al. 2022; Thornock 2016) and message framing (Loftus and Tanlu 2018); however, these studies are not specific to the audit setting and are outside the scope of this review.

<sup>6</sup> Some of the studies identified and included in this review are also contained in prior syntheses on related subject matters (e.g., voice behavior and response to feedback). However, this synthesis differentiates from those by examining relevant research through the lens of communication factors and focusing exclusively on supervisors' downward communication choices to subordinates.

<sup>7</sup> Several audit studies (i.e., Earley 2001, 2003; Leung and Trotman 2005, 2008; Bryant et al. 2009) examine factors affecting feedback. These studies do not directly capture supervisor or team communication practices in their empirical investigation; thus, they are not included in this review. See Andiola (2014) for a review of these studies.

<sup>8</sup> Of the 50 papers reviewed, three examine multiple areas. While included in the 54 percent examining message content, Andiola and Bedard (2018) also examines message treatment and channel and Nelson et al. (2016) also examines message treatment. In addition, Lambert and Agoglia (2011), though included in the 18 percent examining treatment, also examines how the message is conveyed (i.e., review timeliness). Counting the multiple areas these papers examine yields a similar dispersion where 50 percent focus on the message's content, 20 percent focus on the message's treatment, and 30 percent focus on the channel.

### ***Organizational Research on Message Content***

Message content includes the assertions, information, inferences, and judgments an individual makes, presents, draws, or proposes, respectively (Mcquail and Windahl 2013). From supervisors to subordinates, message content typically focuses on the information distributed to coordinate tasks and set deadlines, communicate job responsibilities, set goals, build relationships, and provide performance feedback (Meyers 2016; Kramer 2017). Equally important, are the informal exchanges of nonwork-related topics where supervisors “shoot the breeze” with their subordinates to build rapport (Kramer 2017). These formal and informal exchanges may occur in a verbal and/or nonverbal manner, and what is communicated is at the discretion of the message communicator. Importantly, message conveyance choices (e.g., word choice, body language) influence the message recipients’ emotional state (Bonaccio et al. 2016), which may differentially impact how they respond. Much of the communication literature focuses on the affective influence of message content (Mast 2007; Cosman 2013; Bonaccio et al. 2016); however, there are a few key concepts to consider regarding communication in a professional setting. I discuss these insights below.

Verbal communication, both oral and written, is a common means of interacting in the workplace. Between supervisors and subordinates, task instructions, rules and regulations, and other aspects of the organization (e.g., norms and culture) are captured through oral and written communication mechanisms (Kramer 2017). When sending such messages, clarity, and tone are critical aspects supervisors should consider, as both affect how subordinates interpret, internalize, and respond to that message. Decisions about tone and clarity are challenging, and it requires diligence, effort, and practice to craft thoughtful and productive messages, especially amid a busy and stressful workday (Derks and Bakker 2010).



Research examining clarity is mixed, and academics are yet to identify the components necessary to convey a “perfectly” clear message. Several studies find both vague and/or unclear messages and excessive communication alike can lead to misunderstanding of expectations and loss of concentration (Morren 2018). However, research examining proactivity finds vague communication could prompt employees to engage in feedback and information-seeking behaviors (Grant and Ashford 2008). Attention should be paid to this area of the message as supervisors may be more prone to “overcommunicating” when working apart from their subordinates (Himmelstein 2020), which could have unintended negative effects on subordinates’ learning and proactivity.

There are a number of linguistic dimensions examined in marketing research that provide insight about the tone of a message, including *certainty* (language and words that indicate resoluteness, inflexibility, completeness, and a tendency to speak with authority), *optimism* (language that endorses an individual, group, concept, or event), *activity* (language about movement, change, the implementation of ideas, and the avoidance of inertia), *realism* (language describing tangible, immediate, and recognizable issues), and *commonality* (language that highlights agreed-upon values and rejects group engagement idiosyncrasies) (Hart 1984a, 1984b; Etzioni 1993; Ober et al. 1999). These dimensions can be further psychoanalyzed by their *insistence* (use of repeated words), *variety* (language preciseness), *embellishment* (use of language modifications that slows the audiences’ interpretation abilities), and *complexity* (total number of words) (Boder 1927; Johnson 1946; Flesch 1951; Hart 1984b). While each factor is individually impactful (Pitt et al. 2019; Li et al. 2021), the differences between each are nuanced where subtle changes can drastically alter a message’s meaning, and the receiver’s perception of the communicator, climate, and social environment (Kulhavy and Schwartz 1980). Communicators in professional settings should also be aware that simple changes in word choices impact the

politeness of a message (Cosman 2013). For example, using verbs such as “would” or “could”, rather than giving an explicit demand, is perceived as more polite.

Message content also consists of the nonverbal cues an individual exhibits through body movement (e.g., gestures, posture and gait, and facial expression; Burgoon et al. 2011) and tone of voice (e.g., inflections) (Hall et al. 2005). At work, these cues can “*repeat* verbal discourse (e.g., a nod to show agreement), *substitute* it (e.g., an eye roll instead of a statement of contempt), *complement* it (e.g., reddening while talking to an intimidating person), *accent* it (e.g., a slap on the back following a joke), or *contradict* it (e.g., wiping tears away while asserting that one is fine” (Bonaccio et al. 2016, 1047). Thus, nonverbal cues can significantly impact an individual’s job satisfaction, turnover intention, and job performance (Bonaccio et al. 2016; Jia and Cheng 2021). From supervisors to subordinates, even the slightest cues can become salient and influence subordinate work engagement, mood (e.g., emotional contagion), and, importantly, relational identity with their supervisor; a key antecedent to subordinates’ proactive relationship-building and information-seeking behaviors (Strauss and Kelly 2012; Gkorezis et al. 2015; Sluss and Ashforth 2007).<sup>9</sup> These cues lead subordinates to form opinions about their relationship with their supervisor. For example, a supervisor’s willingness to share and listen is described as open; whereas, defensive communication is closed (Redding 1972). Though open communication results in better relationship building (Schippers et al. 2003), recent research suggests that “strategic communication” (e.g., designating certain times or setting distinct parameters for when open communication may occur) motivates subordinates to draw their own conclusions when completing ambiguous tasks (Redding 1972; Grant and Ashford 2008). Alternatively, closed communication or conveying a negative reaction (e.g., rejecting, criticizing, or avoiding the

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<sup>9</sup> Relational identity draws upon social identity theory and refers to an employee’s developed self-concept and self-definition in relation to the values and positions of his/her supervisor (Strauss and Kelly 2012).

content) to a subordinate's message damages the relationship and discourages subordinates from pursuing future interactions and/or supervisor-oriented proactive behaviors (e.g., relationship building, socializing) (Kramer 2017). This may impede employee job performance and be damaging to overall work quality.

### ***Audit Research on Message Content***

Prior audit literature examining message content focuses on feedback, knowledge sharing, specific verbal and nonverbal cues, coaching, task instructions, and how other various message choices affect subordinate performance (see Appendix A for a summary of the audit research on supervisor-subordinate communication). Most of these studies indirectly examine a specific aspect of communication; however, all are designed to explore subordinate performance in the traditional face-to-face work environment. These studies are presented below and are ordered by message content topic area.

Feedback is a delicate aspect of communication due to its direct and primary objective to aid in learning, improve performance, increase motivation and job satisfaction, and in audit, improve audit quality through performance and engagement reviews (see Andiola 2014 for a review). Unfortunately, supervisors often struggle to adequately communicate feedback in a meaningful and uplifting way (Libby and Luft 1993; Andiola 2014). For example, Dalton et al. (2015) explore the nature of supervisor feedback by examining how supervisory feedback environments, including contextual factors such as feedback quality, feedback delivery, and feedback type, affect subordinates' job attitudes and outcomes. They find unfavorable supervisory feedback environments persist and are associated with lower job satisfaction and role clarity, which lead to lower organizational commitment and higher turnover intention. However, this effect is moderated by the presence of an external supervisor. Andiola and Bedard (2018) also

examine the downstream effects of supervisors' conveyance of positive and negative feedback, and find adverse and beneficial subordinate reactions to more negative feedback, including worse attitudes toward coaching relationships, more attempts to manage supervisors' impressions, but improvements to performance. Yet, by demonstrating attentiveness and competence when delivering feedback, supervisors can motivate and inspire subordinates to perform well (Andiola et al. 2019).<sup>10</sup>

Like feedback, knowledge sharing is an interpersonal interaction between audit team members fundamental to audit quality (e.g., brainstorming) (Duh et al. 2020). While firms have implemented several formal technological means to share task-specific information or discoveries about the client (e.g., KPMG 2020), knowledge sharing most often and best occurs informally through ad hoc and unstructured conversations (e.g., team chatter in the audit room) (Vera-Munoz et al. 2006; Duh et al. 2020). Vera-Munoz et al. (2006) identify social exchanges between supervisors and subordinates, and downward communication in the form of feedback and advice (e.g., instructions, objectives, constructive assessments of preliminary plans) as fundamental to meeting the objectives and regulatory requirements of the audit. Bobek et al. (2012) further find that auditors perceive more than 70 percent of audit issues are successfully resolved through informal communication between engagement team members emphasizing the importance of supervisor-to-subordinate communication to audit quality. For conversations like these to occur, supervisors should exhibit cues that are inviting and demonstrate a desire to have an open line of communication.

Informal communication is also essential to audit quality not only for its role in knowledge

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<sup>10</sup> Studies examining feedback in audit do not always explicitly acknowledge that feedback is being provided by a direct supervisor; however, conventional knowledge regarding the audit context supports the assumption that review feedback is typically delivered by a subordinate's supervisor.

sharing, but also its role in building rapport, sharing emotion, and establishing team connectedness. These factors affect the effectiveness and frequency of supervisor-subordinate conversations. An underlying element to supervisors' ability to motivate and improve these outcomes are the verbal and attitudinal nonverbal cues they exhibit. Several audit studies examine how verbal and nonverbal cues affect subordinate behavior, and find subordinates are significantly affected by the expressions and demeanor of their supervisor. For example, when a supervisor expresses concern about their team members and is seemingly willing to sacrifice time to help (i.e., team-orientated; Nelson et al. 2016), or communicates personal and professional growth (i.e., intrinsic motivation; Kadous et al. 2019), auditors are more willing to speak up about audit issues. Nelson et al. (2016) further find the effect of a supervisor's team orientation is mediated by subordinates' commitment to their team leader. Subordinates are also more comfortable communicating with their supervisor when he/she encourages questions and responds positively (Clor-Proell et al. 2023), and makes them feel psychologically safe (i.e., showing interest in what subordinates have to add to the conversation and exhibiting a friendly and supportive demeanor) (Gissel and Johnstone 2017). Likewise, subordinates are more likely to admit audit errors when their supervisors have reacted positively to a previous error admission (Stefaniak and Robertson 2010). Alternatively, subordinates are less likely to engage in upward communication when their supervisor conveys a "just get it done" mentality (Clor-Proell et al. 2023), and are likely to feel more exhausted at work when their supervisors' approach to managing conflict is collaborative (e.g., active listening, honest discussions) or dominating (e.g., active confrontation) relative to avoidant (shying away from and suppressing feelings of conflict) (Cooper et al. 2019). Lastly, Almer et al. (2023) find that supervisors' leader-member exchanges with their subordinates (e.g., realizing the subordinate's potential or understanding the subordinate's problems) affect the subordinate's

organizational commitment and turnover intention. This includes showing support for subordinates' personal/family needs and procedural justice when subordinates are working remotely which also improves their perceptions of the organization and in turn turnover intention (Dalton et al. 2023).

Communication also influences supervisors' mentoring and coaching effectiveness. Subordinates are more committed to their organization when their supervisors are mentors and regularly invite them to socialize outside the workplace (Stallworth 2003, 2004). Herda et al. (2019) examine the role of supervisor coaching (e.g., advising subordinates to take a big-picture view of what they are testing) on the likelihood of subordinates prematurely signing off on audit workpapers. They find that auditors who feel coached and appreciated by their supervisors, through expressed words of encouragement, are more mindful at work which is associated with a reduced likelihood of premature signoff. Andiola et al. (2021) find that the effect of a perceived low coaching-quality supervisor on subordinates' organizational commitment and turnover intention is mitigated when the coaching quality of another supervisor is high or when a relatively high coaching-quality supervisor is also a mentor. Variation in coaching quality is explained by supervisors' lack of capabilities and presence (including lack of time and physical distance).

Regarding task instructions, Stevens et al. (2019) investigate how an audit partner's style (i.e., supportive, unsupportive) during task allocation affects a subordinate's professional skepticism. Specifically, partner style is manipulated as his/her confidence (supportive) or lack thereof (unsupportive) that the subordinate will perform well on a difficult and challenging impairment task. They find subordinate auditors demonstrate greater skepticism when their partner's style is supportive, but only when team identity salience is high. Vagner (2022) explores the effect of personalized task communication on subordinate auditor judgment and decision

making in determining the collectability of accounts receivable. Personalized communication is operationalized as a message from an audit manager that includes personal text providing support, emphasizing the importance of understanding the task, and an image in the form of the audit manager's profile picture. Results suggest that communication personalization elicits affect and increases effort on the collectability task.

Finally, several experimental studies use a supervisor's message choice to investigate how higher-level constructs, such as decision authority and reputation, affect a variety of subordinate performance measures. Knechel and Leiby (2016) find that when an auditor is told that the engagement partner has directed their colleague to solicit their input and to take and document actions consistent with the advice they provide (i.e., high decision authority), then their estimate precision is constrained. Shanker and Tan (2006) find that when supervisors disclose their review preferences (i.e., whether they agree or disagree with the client's accounting treatment), subordinates' evaluation techniques for deriving their conclusions to agree or disagree are affected. This effect is mediated by their level of technical and tacit knowledge. Peecher et al. (2010) similarly find that when supervisors intervene to provide guidance (i.e., supervisor intervention), subordinates include such guidance in their final inputs which are then incorporated into the supervisors' final judgments. Commerford et al. (2017) find that when a supervisor sends task instructions to a subordinate to select and personally test (rather than a peer test) (i.e., testing responsibility) a sample, they demonstrate information foraging behaviors (i.e., reacting to the immediately felt cost of information collection, such as time and effort, by collecting lower-quality audit evidence). Dennis and Johnstone (2018) find that when partners discuss the importance of effective and efficient fraud brainstorming and the importance of professional skepticism targeted at specific higher-risk accounts and in general throughout the audit, and emphasize fraud

brainstorming as a training/professional development opportunity (i.e., quality-differentiated leadership) during fraud brainstorm sessions, audit seniors' (but not managers) mental representations of fraud risks are improved. Teams that pre-plan fraud brainstorming by preparing written content (i.e., an agenda and checklist) for team members to review lead to higher-quality brainstorming sessions (Brazel et al. 2010). Finally, Blum et al. (2022) find that when supervisors provide positive [negative] "in-process" review feedback to subordinates about their efficiency and effectiveness on an initial accounts receivable audit task, subordinates perceive their reputation with that supervisor is positive [negative]. In a subsequent inventory observation task, they find that the rate of subordinates' requests for explanations and supporting documentation is higher for those with a positive reputation.

### ***Organizational Research on Message Treatment***

Message treatment refers to the selection and arrangement decisions a communicator makes regarding the message content, commonly referred to as message framing across disciplines (Iyengar 1991). Communicators may strategically select interesting content or structure assertions in a way that is more understandable and/or appealing to the message recipient, and even minor tweaks to words, storylines, and phrases can alter a message's meaning (Iyengar 1991; Cappella and Jamieson 1997). One might use an emphasis or equivalency frame to emphasize or make salient a particular topic, concept, or concern, respectively. An equivalency frame examines the use of different, but logically equivalent, words or phrases that cause individuals to alter their frame of thought and/or preferences (Druckman 2001). Kahneman and Tversky (1979) notably use an equivalency frame to examine how simple changes to words and phrases related to gains and losses impact an individual's risk aversion or acceptance. Emphasis framing "emphasizes a subset of potentially relevant considerations" such that "a speaker can lead individuals to focus on



these considerations when constructing their opinions” (Druckman 2001, 230). For example, Mayer and Tormala (2010) explore the “think” versus “feel” framing effect on advertisement persuasion and find the think frame is more effective when the individual’s attitude is cognitively (rather than affectively) oriented.

Specific to supervisor-subordinate communication, Vanderstukken et al. (2019) examine the difference between supervisors’ communication of goals versus visions to subordinates working in near versus far proximity. Results suggest communicating visions is most effective when the communicating parties are far, and should potentially be considered in the context of remote work. Relatedly, framing a message as a success rather than a failure is found to significantly impact subordinates’ perceptions of feedback (Kung and Scholer 2018). Finally, supervisors should consider how contextual factors, such as riskiness, issue involvement, and regulatory focus, might influence subordinates’ interpretation of the message frame (Ashford and Black 1996; Covey 2014).

### ***Audit Research on Message Treatment***

Audit research examining message treatment is scant. The few existing studies focus on emphasis framing or word choice in terms of fraud discussions, feedback, client identity, and performance. These studies are presented by topic area below.

Fraud brainstorming is a subcomponent of knowledge sharing examined in the audit literature, and is most effective when supervisors across levels (senior associates, managers, partners) and subordinates interact (Carpenter 2007; Brazel et al. 2010). Supervisors’ framing of fraud plays a critical role in subordinates’ ability and confidence to understand fraud risks and identify fraud occurrences. Carpenter and Reimers (2013) find that when partners emphasize professional skepticism by informing subordinates to maintain an appropriate level of skepticism

rather than to sufficiently comply with standards, be aware of costs, and work efficiently, subordinates more efficiently and effectively identify relevant fraud risk factors. Similarly, when a partner's communication focuses on the veracity of management's representations and/or the fallibility of the auditor's judgments rather than their personal view, auditors exhibit higher levels of professional skepticism (Harding and Trotman 2017).

A couple of studies examine framing in terms of review note feedback. Lambert and Agoglia (2011) use an emphasis frame to investigate how review note frame (i.e., documentation versus conclusion) affects reviewees' follow-through and performance effort on review notes. A documentation frame emphasizes the importance of making sure there is sufficient defensible documentation in the workpapers, and a conclusion frame emphasizes the importance of completing additional work to ensure appropriate conclusions are reached. Results of this study suggest that conclusion-framed review notes result in greater subordinate effort and performance, particularly when the review is performed timely. Andiola and Bedard (2018) also use an emphasis frame to examine the effect of goal framing on subordinate auditors' reactions to negative feedback. Goal framing is measured as the extent to which the supervisor emphasizes learning or performance goals when providing negative feedback. They find that subordinate auditors react to negative feedback with better attitudes toward coaching relationships and lesser attempts to manage supervisor's impressions when reviewers emphasize learning versus performing. In a follow-up experimental study, Andiola (2023) finds that novice auditors with stronger feedback orientations have more positive reactions to negative feedback when reviewers emphasize learning goals, but framing does not influence performance. Whereas, those with weaker feedback orientations react poorly regardless of framing, but learning goals improve their performance.

Concerning specific word choice, Bauer (2015) manipulates words in an investigation of

how auditors' client identity affects their agreeance with clients' preferred accounting treatments. Client identity is manipulated as the audit partner's use of "we"/"us" versus "they"/"them" to describe the client's relation to the audit team. Results show that these simple word choices impact how auditors identify with the client, and those who identify more strongly with the client agree more with the client's preferred accounting treatments. This effect is moderated by the salience of one's professional identity.

Finally, from a performance perspective, Robertson (2007) examines the effect of a supervisor's preference for either audit quality or meeting a deadline to complete fieldwork on a subordinate's reporting decision when facing deadline pressure. Results suggest subordinate auditors report information concerning a subjective materiality issue involving the capitalization of repairs and maintenance expense regardless of their supervisor's preference. Nelson et al. (2016) and Nelson and Proell (2018) use an emphasis frame where a partner communicates whether the engagement team should focus on issues of effectiveness (i.e., audit quality) or efficiency (i.e., audit costs). Findings indicate that supervisory subordinates are more willing to speak up when issues are aligned with their leader's concern (Nelson et al. 2016), and that they react with irritation to staff who raise concerns that misalign with the partner's previous emphasis (Nelson and Proell 2018). Lastly, Dong et al. (2021) use an emphasis frame to examine how a supervisor's concern about the level of sensitivity, high (i.e., overly sensitive) compared to low (i.e., insufficiently sensitive), toward accounting evidence affects a subordinate's risk assessment of accounting estimates. They find that subordinate auditors assign a higher (lower) risk of misstatement when their supervisor places a high (low) emphasis on evidence suggesting an accounting adjustment.

### ***The Message Research Agenda in Auditing***

This section identifies opportunities for future research to investigate how the message can

be used to improve audit quality. Research questions are discussed below and summarized in Table 1.1 Panel A. The studies reviewed above indicate informal discussions, feedback, and demonstrating support when allocating tasks, improve knowledge sharing, learning, and/or performance. However, these studies identify only a few contextual factors that may improve audit quality (e.g., team-orientation, coaching quality). Future research should explore whether additional communication choices are beneficial (e.g., vague versus detailed messages to promote proactivity), and whether such choices are consistently beneficial during busier periods of work (i.e., busy season; e.g., Jefferson et al. 2023). Further, beyond identifying that conveying stress or frustration and intervening to share opinions or preferences can impair audit quality, very little is known about supervisors' poor communication choices (e.g., inherent biases) which could be heightened during busier work periods. Future research should also examine how poor communication choices may negatively affect subordinates' behaviors, and identify strategies that can be implemented to buffer their effects.

**RQ1:** What additional supervisor communication practices exist that may be strategically implemented to improve audit quality? How do supervisors' communication choices differ between normal and busier work periods? What poor communication choices do supervisors routinely make when communicating with subordinates? How do supervisors' poor communication choices affect audit quality (e.g., subordinates' learning, professional development, organizational commitment, relationship development)? What contextual factors exist to offset the negative effects of supervisors' poor communication choices?

A review of the message also indicates that treatment (i.e., framing) significantly impacts subordinates' interpretation of a message and influences their behavior. Yet, audit research examining this topic is limited, and many techniques, particularly those pertaining to word choice and punctuation (e.g., think versus feel frame, exclamation point versus period) are unexplored. Likewise, the effectiveness of supervisor-subordinate communication is yet to be examined in several audit contexts (e.g., project management, work delegation). Additional research is needed

to understand the effect of additional framing techniques, and how new and previously examined content and treatment choices affect other audit areas.

**RQ2:** How does a supervisor's treatment of words and punctuation affect subordinate behaviors? What additional framing techniques are effective in the audit context? How do other framing techniques (e.g., other goal types or emphases) impact subordinate auditors' judgment and decision-making? What are the downstream effects of supervisors' framing techniques on subordinates' future communication practices?

**RQ3:** How do supervisors' communication choices affect audit contexts other than those previously (and more extensively) examined (e.g., project management, delegation of work, relationship development)? Do supervisors' communication choices consistently or inconsistently affect subordinates' behaviors in varying contexts?

Finally, the message is perhaps one aspect of communication most significantly affected by auditors' increased reliance on CMC as important nonverbal cues (e.g., body language, tone of voice) that typically accompany face-to-face verbal messages are reduced and/or absent (Bauer et al. 2021). For example, exhibiting cues that are inviting and that demonstrate a desire to have an open line of communication may be particularly challenging. Theory suggests subordinates are now likely to search for social context cues within a message to reduce uncertainty, relationally identify, and better understand a message's content (Byron and Balridge 2007; Strauss and Kelly 2012; Gkorezis et al. 2015; Baroudi et al. 2019).<sup>11</sup> As a result, supervisors have an increased responsibility to make intentional content and treatment choices that are meaningful and impactful when using CMC. Thus, it is important to understand whether previously examined message choices consistently affect subordinate behaviors when working apart, and whether new or alternative strategies are more appropriate and effective.

**RQ4:** What alternate or additional message content and treatment practices/strategies can supervisors implement to improve subordinates' professional development, knowledge sharing, and relationship development when working apart? How have supervisors' communication practices changed to accommodate working apart from subordinates? How do

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<sup>11</sup> Research suggests features, such as punctuation marks, capitalization, bold font, emojis, and time lag of response, are ways to express emotion in a text-based message (Walther and D'Addario 2001; Byron and Balridge 2007; Derks and Bakker 2010; Filik et al. 2015).

supervisors communicate emotions to facilitate relationship development and create social bonds when working separately? How do supervisors' previously explored communication practices translate to the contemporary audit environment?

[INSERT TABLE 1.1]

## **The Channel**

### ***Organizational Research on the Channel***

The communication channel is the medium through which a message travels which includes communicating face-to-face, via audio (e.g., telephone), text (e.g., letter or memo), or a combination of each (Mcquail and Windahl 2013). Over the years, communication channels have evolved to include various types of CMC (e.g., email, video messaging, instant messaging) which are often used by supervisors to interact with their subordinates at work, especially when working in different locations (Derks and Bakker 2010; Kramer 2017). As such, I primarily focus on types of CMC in my review of the message channel.

CMC refers to the various synchronous and asynchronous computer networked communication channels that are either text-based (e.g., email, instant messenger) or audio and/or video (e.g., Zoom) (Lee and Oh 2015). The use of CMC plays an important role in organizational efficiency and effectiveness and its use has grown tremendously to facilitate convenient team interactions, particularly when individuals are working apart. For decades, email has been recognized as a primary way for supervisors to distribute information to their subordinates (Derks and Bakker 2010). However, many organizations have more recently introduced other mediums, such as instant messaging, video conferencing, and discussion boards to interact (Sidgman et al. 2021; Brazel et al. 2022). Supervisors tend to appreciate the convenience of these mediums; however, research suggests greater reliance on such technologies may weaken its benefits as individuals are more prone to miscommunications and have difficulty forming social bonds

(Cornelius and Boos 2003; Derks and Bakker 2010). Employees also experience difficulties coordinating and collaborating with peers, making face-to-face interactivity superior to CMC (Sirait and Zellatifanny 2020).

Of primary concern are the varying levels of social presence and media richness associated with alternative modes of CMC. Social presence theory (SPT) posits that the awareness of those with whom one is communicating is dependent on the communication method (Short et al. 1976). Face-to-face communication is considered to have the greatest level of social presence, while text-based CMC, such as email, significantly reduces or eliminates the ability to observe critical social context cues (e.g., tone of voice, hand gestures, and facial expressions) (Byron and Balridge 2007; Byron 2008). Similar to SPT, media richness theory (MRT) ranks the richness of each medium and proposes that differing objective characteristics (i.e., immediacy of feedback, language variety, number of cues, and personalization) of the communication channel have implications for individuals' subsequent behavior (Daft and Lengel 1986). For example, video communication ranks highest in richness because it allows individuals to observe both visual and audio cues, which may only incrementally reduce performance relative to face-to-face interactions. Research examining video platforms, such as Zoom, find its user-friendliness and additional features (e.g., dialogue boxes) make it suitable and attractive to professionals (Yuni Utami 2020). However, there are still concerns about engagement during video meetings as users are more easily distracted and have a greater ability to multi-task than when meeting face-to-face (Sayem et al. 2017; Serhan 2020). Recent research also identifies "virtual fatigue" as a side effect of participating in frequent video calls which may also reduce engagement over time (Shoshan and Wehrt 2021). Others describe video calls as a forced interaction that interferes with overall productivity (Okabe-Miyamoto et al. 2021).

In addition to video, email is one form of text-based CMC frequently used by supervisors at work; however, its use reduces one's ability to share and/or observe nonverbal cues. This is concerning for several reasons. First, as a result of limited social presence, text-based CMC is a source of many miscommunications and miscues at work (Hindi et al. 2004; Katz 2012). Emails are not intended to communicate lengthy, complex, and ambiguous topics; such information should be reserved for face-to-face meetings, video, or phone calls (Rainey 2000; Dickey et al. 2006). However, given the time pressures, workloads, and unique circumstances of each workday, supervisors often still choose to send inadequate and ineffective emails. One common root cause is a communicator's tendency to craft emails that only meet their personal needs, customs, and capabilities; overlooking the additional context needed to support the receiver's understanding (Derks and Bakker 2010; Jackson and van den Hoof 2012). Sending emails that fail to provide adequate context, especially when communicating ambiguous subject matter, can result in miscommunication, and may lead to tension in the workplace and cause recipients to approach their work with an incomplete understanding (Jackson and van den Hoof 2012).

Instant messaging is another form of text-based CMC more recently used to interact at work. Many employees value the further ease, flexibility, and informal nature of instant messaging; however, research to date argues these features also make instant messaging disruptive which may increase work inefficiencies (e.g., an employee takes longer to complete a task) (Gonzalez and Mark 2004; Mark et al. 2005; Ou and Davidson 2011). Nonetheless, instant messaging is beneficial as it increases team communication, and when strategically used, facilitates knowledge sharing, heightens team performance, and improves connectivity and



collaboration (Ou 2010; Quan-Haase et al. 2017).<sup>12</sup>

From a performance perspective, results are also mixed. While some studies find performance across CMC mode does not vary, others suggest anonymity in completely digital groups increases effort and improves performance (Klein et al. 2007). For example, Simon (2006) examines performance on three tasks (idea generation, intellective, and judgment) among 75 dyads of psychology students working through one of three modes of communication (instant messaging, video conferencing, and face-to-face) and finds no variation in performance. However, participants using instant messaging were the least satisfied with the quality of their interactions. Alternatively, the social identity model of deindividuation (SIDE) suggests individuals are more trusting and likely to conform to group norms when using CMC in contexts other than business (e.g., Facebook) (Tanis and Postmes 2005; Perfumi et al. 2019).

### ***Audit Research on the Channel***

Historically, auditors core to the engagement team have primarily worked face-to-face to improve audit quality. This work structure is quickly evolving to support greater flexibility and work-life balance (McCabe 2021). As a result, auditors more frequently rely on CMC to interact. Some audit research examines how certain CMC affects audit quality, particularly in the context of electronic review notes, fraud brainstorming, and task performance (See Appendix A). These studies are discussed by topic below.

Electronic review notes are one form of CMC frequently used in the audit profession that allow supervisors to provide feedback and training to their staff (Andiola 2014; Lambert and Agolia 2011). Several studies investigate the implications of providing review note feedback

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<sup>12</sup> Additional forms of CMC (e.g., discussion and bulletin boards) are being introduced and used in professional settings to interact; however, very little research examines the effectiveness of these mediums. I provide suggestions for future research to evaluate the effectiveness of these CMC platforms.

electronically or face-to-face, and find face-to-face review note discussions strengthen supervisor-subordinate coaching and mentoring relationships (Andiola and Bedard 2018; Andiola et al. 2019), improve subordinates' learning and reduce the frequency of back and forth communication (Ater et al. 2019), and improve team performance (Favere-Marchesi 2006). Furthermore, when supervisors communicate prior to task completion that they intend to discuss review notes face-to-face, subordinates are more concerned with audit effectiveness, produce higher quality judgments, and are less likely to be influenced by prior year workpapers (Brazel et al. 2004). Similarly, Miller et al. (2006) find subordinates are motivated to improve when feedback is accompanied by a verbal discussion. Subordinates further benefit when such discussions are conducted interactively (Payne et al. 2010). Alternatively, subordinates anticipating a solely electronic review perform similarly to those who receive no review feedback at all (Brazel et al. 2004), and this increases the reviewer's burden to recognize and compensate for the preparer's lower-quality documentation (Agoglia et al. 2009). Despite these negative implications, reviewers are prone to use an electronic review format for its convenience (Agoglia et al. 2010), particularly during busier periods of work, when the risk of misstatement is low, and when preparers are above-average performers (Agoglia et al. 2010; Gimbar et al. 2018). Lastly, a couple of studies examine the timing of feedback finding that failure to provide feedback concurrently or immediately after task completion impairs auditors' performance (Favere-Marchesi 2006), and delaying a review lowers subordinate effort relative to when a review is timely (Lambert and Agoglia 2011).

Audit research also examines the effect of using CMC to conduct regulatory required fraud brainstorming discussions. Though these studies, including those that examine performance in the following paragraph, examine CMC effectiveness in team (rather than supervisor-subordinate) interactions, they are telling of the outcomes that may result from supervisor-subordinate

interactions, and are relevant for purposes of this review. Lynch et al. (2009) find the effectiveness of team brainstorming is significantly higher when conducted electronically compared to face-to-face. Chen et al. (2015) further examine how hierarchical nominal versus interacting teams brainstorming electronically perform fraud tasks of varying complexity. They find nominal teams outperform interacting teams in each task and attribute this to social loafing in less experienced auditors. In a second study examining the effectiveness of structured (i.e., organizing idea inputs into organized trees and displaying ideas by categories or topics) compared to non-structured (i.e., only placing idea inputs in a chronological sequence) electronic brainstorming platforms, they find those using a structured platform do not outperform their colleagues (Chen et al. 2022).

Finally, a couple of studies expand beyond comparing a single form of CMC to face-to-face interactions by considering alternative modes of electronic communication. Murthy and Kerr (2004) find teams using a bulletin-board tool better exchange and process unique fraud information than teams using a chat tool or interacting face-to-face. More recently, Sidgman et al. (2021) examine the performance of multitasking audit teams across alternative modes of communication (i.e., face-to-face, discussion board, and chatroom). Results suggest those in the face-to-face condition better identify internal control deficiencies than those in the CMC conditions; however, auditors prefer and are familiar with, chatroom features because of its similarity to text messaging (Brazel et al. 2022). Lastly, Kuselias et al. (2023) examine the joint effect of subordinates' proximity to their supervisor (where distributed proximity requires greater reliance on CMC to interact) and assignment length on subordinates' reliance on supervisors' preferences during an inventory obsolescence task. They find that distributed subordinates are less influenced by their supervisors' preferences relative to co-located subordinates when they are on temporary assignments. However, distributed subordinates react similarly to co-located subordinates when

on a continuing assignment.<sup>13</sup>

### ***The Channel Research Agenda in Auditing***

This section identifies opportunities for future research to investigate how supervisors' greater reliance on CMC affects audit quality. Research questions are discussed below and summarized in Table 1.1 Panel B. Audit research examining the channel yields mixed results. Specifically, CMC is effective in conducting fraud brainstorming; however, audit quality is reduced when supervisors solely conduct electronic reviews. These findings indicate that CMC effectiveness may be situational and contextual, and subordinates' behavioral responses may vary by the supervisor's choice of communication channel. Yet, there is limited audit research in this area. For example, we know very little about CMC in other critical aspects of an audit, such as coaching and developing subordinates outside of the review process, conveyance of task instructions, or project management. In addition, auditors now have several CMC channels through which they can interact (e.g., email, instant messaging, Zoom, discussion boards, audit workpaper software) (Sidgman et al. 2021; KPMG 2020). Thus, it is necessary to gain an in-depth understanding of how CMC is used in practice, including the downstream consequences to audit quality.

**RQ5:** How do supervisors' CMC choices vary with audit context (e.g., task instructions, performance feedback, project management)? What CMC choices do supervisors and subordinates prefer and/or perceive are most appropriate/effective in various contexts? Which types of CMC (e.g., video conferencing, email, instant messaging) are most appropriate and effective in specific situations (e.g., distributing task instructions, providing feedback) to improve audit quality?

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<sup>13</sup> Existing audit research examining the use of CMC in auditor-client interactions also finds its use can impair auditor judgment and decision-making and professional skepticism (Bennett and Hatfield 2013, 2018; Durkin et al. 2021), and choices regarding the communication channel (i.e., email versus face-to-face) not only impact the content (i.e., personal bias) of the receiver's response but also the receiver's perceived sense of urgency to respond (Saiewitz and Kida 2018; Saiewitz, 2018). These results suggest that CMC may not always facilitate the level of communication needed to solve unique and complex problem-solving tasks, and further motivate the need to examine CMC between supervisors and subordinates.

It is also apparent from my review of the communication literature that greater reliance on CMC naturally increases the propensity for miscommunications to occur. This is partly because supervisors tend to over rely on their abilities and use themselves as a reference point when crafting messages (Derks and Bakker 2010). In addition, greater reliance on CMC may lead supervisors to make careless communication choices which could exacerbate miscommunications when working remotely. Indeed, communication research suggests there is an inherent risk that supervisors may inappropriately use CMC, and disengage from or avoid using video calls when they experience virtual fatigue or are busy (e.g., Shoshan and Wehrt 2021). Yet, these topics are unexplored in audit. Future research is needed to examine how miscommunications between supervisors and subordinates occur and affect audit quality. Future research should also investigate whether and how features unique to the audit profession (e.g., workload, cognitive demands) contribute to miscommunications at work.

**RQ6:** How effective are supervisors at recognizing their own communication abilities? How often do subordinates misunderstand their supervisors' messages and/or misinterpret their feelings about a message? To what extent can miscommunications be attributed to using CMC when working apart? What effect do miscommunications/misunderstandings have on audit quality? How do supervisors perceive miscommunications affect various aspects of audit quality (e.g., relationship development, performance, efficiency)? Does the frequency of miscommunication vary by the type of CMC used?

**RQ7:** How do workload, pressure, fatigue, and busyness influence a supervisor's CMC choice? How do these factors influence a supervisor's communication effectiveness and/or lead to miscommunication? What aspects of CMC contribute to supervisors' virtual fatigue and resultant poor communication choices? How does supervisors' virtual fatigue affect subordinate auditors' behaviors and performance outcomes?

While increases in remote work may yield some improvements (e.g., reductions to overhead, increases in work flexibility), additional research is needed to understand how supervisors' reduced ability to convey nonverbal cues when using CMC may negatively affect audit quality. Audit research suggests declines in subordinates' ability to acclimate to professional

norms and delays in supervisor-subordinate relationship development when working remotely (Bailey et al. 2023; Tighe 2024). Yet, little attention is given to how these symptoms of remote work affect subordinates' personal and professional outcomes. Audit research should empirically examine how CMC affects subordinates' socialization, relationship development, work-life balance, and performance.

**RQ8:** How does a supervisor's CMC choice influence the subordinates' socialization process with the team and the firm? How do a supervisor's CMC-related choices (e.g., interacting on Zoom with their cameras on or off) affect their ability to build a relationship with a subordinate and in turn affect subordinate behaviors? How do these choices affect subordinate auditors' behaviors (e.g., proactivity, professional skepticism, accountability, relationship development) and feelings about work (work-life balance, organizational commitment, job satisfaction)? How do supervisors' CMC choices influence subordinates' subsequent communication choices?

Finally, future research should examine whether choices around the message content and treatment can moderate the potential negative effects of using CMC on subordinates' behavior, and investigate the efficacy of specific CMC tools (videos on/off, emojis) to improve audit quality. For example, to improve accountability, supervisors may consider communicating clear expectations for subordinates to explain or justify their conclusions during virtual meetings (Bowrin and King 2009), encourage subordinates to perform well, and remind subordinates of performance metrics (Kaplan and Lord 2001).

**RQ9:** What message content and/or treatment communication strategies that are unique to using CMC are useful for improving the effects of CMC on subordinate behavior and audit quality? What specific CMC functionality choices (e.g., video conferencing camera on versus off) are useful to improve the effects of CMC on subordinate behaviors and audit quality?

## V. CONCLUSION

Supervisor-subordinate communication is integral to performing high-quality audits. To meet regulatory requirements, supervisors should convey messages that make subordinates feel comfortable with behaving proactively (e.g., asking questions, seeking information, speaking up) (Nelson et al. 2016; Kadous et al. 2019), and communicate information in a manner that facilitates

subordinates' learning and performance improvement (Westermann et al. 2015). However, insufficient recognition is given to understanding how supervisors' communication choices improve or hinder subordinate auditor behavior. An interdisciplinary review of the communication literature suggests supervisors' communication choices affect subordinate performance, proactivity, knowledge acquisition, professional development, organizational acclimation, and relationship building (Grant and Ashford 2008; Parker and Wang 2015; Meyers 2016; Kramer 2017). Results of organizational and audit research alike further indicate that communication is complex and nuanced where simple adjustments to words and phrases, and using "richer" forms of CMC may drastically change audit subordinate behaviors. Additional research is needed to understand the interplay of these various communication factors in the audit environment (e.g., the interactive effect of the message, source, and context-Whiting et al. 2012), and to determine how supervisors can practically implement effective communication strategies.

As noted in this review, several audit studies address downward communication from supervisors to subordinates; however, investigation of the communication construct tends to be indirect, and an abundance of research opportunities still exist. Findings to date emphasize the importance of communication, but audit research should explore additional communication factors that may improve supervisor-subordinate interactions and audit quality (e.g., supervisor communication practices that motivate subordinate proactivity). Furthermore, very few studies consider how results might differ in a remote environment. The evolution of communication in this way presents an area where focus and replication are warranted to test the boundary conditions and generality of existing results (Salterio et al. 2022). I propose nine research questions focused on gaining an in-depth understanding of the message and channel communication practices in the

evolving audit environment.<sup>14</sup> These research questions are intended to extend academic literature on supervisor-subordinate communication in audit.

In conclusion, audit researchers have the opportunity to use a professional, knowledge-intensive setting to extend and contribute to the understanding of communication's role in performance and work quality, and to further develop theories to explain the results. Successful research will depend on devising strong qualitative and experimental studies that will appropriately capture the individual roles of supervisors and subordinates involved and communication in the audit setting.

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<sup>14</sup> Though the focus of this review is to identify opportunities for future research regarding the message and channel aspects of communication, future research may also examine how traits of the communicator (e.g., experience, personality) affect their communication choices.



## **Part II: Examining Supervisor and Subordinate Auditors' Computer-Mediated Communication Practices**

### **I. INTRODUCTION**

Increases in remote work within the public accounting profession to support more widespread geographic team distribution have fundamentally changed the way audit supervisors and subordinates interact (Bauer et al. 2021; McCabe 2021). In particular, auditors now extensively use a variety of technologies to communicate (termed computer-mediated communication “CMC”), which is a new norm that firms intend to support going forward (Bauer et al. 2021; Tighe 2024). As a result, many firms are investing in additional technologies that may enhance auditors’ daily communication experiences (e.g., KPMG 2023; PWC 2023), yet we know very little about the current types of CMC supervisor and subordinate auditors use to communicate when working remotely. Examining supervisor and subordinate auditors' current CMC practices could help to guide firms’ future investment decisions and can provide important insight about how alternative mediums are being used to inform future research. Thus, the objective of this study is to investigate the types of CMC in use by supervisors and subordinate auditors to facilitate supervisor-subordinate communication when working remotely.

I conducted semi-structured interviews with 32 practicing supervisor (17) and subordinate (15) auditors from Big 4, national, and regional public accounting firms to examine their lived communication experiences when working apart from one another (i.e., remotely).<sup>15</sup> My interviews reveal that supervisor and subordinate auditors use several synchronous and asynchronous mediums to interact. Specifically, they use virtual audit rooms, video conferencing,

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<sup>15</sup> Jefferson (2024c) examine how supervisor-subordinate communication unfolds when working remotely and how auditors adapt their communication practices through the lenses of psychological needs and communication accommodation theory. I utilize a subset of interview data collected that are not part of the Jefferson (2024c) study to specifically examine which communications practices are currently used, and when and why they are used by supervising and subordinate auditors. In so doing, I use different data and apply a positivist lens of understanding current audit practice. Splitting data gathered from one field study is a common approach to properly analyze the rich data gathered from interviews (e.g., Bills et al. 2018 and Bills et al. 2021; Hux et al. 2023 and Hux et al. 2024).

electronic review notes, email, instant messaging, and discussion boards to communicate, and the appropriateness of each medium tends to depend on the personal preferences of the supervisor and/or characteristics of the content being communicated. For example, most supervisors [subordinates] prefer using [receiving] a combination of email and video conferencing to communicate lengthier, more complex information like task instructions to reduce the likelihood of miscommunications. Alternatively, instant messaging and video conferencing are most commonly used to communicate casually, and informally, and tend to be unfiltered given auditors' ability to more easily emote (e.g., emojis or gifs) and respond rapidly. These mediums are also frequently used to ask and respond to quick, less complex questions. Importantly, this finding reveals that technological advances make instant messaging platforms more versatile allowing for both personal and less personal interactions between team members. Finally, though many subordinates believe virtual audit rooms improve knowledge sharing and their professional development, supervisors often perceive that virtual audit rooms are awkward, distracting, and a waste of time suggesting that some "richer" mediums though helpful are not always desirable.

This study makes important contributions to practice and research. First, public accounting firms intend to support remote work indefinitely, and as a result are investing in communication technologies to improve auditors' remote work experiences (e.g., KPMG 2023; PWC 2023). By examining supervisor and subordinate auditors' most and least desired types of CMC, as well as those that are most suitable to facilitate various contextually different interactions, I provide insight that can help firms assess current supervisor-subordinate remote communication practices and develop guidance and training for supervisors in best practices. Second, distributed teams must rely on CMC despite its' challenges and potential to impact audit quality, sparking academic, practitioner, and regulator interest in understanding the communication practices of distributed

teams (PCAOB 2013; Downey and Bedard 2019; Downey et al. 2020; PCAOB 2020). By examining the current types and uses of CMC in audit, I identify commonalities and uncover inconsistencies in how CMC is applied providing an opportunity for academics to design more precise and generalizable studies in the future.

## **II. BACKGROUND**

### **Communication in the Evolving Audit Environment**

Supervisor and subordinate auditors have traditionally worked together in a shared space (e.g., the audit engagement room) where continuous communication to collaborate and knowledge share naturally occurs to facilitate audit efficiency and effectiveness (Vera-Munoz et al. 2006; Westermann et al. 2015; Tighe 2024). However, the increasing use of offshore and component auditors and the COVID-19 pandemic have drastically increased the prevalence of remote work (e.g., fully remote, hybrid) (Downey 2018; Bauer et al. 2021). As a result, auditors now extensively use computer-mediated communication (CMC) to interact. This may include the use of more traditional forms of CMC, such as email and video-conferencing, and the adoption of newer forms of CMC, such as chatrooms and virtual audit rooms, that allow for more convenient interactions when supervisors and subordinates are working apart (e.g., from home, the client, or the office) (e.g., Dannemiller 2023). Yet, relying on CMC involves increased coordination and, in some cases, requires greater monitoring to improve subordinate accountability, which is inherently challenging (Downey and Bedard 2019; Downey et al. 2020).

To date, prior research examining CMC within teams focuses on tools that facilitate fraud brainstorming and the provision of feedback (Jefferson 2024a). For instance, teams that fraud brainstorm electronically perform better than those brainstorming face-to-face (Lynch et al. 2009), and teams using a bulletin board better exchange and process unique fraud information than teams using a chat tool or interacting face-to-face (Murthy and Kerr 2004). Yet, while these studies

suggest CMC improves performance, audit research examining electronic review notes suggests contrary results. For instance, several studies find face-to-face interactions relative to CMC improve performance in the context of review note discussions (Andiola and Bedard 2018; Andiola et al. 2019), and subordinate performance and learning (Brazel et al. 2004; Favere-Marchesi 2016; Ater et al. 2019). Further, supervisors' review effectiveness is negatively affected by subordinates' lower-quality judgments when anticipating an electronic review (Agoglia et al. 2009). Collectively, these studies yield mixed results, making it difficult to interpret the true benefits and drawbacks of specific CMC types. Thus, while Jefferson (2024c) provides a deep examination of the complexities of auditor supervisor-subordinate communication and the downstream effects, it is important to also capture and document the types of CMC in use and how and when supervisors and subordinates use various forms of CMC.

To guide my understanding of the mediums audit supervisors and subordinates use to facilitate their remote interactions, I leverage media richness theory which proposes that each communication medium has differing objective characteristics, including immediacy of feedback, language variety, number of cues, and personalization (Daft and Lengel 1986).<sup>16, 17</sup> These characteristics in turn vary each medium's situational and contextual appropriateness which can differentially affect a communication receiver's behavioral response. For example, compared to other types of CMC, video conferencing ranks highest in richness because it allows for fluid discussion and the ability to observe both visual and audio cues which may only incrementally

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<sup>16</sup> Immediacy of feedback is the extent to which a medium enables users to give rapid feedback on the communication they receive. Language (or symbol) variety refers to the number of ways in which information can be communicated. Number of cues refers to number of social context cues the medium allows a communicator to share and message receiver to observe. Personalization refers to the extent to which a communicator is able to make a message more personable (Dennis and Valacich 1999; Dennis et al. 2008).

<sup>17</sup> Social presence theory posits (SPT) that the awareness of those with whom one is communicating is dependent on the communication method (Short et al. 1976; see Hawkins and Vandervelde 2023 for a review of SPT in audit). Similarly, media richness theory ranks the richness of each medium and proposes that differing objective characteristics of the medium varies individual's subsequent behaviors (Daft and Lengel 1986). In this paper, I rely on MRT rather than SPT because I specifically focus on how CMC itself is used operationally, rather than the downstream impact on another's behaviors.

reduce performance relative to face-to-face interactions (e.g., Simon 2006). Alternatively, text-based mediums such as email or discussion boards reduce one's ability to share and/or observe nonverbal cues and rapidly respond. Unfortunately, the lack of social context cues and prolonged response times associated with these mediums can make it difficult to convey clear messages and could even send unintended messages, especially when communicators are unfamiliar (Walther and D'Addario 2001; Dennis et al. 2008; Boutet et al. 2021). Because miscommunications like these are likely to increasingly occur between supervisors and subordinates as the pace, volume, and complexities of interpersonal CMC at work continue growing and evolving, there is a need to examine the types of CMC currently used by auditors and the context of use to facilitate effective supervisor-subordinate communication. Therefore, I ask:

***Research Question:*** How is CMC used in audit supervisor-subordinate communication?

### **III. METHODS**

This section describes the participants, data collection, and data analysis techniques used to conduct my interviews. Given the complexities associated with examining communication within organizations (Stubbe 2017), I use a qualitative, semi-structured interview approach to obtain detailed, descriptive information (Miles and Huberman 1994) about auditors' lived communicative experiences (e.g., Hirst and Koonce 1996). This approach also provides me “inherent flexibility” (e.g., Gibbins and Jamal 1993; Gendron 2009; Radcliffe 2010) to guide the interview using predefined, theory-based interview questions, while also allowing the interviewee to reflect upon and describe the subject matter that they deem most relevant and important (Malsch and Salterio 2016; Power and Gendron 2015; Kenno et al. 2017).

#### **Participants**

I conducted individual interviews with 17 audit supervisors (11 senior associates, 3 managers, and 3 senior managers) and 15 audit subordinates (associates) from regional, national,

and Big 4 firms.<sup>18</sup> Supervisor participants had an average of 4.9 years of experience and subordinate participants had an average of 1.5 years of experience. Five of the subordinate participants were current staff auditors to four of the supervisor participants, and two supervisors were subordinates to higher-level supervisors. Thirty-four percent of participants are male. At the time of my interviews, all of the participants primarily worked remotely from home, apart from their supervisor or subordinate. See Table 2.1 for a summary of participant information.<sup>19</sup>

[INSERT TABLE 2.1 HERE]

### **Instrument and Data Collection**

I developed my research instrument based on the supervisor-subordinate communication and CMC literature (e.g., Byron 2008; Meyers 2016; Bonaccio et al. 2016; Kramer 2017), as well as informal discussions with one senior manager and one senior associate from two Big 4 public accounting firms. The instrument was piloted with one senior manager (a supervisor) and one associate (a subordinate), both from Big 4 public accounting firms. The final instrument contains seven semi-structured interview questions about subordinates' [supervisors'] communication experiences with their supervisor [subordinate] when working in a different physical location than their supervisor [subordinate].<sup>20</sup> Each interview was conducted remotely via Zoom from late May 2022 through early September 2022, with each interview averaging approximately 45 minutes in

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<sup>18</sup> I obtained approval from the Institutional Review Board for Human Subjects at my University. To protect the interviewees' identities, I replace the participants' names with an identifier (e.g., Sub-1 or Sup-1).

<sup>19</sup> I conducted interviews until reaching saturation; i.e., the later interviewees provide consistent information as was provided by the prior interviewees, with no new information learned (e.g., Malsch and Salterio 2016; Morse 1995).

<sup>20</sup> All participants were provided with the interview protocol at least 24-48 hours prior to the scheduled interview to allow them to reflect and prepare for the interview, and so that I could appropriately allocate interview time to valuable discussion rather than lengthy silent "wheel-spinning". See Appendix B for the complete list of interview questions. Responses to the following questions were used in this paper: 1) Tell me what it's like communicating with your supervisor when working in two physically different locations, 2) What is most difficult about communicating with your supervisor/subordinate when you are working in different locations? What challenges have you experienced?, In what ways, if any, do you feel you misunderstand your supervisor's messages (e.g., task instructions, feedback) to you when working in different locations? Tell us about a specific experience, and 4) If you could change anything about the current communication between you and your supervisor/subordinate when you're working in two different locations, what would you change? Why?

length (ranging from 22 to 60 minutes). All participants consented to be recorded; transcription responsibilities were shared between myself and a third-party transcriber.<sup>21</sup>

### **Coding and Data Analysis**

My approach to data analysis is consistent with the positivist approach described in the qualitative methods literature (Power and Gendron 2015; Malcsh and Salterio 2016; Yin 2017). I analyzed the interviews iteratively to develop a first-stage coding scheme (Patton 2015) to identify the types of CMC in use and the context of use in the remote audit environment. I use NVivo to code each interview transcript and to identify quotes that truthfully convey the sentiments of my respondents (Power and Gendron 2015). While I incorporate some quotes throughout the results, positivism primarily presents itself in a descriptive form through tabled counts of observations that reflect the mechanics of the process being examined. I and another researcher coded eight of the 32 transcripts (25 percent) using the agreed-upon final coding scheme achieving an inter-coder agreement of 0.96 (Kappa = 0.65), signifying agreement; Landis and Kock 1977). The researchers successfully reconciled any differences. Given the high inter-coder agreement, one researcher applied the final coding scheme to the remaining interview data in NVivo to aggregate and organize interviewees' responses by categories (e.g., Westermann et al. 2015; Dodgson et al. 2020). The other researcher reviewed the coded data, noting no issues in the responses coded to each category. To prevent researcher bias and enhance the reliability of my findings, I sent each participant a copy of their transcript to attest to its accuracy. No respondent objected to the contents of their transcript.

## **IV. RESULTS**

Supervisor-subordinate CMC lies on a continuum from rich to lean based on the

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<sup>21</sup> I transcribed the first 11 interview recordings, leveraging the transcription output from Zoom. I then engaged a third-party transcription service to transcribe the other 21 interview recordings. Myself and another researcher reviewed all transcriptions for accuracy before using them for data analysis.

communication technology's capabilities in terms of its feedback immediacy, language variety, number of cues, and personalization (Daft and Lengal 1986; Bauer et al. 2021). In audit, this includes a variety of synchronous and asynchronous mediums including virtual audit rooms, video conferencing, instant messaging, email, electronic review notes, and discussion boards. The large number of CMC options provides supervisors and subordinates choice in the type of medium or combination of mediums used to communicate, which is often person, situation, and/or context-specific and can vary according to how useful auditors perceive each medium to be (see Table 2.2 for frequency counts of each CMC type grouped by whether participants described its use positively, neutrally, or negatively). Examination of the frequency counts suggests that both supervisors and subordinates perceive video conferencing and instant messaging favorably, but have more unfavorable discussions of video conferencing than instant messaging. An interesting result, given that one might expect more miscommunications to occur with instant messaging. Importantly, these results highlight the reduced use of email for communication in general and also indicate that other CMC methods (e.g., e-calendars and discussion boards) are increasing in use. In the sections below, I discuss how each medium is used in audit practice and auditors' perspectives on the functionality and usefulness of each.

[INSERT TABLE 2.2 HERE]

### **Virtual Audit Rooms**

Several participants comment that a virtual audit room is the CMC option that can most closely resemble an audit room. Intended to simulate a traditional in-person audit room experience, a virtual audit room is an open forum that allows engagement team members to exchange nonverbal cues (via a camera function) and rapidly exchange thoughts (via chat and voice functions) for an extended period (i.e., several hours) (see Dannemiller 2023). One supervisor



explains, “We use a virtual audit room sometimes, which is lovely...If someone has a question, they’ll just unmute and say hey senior, can you help me with this. The senior is there and can hear. It’s the best we can do to kind of simulate that audit room type of environment” (Sup-15). Another supervisor expresses the benefit of scheduling a recurring virtual audit room for subordinates’ professional development.

The virtual audit room was the biggest thing that helped me [to develop my subordinate]... My partner suggested that we [the supervisor and subordinate] do an audit simulation room. So, we sat on Teams calls for a few hours a day. That helped tremendously because it opened the subordinate up to... asking questions and feeling more comfortable to do that. Honestly, that [virtual audit rooms] changed the game. (Sup-6)

Although some perceive virtual audit rooms are beneficial to overall team effectiveness, others contrarily perceive that they are disruptive, awkward, and a waste of time. Interviewees express that this is likely because many team members join with their cameras off and remain muted making it difficult for team members to optimize the virtual audit room space. For instance, “It's not the same [as an in-person experience] because everybody is on mute and it's kind of awkward. ...it [the virtual audit room] just ended up being awkward and it [virtual audit room] wasn't taken advantage of as much as possible” (Sup-3). Moreover, due to having a heavier workload, supervisors may only briefly join the virtual audit room (e.g., for a 30-minute increment to check-in) leading subordinates to solely develop stronger peer-to-peer relationships rather than an accompanied strong supervisor-subordinate relationship. As a result, many contend that geographically distributed teams now rarely use virtual audit rooms. Instead, supervisors and subordinates rely on one-on-one video conferencing to facilitate their rich interactions.

These opposing perspectives seem to form due to how virtual audit rooms are implemented and the involvement of team leadership in setting expectations of their use to ensure effectiveness. Future research should examine factors that inhibit and contribute to the effective use of virtual

audit rooms and the effects on subordinate learning and performance.

### **Video Conferencing**

Both supervisors and subordinates express that they enjoy the richness and synchronicity of video conferencing (or “video calls”) to facilitate their one-on-one interactions through platforms like Microsoft Teams and Jabber. Specifically, video calls provide an opportunity for supervisor and subordinate auditors to engage in fluid conversations about both work- and non-work-related topics (e.g., tasks, gossip) in a closed, individualized virtual space. Many participants express that the ability to chat casually in this way improves professional- and relationship-development, which is particularly important for both team and audit efficiency and effectiveness when working remotely (Jefferson 2024c). For example. “Professional development wise, the best way I’ve learned remotely has been hopping on a [video] call with a supervisor and having them share their screen or show me something in that way” (Sub-4). Supervisor-subordinate video calls are typically scheduled on an “as needed” basis to provide task instructions and/or address complex questions. Participants indicate that using video calls to facilitate these types of interactions reduces the likelihood of miscommunication as both supervisors and subordinates can provide clearer and more thorough explanations, screen share to enhance understandability, ask and respond to follow-up questions immediately, and observe tone and nonverbal cues (if cameras are used). In turn, supervisors express that they can “get a better sense of if the staff is really understanding what I’m trying to tell them.” (Sup-7) and gain “more of a personal connection” making it “easier to explain things... and faster” (Sup-11).

Despite the benefits of video conferencing, there are challenges. First, video calls can be difficult to coordinate primarily due to an uptick in the number of client, firm-, office-, and engagement-level video meetings supervisors are required to participate in throughout the week.

One supervisor explains that,

I actually don't like setting up calls. It makes things really annoying when you block off a random time, and then you have to wait until that time to ask your question...Everyone's putting these 30-minute calls on my calendar and then I have 25 minutes of nothing. I'd rather they IM. (Sup-12)

As a result, some subordinates are left “spinning their wheels” while they wait to get additional clarity from their supervisor. For example, a few subordinates share that it is difficult to discern what issues they may encounter and what questions may arise during initial, task allocation video calls; yet, experience challenges scheduling follow-up meetings to gain clarity.

I think the hard part is the follow-up. I'm the kind of person—I think a lot of people are—where I get instructions and I don't necessarily have questions right away. I have to get in there and start working on something and really give it my best shot and then I find out what my questions are. I think it's great for getting the initial instructions. It's harder to follow up and saying okay, I'm getting stuck here. (Sub-9)

Second, many supervisors express that the constant video interactions are “exhausting... and intimidating” (Sup-2), where “the Zoom fatigue comes in if I've been on camera calls all day. At some point I turn it [the camera] off because I want to just sit there...” (Sup-12). Consequently, some supervisors feel less motivated to schedule additional video meetings – even when it may be warranted – and are less likely to maximize the video platform's functionality, such as choosing to join a meeting with their camera off. Communication choices like these may, in turn, affect supervisors' and subordinates' ability to effectively and efficiently reach important team and audit outcomes (e.g., professional development, performance, relationship development) that future research should examine.

### **Instant Messaging**

Supervisors and subordinates express that they use instant messaging (also referred to as “pings”) most frequently to communicate when working remotely. It fosters quick and convenient interactions (Sidgman et al. 2021), and offers an array of unique functionalities that allow

individuals to personalize their message. For example, participants express with excitement that instant messaging provides a quick and easy way to share emotion through features like emojis and message tapbacks (e.g., one subordinate notes “using emojis on IM keep things light and fun” Sub-9).<sup>22</sup> Such features encourage supervisors and subordinates to chat more casually and unfiltered (e.g., shoot the breeze, gossip), which is increasingly important to facilitate relationship development in a remote work environment. One subordinate notes, “There are definitely times where we’ll [the subordinate and supervisor] just talk back and forth [when using IM], how was your weekend, what are you doing this weekend, or something like that...I think email is more official, it stays longer” (Sub-14). In fact, some view informal conversations through instant messaging as equivalent to ad hoc face-to-face interactions.

Beyond casual conversation, supervisors also prefer subordinates use instant messaging to initiate discussion about technical topics requesting that subordinates “ping” to ask quick technical questions or, for more complex subject matter, “ping” to inquire about the supervisor’s availability for a video call. “Most supervisors share that ‘if it’s something simple, quick, easy, boom... just ping it’” (Sup-9). Both parties also leverage the colored activity dot (e.g., green = available, yellow = away, red = busy, do not disturb) within the instant message platform to evaluate the other’s availability. For example, a supervisor states, “We will put in a status of ‘I’m taking a lunch break’ or if I’m going on a walk, I’ll put in a special emoji, type in my status underneath. So, anybody that’s looking to check in with me can see that my status is that I’m away from the computer, [which] encourages that you at least take the hour lunch break...away from your computer...because it can be draining to go for meetings on your computer all of the time” (Sup-3).

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<sup>22</sup> Tapbacks provide a quick and easy way to respond to an instant message, such as a thumbs-up, thumbs-down, heart, etc. (Levin 2021).

While the majority of participants discuss the advantages of using instant messaging, a few share the disadvantages. First, supervisors express that the influx of instant messages can be excessive, especially when the supervisor is responsible for multiple subordinates. Some supervisors find this distracting and disruptive making it difficult to maintain concentration on current work tasks. Second, relative to email, both supervisors and subordinates express challenges in keeping track of important instant messages. For example, some supervisors may overlook messages received while they are busy. Likewise, subordinates find it difficult to retrieve (or keep track of) important messages from their supervisor.

A lot of times pings would get lost. You see a ping, then you look away, and you have 20 people...pinging...That happens to me every day. I read someone's ping, but then forget to respond...That would happen with me and her [the supervisor] quite often. She'd ping me six hours later and say sorry, didn't see this. (Sub-8)

Third, due to supervisor busyness, supervisors and subordinates may consequently discuss complex information using instant messaging which they express often results in miscommunications and audit inefficiencies. One supervisor explained that "I've seen a lot more [miscommunications] with remote work...naturally in-person it happens, but the rate at which it happens [remotely] is just more" (Sup-10). For example,

If you get instructions via instant messaging... finding where that line is of getting on the same page can be difficult, especially if you're multitasking... More frequently than expected, I am trying to find that line; whereas if it was on a call or face-to-face, that would not have been called into question. (Sub-1)

Video conferencing is typically necessary to resolve these misunderstandings. Finally, supervisors are inconsistent in how they use instant messaging functionalities. For example, supervisors of a higher rank (e.g., partners) are less likely to use emojis relative to lower-ranked supervisors (e.g., senior associates), which could lead subordinates to misunderstand the tone behind their more experienced supervisor's message and in turn potentially negatively affect relationship development when working remotely.

Most of it [emoji usage] occurs at the peer-to-peer level or even maybe one level above...one level above me is supervisor and manager so I expect to see less of that [emojis]...I would say this is hit or miss. Some managers will use it, but others rarely, like once a year with a Smiley face to someone. (Sub-3)

Given the rise in supervisor-subordinate communication via instant messaging, future research should examine how such informal communication affects subordinate learning and task performance.

## **Email**

Interviewees indicate that as communication technologies in audit advance, email – relative to instant messaging and video conferencing – is a “less common” (Sub-10) way to interact with team members. One subordinate explains, “Communication is... rarely through emails now, emails are just for clients, mainly. Then we mainly communicate through [Microsoft] Teams. If it [the assigned task] gets really complex, then we’ll [supervisor and subordinate] hop on a call, share our screens, walk through it” (Sub-2). While email remains a common asynchronous way for supervisors to send lengthy task instructions with supporting attachments to subordinates, supervisors now tend to reserve email for client communication. Some participants suggest that this is because email is a more formal way to communicate, and that an informal medium like instant messaging is more appropriate for communication between supervisors and subordinates.

Supervisors also tend to send constructive feedback to subordinates through email (e.g., “if I was in trouble, not literally, but if it was a review note and I did something wrong and it was a more serious communication, it would be an email... it’s a bit more serious” (Sub-3)) and when making requests after hours or that do not warrant an immediate response. Subordinates may also choose to send an email when they know their supervisor is busy; however, this may result in a significantly lagged response time if the supervisor is not actively monitoring their email for subordinate messages. As one supervisor notes,

Email is mixed up with client emails, it's mixed up with things I'm just copied on, and it's things that are not urgent. There is a lot more noise in emails than there is in IMs. In my head, emails are a to-do. Maybe not a to-do right now, but it's a to-do. I'll put it on my list and I'll get to it. (Sup-12)

As CMC options expand, supervisors and subordinates seem to rely on email less frequently to support their interactions. Rather, video calls and instant messaging are the primary choices. Future research should explore whether using email relative to other CMC choices affects supervisors' or subordinates' perceptions of one another, and investigate potential differential effects on audit quality (e.g., decision-making, review quality).

### **Discussion Boards and Calendars**

Discussion boards and e-calendars are asynchronous mediums auditors historically use to communicate; however, these mediums are used much more frequently since the shift to increased remote work. Supervisors often use asynchronous tools like discussion boards to provide subordinates with a prioritized list and related time budget expectations, and more intentionally manage their calendars to make subordinates aware of their daily availability. For example, "We'll share documents, so just a shared huddle board. It has everybody's name on it and what they're working on. That's a good way for us to visualize what everybody's got going on" (Sup-15).

Auditors also seem to more frequently rely on their calendars. Specifically, subordinate auditors now regularly check their supervisors' availability to "see if they have a meeting or if they have 'busy time' or 'focus time'" (Sub-14) to identify when they can get their questions answered. Since the transition to a more flexible work structure, subordinates are also more mindful about updating their calendars. Some firms are enforcing a "culture of making sure your calendar is updated" (Sub-4), especially if an individual is planning to work remotely. A supervisor explained "We are very calendar driven. We try as best we can. It's somewhat firmly established to state whether you're going to be in the office or out of the office. So, I try to let my team know the days

that I'm working from home. Here are the times that I'm going to be in the office" (Sup-4). While the majority of participants reflect positively on the benefits of using calendars, one says "I feel like we've overused Outlook and the calendar these days. I don't even set up a calendar meeting" (Sup-16).

The discussion above suggests that as CMC increases, structured project management tools like discussion boards become more prevalent. Further, attentiveness to other's calendars is now a way to determine whether supervisor-subordinate interactions can occur. Future research should explore how such tools may not only improve audit efficiency through the provision of subordinate accountability but also examine potential effects on work engagement and well-being (e.g., emotional exhaustion from project management tasks and remaining knowledgeable and alert to boards and calendars) in the remote environment.

## **V. CONCLUSION**

This paper documents how supervisors and subordinates use CMC to interact when working remotely. Consistent with communication theory, my results suggest that supervisor-subordinate communication is an iterative process optimized by both the suitability of the medium used to facilitate the interaction and how supervisors choose to use the medium (Kramer 2017; Dennis et al. 2008). The results provide insight into the types and uses of CMC in the contemporary audit environment, and how the effectiveness of each medium may vary by person, situation, and context. In particular, contextual factors (e.g., supervisor availability, busyness) may not always permit good CMC choices for the information being communicated.

Interestingly, within CMC mediums there appears to be a lot of strategy as to when to use each and also how auditors perceive these methods. Email, a more traditional form of CMC, is now often reserved for detailed task instructions, after-hours communication, and more formal communications (e.g., negative performance feedback) between a supervisor and subordinate.



Further, email communications are often added to “to-do lists” versus real-time responses. More frequently, supervisors and subordinates rely on internal instant messaging systems to quickly and more casually interact. Both parties tend to appreciate the richness of these mediums as they provide opportunities to build relationships (e.g., shooting the breeze, using emojis) and discuss complex, technical topics while minimizing the likelihood of miscommunications. In addition, video communications, including virtual audit rooms, are more frequently used to simulate an in-person audit room atmosphere. Although virtual audit rooms also facilitate rich, synchronous interactions and are ideal in some cases for improving subordinates’ professional development and team bonding, some participants do not maximize the functionalities of the medium and find sharing the virtual space for an extended period awkward making virtual audit rooms less effective. Finally, a few asynchronous mediums such as discussion/whiteboards are increasingly used to aid in project management.

Though firms offer a variety of mediums and internal support to promote effective supervisor-subordinate communication, relying on CMC remains challenging. The interviews collectively suggest that norms are developing as to when each CMC type can and should be used by supervisors and subordinates, albeit the development of these norms can be for efficiency and/or effectiveness, and future research is needed to examine whether the CMC norms are best for audit quality. To mitigate potential negative consequences to audit quality, firms should consider educating auditors on supervisor-subordinate CMC shortcomings so that they may implement remedial coping mechanisms. Training supervisors in particular will equip them to not only improve their personal CMC skills thereby improving their ability to lead by example (Bol et al. 2018), but also help them to more effectively encourage their subordinates to make high-quality CMC decisions.

In addition to providing practical insight, this study informs academic research. By identifying the specific types and uses of CMC in audit practice, I provide academics an opportunity to improve the generalizability and accuracy of future research in this area. My findings also reveal several opportunities for future research. Specifically, future research should continue examining communication strategies supervisors and subordinates are implementing to achieve audit quality when working remotely, and explore the nuances associated with supervisors' and subordinates' communication decisions. Future research should also examine how CMC is used to facilitate interpersonal team interactions.

### **Part III: Supervisor-Subordinate Communication in the Contemporary Audit Environment: A Needs-Based Perspective**

#### **I. INTRODUCTION**

High-quality communication between supervisor and subordinate auditors (hereafter *supervisor-subordinate communication*) is essential to audit quality. Not only do regulators mandate communication through effective audit supervision and require that subordinates bring potential audit issues to a supervisor's attention (AICPA 2001; PCAOB 2010), but also the effectiveness of subordinates' learning, performance, and acclimation to organizational and team norms, and the adequacy of supervisors' oversight and coaching depends on high-quality supervisor-subordinate communication (Brazel et al. 2004; Nelson et al. 2016; Proell et al. 2022). Unfortunately, communication challenges within audit teams persist (PCAOB 2020; Downey et al. 2020). For instance, audit research identifies that demotivating feedback discussions (Andiola and Bedard 2018), supervisors emphasizing audit completion over performance (Clor-Proell et al. 2023), and subordinate workpaper stylization (Tan and Trotman 2003) can negatively affect audit quality. Often these studies only examine a specific communication area or how a single communication factor (e.g., goal framing, team orientation, workpaper stylization) positively or negatively affects another's behaviors (e.g., subordinates' willingness to speak up about audit issues, supervisors' judgments), leaving gaps in our understanding of supervisor-subordinate communication practices. Thus, my objective is to fill this gap by conducting a holistic, in-depth analysis of supervisors' and subordinates' communication practices in the contemporary audit environment.

This study is timely and directly responds to calls from both academia and regulators for research examining the dynamics of geographically distributed audit teams (Deloitte 2016; Downey et al. 2020; PCAOB 2020; Bauer et al. 2021). Specifically, public accounting firms more

commonly rely on geographically distributed teams to conduct the core audit, where supervisors and subordinates regularly work in separate physical locations (i.e., work remotely apart from one another; Bauer et al. 2021; Tighe 2024). This shift drastically increases the use of traditional forms of computer-mediated communication “CMC” (e.g., email, video-conferencing) and the adoption of newer forms of CMC (e.g., chatrooms) that more conveniently facilitate supervisor-subordinate communication when working remotely (Jefferson 2024b; Tighe 2024). Unfortunately, supervisors and subordinates also may more frequently experience communication challenges (e.g., coordination, miscommunications) when working remotely, which could impair supervisors-subordinates’ performance, relationship development, and in turn audit quality (Bauer et al. 2021; Bailey et al. 2023). Moreover, effective communication is a tacit skill that many supervisors and unacclimated subordinates may not be adept at (Bol et al. 2018), particularly when working apart. Thus, it is necessary to examine *if* and *how* supervisor and subordinate auditors’ communication practices are evolving to effectively support the pace, volume, and complexities of current within-team interpersonal interactions.

This study is designed to explore the nuances and complexities of supervisor-subordinate communication in the contemporary audit environment by examining two main questions: *How does communication unfold between supervisors and subordinates when working remotely?* and *How do communication practices between supervisor and subordinate auditors affect the team dynamics and audit production?* Given the complexities associated with examining communication (Stubbe 2017), I conduct and analyze 32 semi-structured interviews with U.S.-based supervisor (17) and subordinate (15) auditors from global, regional, and local public accounting firms to obtain rich, detailed, and descriptive information (Miles and Huberman 1994). My interviewees consistently express that the shift to remote work fundamentally disrupted

supervisor-subordinate communication norms which challenge their ability to perform well, connect with teammates, and feel in control. As a result, supervisors and subordinates implement communication strategies to facilitate these needs. Applying an interpretive analytical approach, I identify that these themes and communication adaptation processes reflect ideas supported by self-determination and communication accommodation theories.

Self-determination theory posits that individuals have three basic psychological needs, including the need to feel competent (i.e., perform well), relate (i.e., connect), and be in control (i.e., reduce uncertainty), that they wish to satisfy to meet performance and well-being goals (Gagné and Deci 2005; Deci et al. 2017). Yet, the current audit environment may interfere with individuals' ability to adequately meet each need, which can in turn negatively affect their motivation and engagement at work and lead them to make adjustments that will re-satisfy each need (Deci et al. 2017; Ryan and Deci 2019). Thus, I look to communication accommodation theory which posits that individuals are motivated to make communication adjustments, especially when performance and relational objectives are at stake (Dragojevic et al. 2015; Soliz and Gilez 2016). Each theory further suggests that how people meet their individual needs and adapt their communication practices; respectively, can uniquely differ which can differentially affect work outcomes. My interviewees confirm that supervisor-subordinate communication practices in auditing are not one size fits all and in turn vary resultant audit (i.e., effectiveness and efficiency), relational (e.g., loyalty), and personal (i.e., well-being) outcomes.

Supervisors and subordinates implement several strategies to meet their psychological needs when working remotely. To feel competent and improve performance, I learn that supervisors incorporate strategies to coach and knowledge share and improve audit efficiency. For example, supervisors now commonly coordinate routine video syncs to explain delegated work

and respond to complex questions, which helps to avoid the miscommunications that typically occur when using text-based mediums like email or instant messaging. However, some supervisors struggle to adopt this practice given the significant work demands in the audit environment, or may inappropriately adopt this practice (e.g., attending a sync session without using the camera functionality) to minimize negative personal outcomes such as virtual fatigue. In these cases, subordinates are more likely to encounter ineffective learning and developmental experiences. I also identify subordinate strategies to continue learning, be productive, and make a good impression despite increased supervisor irresponsiveness and unavailability in the remote environment. Such strategies include proactively exploring other resources (e.g., firm guidance, other supervisors, peers) to find answers to questions. However, for those who struggle to be proactive or in cases where other resources do not provide adequate information, subordinates are often forced to sit and wait for hours or, in some cases, days until the supervisor eventually responds to their questions.

To connect, both supervisors and subordinates describe the importance of communicating intentionally. For example, habits like shooting the breeze and being vulnerable are not as natural in the remote environment given communication is typically initiated to solely discuss work topics and CMC limits the depth of emotional exchanges. Thus, supervisors now work to create safe spaces (e.g., virtual tea time) where emotional exchanges (positive and negative) between supervisors and subordinates can intentionally occur, and they must purposefully show appreciation to subordinates given their inability to observe and compliment subordinates' worthy actions. Unfortunately, I learn that because these strategies require intentionality and effort, they tend to occur less frequently in the remote environment which can frustrate subordinates. Thus, some subordinates intentionally make mental adjustments such as giving supervisors the benefit

of the doubt and trying not to take the supervisor's shortcomings too personally. Finally, I identify a few strategies that supervisors and subordinates implement to improve job control while working remotely. In particular, supervisors and subordinates often feel uncertain in executing their roles and find it challenging to establish firm boundaries between work and life in a remote environment. Thus, to cope, they take advantage of the unique ability to discontinue communication when working remotely. For example, supervisors may intentionally add a meeting to their calendar which turns their instant messaging activity color red and in turn discourages subordinates from reaching out with questions. Likewise, to manage supervisors' impressions when working from home, subordinates may sit and move their mouse to appear as if they are actively working though they are disengaged. Through the interviews supervisors and subordinates alike note the inefficiencies and learning gaps that can occur when working remotely that have implications for audit quality. Further, some adopt successful strategies to cope with the challenges, while others seem to adopt strategies that may be helpful to satisfy their needs but lead to dissatisfaction of others.

Examining auditors' lived communication experiences makes several contributions to research and practice. Given calls for more research on geographically distributed audit teams and the PCAOB noting "troubling" inspection deficiency rates related to recent audit years (Bauer et al. 2021; PCAOB 2023), my study provides in-depth insight into the communication challenges supervisor-subordinate auditors are experiencing in the contemporary audit environment, identifies communication adaptations, and the effects on both team dynamics and audit quality. This study specifically extends recent studies that examine how remote work affects auditors and their attitudes and socialization (Bailey et al. 2023; Tighe 2024). These insights focus specifically on supervisor-subordinate communication, which is critical to conducting the bulk of audit

fieldwork, developing novice auditors, and ensuring proper supervision of the audit. In addition, I extend the limited but growing literature examining the effects of CMC on audit quality. In particular, audit research examining specific forms of CMC (e.g., email, instant messaging, video conferencing) typically focuses on auditor-client interactions (e.g., Bennett and Hatfield 2013, 2018) or electronic review note feedback (e.g., Brazel et al. 2004; Agoglia et al. 2009, 2010). However, given the sudden and drastic increases in CMC within audit teams and the inherent challenges associated with its use (e.g., miscommunications), it is necessary to explore the nuances of within-team supervisor-subordinate CMC (Bauer et al. 2021). My findings expand beyond these contexts to help us understand how the interplay of various contextual factors affects supervisor-subordinate computer-mediated interactions, and in turn, audit quality. Finally, my findings identify communication best practices that can promote improved team dynamics and audit quality, which future empirical research can investigate further.

The remainder of this study proceeds as follows. In section II, I discuss the background on which the research question is developed. In section III, I describe the method used, including the design of the instrument, the study's respondents, data collection, and data analysis. In section IV, I present insights obtained from my respondents, and in sections V and VI I provide a discussion and conclusion, respectively.

## **II. BACKGROUND ON AUDIT SUPERVISOR-SUBORDINATE COMMUNICATION**

The role of communication in affecting audit quality is reflected in audit standards that require supervisors to *inform* engagement team members of their responsibilities, *direct* subordinates to behave proactively, and, through engagement review, *supervise* audit work to ensure subordinates draw appropriate audit conclusions (AICPA 2001; PCAOB 2010). Likewise, standards require subordinates to *communicate* audit issues to those supervising the audit (PCAOB



2010). Unfortunately, communication challenges in the audit environment can lead to difficulties in achieving audit quality and complying with auditing standards. For instance, audit regulators continue to report deficiencies in the area of audit supervision (PCAOB 2019; SEC 2022), and communication failures are a viable root cause given the implications of supervisor-subordinate communication on subordinates' learning and performance and the effectiveness of supervisors' oversight (Westermann et al. 2015; Kadous et al. 2019). Audit research also documents communication challenges between auditors and specialists (e.g., Bauer and Estep 2019; Hux et al. 2024), component auditor teams (Downey and Bedard 2018), and their clients (Saiewitz and Kida 2018). These studies generally find that ineffective communication and/or communication practices lead to audit inefficiencies and/or ineffectiveness.

While regulators and prior research acknowledge that effective communication is key to audit quality, research has yet to establish an in-depth understanding of the within-team interactions and communication practices between a supervisor and subordinate auditor (Bobek et al. 2012; Bauer et al. 2021). Their interactions with each other are particularly important because these auditors collectively conduct the bulk of audit fieldwork, which involves numerous interdependent tasks. Prior audit research establishes that certain communication choices of a supervisor or a subordinate are influential on the attitudes and behaviors of the communication recipient (see Jefferson 2024a for a recent review of supervisor-to-subordinate communication). For example, subordinates' learning, performance, willingness to speak up about audit issues, response to feedback, and even their well-being can depend on their supervisors' communication choices (e.g., communication mode-Brazel et al. 2004; leadership orientation-Nelson et al. 2016; feedback framing-Andiola 2023; supervisor support-Jefferson et al. 2024). Similarly, subordinates' communication choices (stylization-Tan and Trotman 2003; persuasion techniques-

Rich 2004; communication style-Proell et al. 2022) can impact audit supervisors' performance, review quality, and ability to address audit issues.

Audit research further indicates that communication is a tacit skill that can vary from person to person (Bol et al. 2018; Andiola et al. 2020); thus, not all supervisor and subordinate auditors are likely adept at effective communication practices. For example, audit subordinates describe ineffective review discussions (Andiola and Bedard 2018; Andiola et al. 2019) and indicate that supervisors may inappropriately emphasize audit completion over skepticism (Clor-Proell et al. 2023). Subordinates also tend to prioritize their desire to feel comfortable at work over audit quality when deciding whether to communicate audit issues to their supervisor (Kadous et al. 2019; Clor-Proell et al. 2022, 2023). Moreover, supervisors' communication choices may be influenced by environmental factors, like workload and geographic team distribution, that lead to less effective feedback or coaching (Agoglia et al. 2009; Andiola et al. 2024). Collectively, these studies highlight the nuances and complexities of understanding supervisor-subordinate communication practices.

Importantly, the recent shift to allow regular remote work practices further complicates the communication dynamics between audit supervisors and subordinates who traditionally worked the majority of the time in the same locations, either at the client site or in their firm's local office (McCabe 2021; Tighe 2024). This shift in work practice has distinct benefits (e.g., work from anywhere, no commute) but is accompanied by new communication challenges (e.g., difficulty coordinating meetings, difficulty sharing emotions) that may affect supervisors' and subordinates' learning, socialization, and performance (Sidgman et al. 2021; Bailey et al. 2023; Tighe 2024). In particular, geographically distributed audit teams require increased use of computer-mediated communication (CMC) (e.g., email, instant messaging, video conferencing) to interact, which is

inherently more challenging than working face-to-face (Downey and Bedard 2019; Bailey et al. 2023). This change in within-team dynamics raises key questions regarding how supervisors and subordinates communicate when working remotely, if and how auditors adapt communication practices in this environment, and what impact these communication practices have on team dynamics and audit quality. Thus, I ask the following overarching research questions:

**Research question:** *How does communication unfold between supervisor and subordinate auditors when working remotely? How do communication practices between supervisor and subordinate auditors affect team dynamics and audit quality?*

### III. METHOD

This section describes the participants, data collection, and data analysis techniques used to gain an in-depth understanding of how supervisor and subordinate auditors communicate and adapt communication in the contemporary audit environment. Communication is intricate, nuanced, and characterized by the interplay of several unique person-centric and contextual factors that are difficult to examine using experimental, archival, and survey methods (Stubbe 2017). As such, I use a qualitative, semi-structured interview approach to obtain detailed, descriptive information (Miles and Huberman 1994) about auditors' lived communicative experiences (e.g., Hirst and Koonce 1996). This approach also provides us "inherent flexibility" (e.g., Gibbins and Jamal 1993; Gendron 2009; Radcliffe 2010) to guide the interview using predefined interview questions, while also allowing the interviewee to reflect upon and describe the subject matter that they deem most relevant and important (Power and Gendron 2015; Malsch and Salterio 2016; Kenno et al. 2017).

#### Interviews

I developed the research protocol based on the supervisor-subordinate communication and CMC literature (e.g., Byron 2008; Meyers 2016; Bonaccio et al. 2016; Kramer 2017), as well as informal discussions with one senior manager and one senior associate from two Big 4 public

accounting firms. I piloted the instrument with one senior manager (a supervisor) and one associate (a subordinate) from Big 4 public accounting firms. The final instrument contains seven semi-structured interview questions about subordinates [supervisors] communication experiences with their supervisor [subordinate] when working in a different physical location than their supervisor [subordinate] (see Appendix B). I attempt to minimize researcher intrusion (Lillis 1999) by posing open-ended, neutrally formatted questions (Patton 2015). As I conducted the interviews, I periodically considered whether my interview questions required revisions (Cohen et al. 2002; Trompeter and Wright 2010; Westermann et al. 2015).

I interviewed 32 audit professionals, consisting of 17 supervisors (11 senior associates, 3 managers, and 3 senior managers) and 15 subordinates (all associates) from Big 4, national, regional, and local firms. I initially recruited my interviewees from personal contacts, followed by using a “snowball” technique (Malsch and Salterio 2016). I intentionally recruited interviewees from multiple firms and varying ranks, to ensure rich and diverse perspectives to identify similar patterns as well as plausible rival explanations to achieve both literal and theoretical replications (Santos et al. 2001; Ciliberti et al. 2011; Yin 2017) regarding supervisor-subordinate communication.<sup>23</sup> Supervisor participants had an average of 4.9 years of experience and subordinate participants had an average of 1.5 years of experience. Five of my subordinate participants were current staff auditors to six of the supervisor participants (hereafter referred to as a “matched-pair”). Fifty-nine percent work at Big 4 firms and 34 percent are male. Table 2.1 reports demographic information for each respondent.

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<sup>23</sup> Additionally, to assess saturation of the data collection process, we reviewed our data, noting that no new codes were added after our 11<sup>th</sup> subordinate interview and 14<sup>th</sup> supervisor interview. After that point, responses became repetitive and we were not identifying significantly new insights, and we had varying levels of replication for factors previously identified, suggesting that saturation was met (e.g., Guest, Bunce, and Johnson 2006; Boritz et al. 2020). Our subsequent interviews continued to provide rich details from different perspectives to evidence further replication.

At the time of my interviews, all of the interviewees primarily worked remotely from home, separately from their supervisor or subordinate. While many of the subordinate participants express only having experience working in a remote capacity, many of the supervisors also have non-remote audit experience and provide a varied perspective. Gaining the perspectives of both subordinates and supervisors is valuable because communication between supervisors and subordinates represents at least two-thirds of each group's daily communication, and the quality of this interaction directly affects team dynamics and performance outcomes (Meyers 2016; Kramer 2017). As noted above, lower-level supervisor and subordinate auditors are responsible for completing a substantial part of fieldwork, making the quality of communication between them a key contributor to audit quality (Kadous et al. 2019, Clor-Proell et al. 2022, 2023). Interviewing both parties helps us fully understand the complex and iterative communication process between the two when working separately.

### **Data Collection and Analytical Approach**

I conducted each interview remotely via Zoom between May 2022 and September 2022, with each interview averaging approximately 45 minutes in length (ranging from 22 to 60 minutes).<sup>24</sup> Two researchers attended every interview. For interview consistency, the same researcher served as the lead interviewer (i.e., asking questions), and the other researcher recorded detailed notes and asked follow-up questions as needed. To establish rapport, I began each interview with introductions, explaining the purpose of the study, and reminding participants that their identities, including any personally identifiable information about themselves or their firm,

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<sup>24</sup> I obtained approval from the Institutional Review Board (IRB) for Human Participants at the University to which the authors were affiliated when the study was completed. To protect interviewees identities, I replace the participant's names and the respective firm's name with an identifier (e.g., Sub-1, Sup-1).

would remain confidential.<sup>25</sup> I also designed the first research question to be less specific, giving participants time to get comfortable speaking about the interview topic to the research team. All participants consented to be recorded; transcription responsibilities were shared between one of the researchers and a third-party transcriber.<sup>26</sup>

My approach to data analysis is consistent with that described in the qualitative methodology literature (Power and Gendron 2015; Malsch and Salterio 2016; Yin 2017). To develop my coding scheme, I analyze the interviews iteratively by evaluating, reflecting, and engaging in reanalysis. I use NVivo to code each interview transcript and to identify quotes that truthfully convey the sentiment of my respondents (Power and Gendron 2015). Through this process, I construct first-stage coding schemes that focus on (1) how communication occurs, (2) challenges of remote communication, (3) sources of miscommunication, (4) communication strategies, and (5) communication outcomes. As I reflected on my coding and worked to make sense of my interviewees' perspectives, a pervasive theme emerged from my analyses. The interviewees related their communication experiences through specific psychological needs, i.e., identifying desires to perform well, feel part of a team, and reduce uncertainty. Through these desires, I heard descriptions of the challenges of communication in a remote setting and various ways both supervisors and subordinates attempted to adapt their communication practices to improve effectiveness, build relationships, and ultimately achieve both personal needs (e.g., well-being, job satisfaction) and work requirements (i.e., audit efficiency and effectiveness). These descriptions led us to identify self-determination theory and communication accommodation

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<sup>25</sup> All participants were provided with the interview protocol at least 24-48 hours before the scheduled interview to allow them to reflect and prepare for the interview, and so that the researchers could appropriately allocate interview time to valuable discussion rather than lengthy silent "wheel-spinning".

<sup>26</sup> I transcribed the first 11 interview recordings, leveraging the transcription output from Zoom. I then engaged a third-party transcription service to transcribe the other 21 interview recordings. Myself and another researcher reviewed all transcriptions for accuracy before using them for data analysis.

theory as most relevant for interpreting the data.

Adopting this theoretical perspective, one author went back through the transcript data and coded comments that illustrated key themes proposed by basic psychological needs theory (a sub-theory of self-determination theory) and accommodation theory. The author then created analytical memos in an Excel file to describe and summarize the findings, including relevant quotes, for each emergent theme. The second author reviewed all analytical memos to validate that the quotes were consistent with the descriptions of these themes. In reporting the findings, I held many iterative meetings to discuss the observed themes and to select illustrative quotes that I agreed best represent the theme, including quotes that provide the most compelling evidence, as well as “proof” evidence (Pratt 2009). Further, to ensure the findings respectfully convey the collective insights of the supervisors and subordinates I interview (Power and Gendron 2015) rather than interests, biases, or motivations that I may have, I perform two trustworthiness checks (Malsch and Salterio 2016): deviant analysis and member checking. Deviant analysis includes searching and reporting on anomalies and contrary cases that emerge from the collective data. For member checking, I first sent each participant a copy of their transcript to attest to its accuracy. No respondent objected to the contents of their transcript. Finally, to verify the trustworthiness of my key findings, I provided a draft of this paper to two additional experienced audit professionals who were not a part of the participant pool and requested that they provide us with feedback. Their feedback largely confirmed my findings and there were no major concerns raised.

### **Self-Determination Theory and Communication Accommodation Theory**

My analysis is guided by self-determination and communication accommodation theories. Self-determination theory posits that aspects of one’s work environment (e.g., job design, work arrangements) can affect an individual’s motivation to exhibit quality work behaviors (Gagné and

Deci 2005; Deci et al. 2017). The theory further posits that this motivation is driven by fulfilling three basic psychological needs, including the need for (1) competence, (2) relatedness or belongingness, and (3) control (Huang et al. 2019; Ryan and Deci 2019). Satisfying these psychological needs not only improves one's motivation and work engagement but also their performance and well-being (Deci et al. 2017; Ryan and Deci 2019). However, working in a predominantly remote work environment could interfere with the adequate fulfillment of these needs and in turn, affect the motivation one feels at work. This is especially true for professionals who have historically relied on and benefited from team co-location to achieve desired work outcomes (e.g., auditors working together in the same audit room – Tighe 2024).

When these psychological needs go unmet, individuals are naturally inclined to pursue behaviors that will re-satisfy each need (Van den Broeck et al. 2016). In the context of communication, and consistent with communication accommodation theory, re-satisfying needs may involve revising or implementing new communication strategies (Dragojevic et al. 2015; Soliz et al. 2016). Communication accommodation theory posits that “upon entering a communicative encounter, people immediately begin to synchronize aspects of their verbal (e.g., accent, speech rate) and nonverbal behavior (e.g., gesture, posture)” to accommodate the various aspects of the social interaction (e.g., attributes of the receiver, contextual factors) (Dragojevic et al. 2015, 36; Soliz and Giles 2016). While these adjustments often happen subconsciously, individuals are also motivated to make conscious adjustments to their communication practices, especially when communicators perceive their relationships (e.g., relational identification) and performance are at stake (Dragojevic et al. 2015; Giles et al. 2023).

In this same manner, shifting to remote work should motivate supervisor and subordinate auditors to revise and/or implement new communication practices that are accommodating to



meeting their relational and performance goals, which best occurs when their psychological need to be competent, belong, and in control is satisfied. Importantly though, while self-determination and communication accommodation theories highlight that satisfying psychological needs and adapting communication practices, respectively, are universal and innate, each individual's approach to satisfying needs, including the communication strategies they adopt, are influenced by unique personal characteristics, perspectives, and experiences (Chen et al. 2015; Dragojevic et al. 2015; Ryan et al. 2019). As a result, the effectiveness of communication strategies can vary from person to person and affect related work outcomes (Chen et al. 2015; Ryan et al. 2019).

#### **IV. FINDINGS**

The prevalence of remote work in the audit environment fundamentally changes the day-to-day communication dynamics between supervisor and subordinate auditors. Consistent with self-determination theory, the interviewees note that such an environment can interfere with their ability to satisfy their psychological needs for competence (i.e., to perform well), belongingness (i.e., to connect, feel part of the team), and control (i.e., reduce uncertainty). Thus, I begin by discussing each need and the hindrances to satisfying the need created by remote interactions, as well as the communication strategies implemented to re-satisfy each need, including the variation in the effectiveness of certain strategies.

##### **I Need to Perform Well, but...**

Competence at work is a “continuous process of development, becoming, and understanding” (Bound and Lin 2013, 1). It reflects one's ability to perform well, with the right knowledge, skills, and attitude (Bound and Lin 2013), which organizations routinely evaluate to determine an individual's organizational fit and trustworthiness to assume more responsibility (Raven and Pels 2021). Research further suggests that competence is associated with one's perceived self-efficacy and engagement at work; thus, striving to be competent and performing

well is deemed a natural psychological need for employees to fulfill (George and Brief 1992; Svendsen et al. 2016; Raven and Pels 2021).

Consistent with theory, my interviewees (both supervisors and subordinates) express an immense desire to perform well. This innate desire can start at job entry, where a subordinate explains, “I was just scared and new...I definitely thought that either I wasn't important because I was an intern or my performance was not good...I think it made me kind of take a little bit longer to do my work because I wanted it to be perfect” (Sub-1). Another discussed an instance where,

I just spent like an hour and a half trying to figure this out on my own...and then I'm going to go back to that person [supervisor] to be like, ‘Hey, I actually haven't really gotten anything done’...and that was really hard, emotionally and professionally...it really kind of puts you down a little bit because I’m like ‘dang I’m not really performing’. (Sub-2)

As a result, subordinates feel uncertain about their performance, stating “It’s hard to know whether I’m doing a good job or a bad job” (Sup-2).

Several supervisors also discuss their desires to perform well, noting that “everybody is really pressed about looking and performing better than their peers...it's hard when everybody wants to try to be an overachiever, and then it becomes like everybody overworks” (Sup-3).

### ***Hindrances to Feeling Competent and Performing Well***

While prior audit research acknowledges the desire of staff auditors to perform well and discusses some of the challenges to this (e.g., Brazel et al. 2016; Andiola et al. 2019), the remote environment presents additional hindrances that often stem from communication difficulties. For instance, relying on CMC makes it difficult for subordinates to learn and challenging for supervisors to effectively coach. First, supervisor busyness is exacerbated in the remote environment because supervisors are “making sure that staff are ok...managing up and making sure that managers know what’s expected of them...and now [since shifting to remote work], it’s a lot of the communication role” (Sup-7). As a result, subordinate professional development is

strained because “it’s difficult trying to reach out to the supervisor...[and there are] fewer opportunities to have more in-depth discussions” (Sub-8). This includes being unable to “just walk up to one of my seniors and ask questions” (Sub-6). Likewise, there are knowledge-sharing challenges because subordinates don’t “get to speak with clients well enough in meetings to understand what is going on” (Sub-6), and “don’t hear the side conversations” (Sub-9). The interviewee elaborates that “whenever I’m on a Zoom call, I’m typically just very focused on what I am doing and what I need to learn, which is good. That’s obviously #1, but when I have been in an office, it’s been really interesting to hear what other people are doing” (Sub-9). Another subordinate explains:

If I’m talking to someone and we’re working together on revenue, I might tell them everything about revenue even if we’re in two different locations. I’m going to ping them about it, email them, call them. But, if I’m working with someone else on inventory, I don’t think that they need to know about what’s going on in revenue at that moment, so I’m just not going to tell them about it until it comes up. (Sub-7)

Congruently, supervisors struggle to coach when remote. Specifically, “just not being able to see those nonverbal cues”, such as “spinning their wheels” or a “change in mood” (Sup-1) makes it difficult for supervisors to offer subordinates effective developmental support. Further, “it can be sort of easy for them [supervisors] to not think about what’s going on with you [the subordinate] since we’re not in person” (Sub-6). A supervisor shares an example where “there might have been a disconnect because some people on my team have had a lot of work to do. I’ve been sending e-mails asking for work, but...people don’t see me. So, they don’t say, ‘Hey, can you help out with this?’ And not everyone on my team knows who I am” (Sup-6). Remote work also allows subordinates to avoid communicating with a supervisor when the subordinate feels they are not meeting expectations, which further inhibits supervisors’ coaching ability. A supervisor explains through an example, “My expectation for her [her subordinate] was, ‘Hey, I want this done by the

end of the day.’...towards the end of the day, I was trying to check in with her and she was avoiding me because I think they [subordinates] get worried that you're going to get upset, and so, she was just avoiding me” (Sup-1). Another shares an example where,

I was very busy and couldn't check on him all the time. So, I would ping him and say 'Hey, are you okay?' His [the subordinate] answer would be 'Yeah, I'm doing ok...I'm almost done.' He said I'm almost done twice. I'm thinking 15, 30 minutes, but it was like two hours and he's like 'I'm almost done'...We hop on a call, and then...he's like 'I don't understand'. (Sup-13)

Finally, miscommunication is innate to CMC, which my interviewees express diminishes feeling competent, including “subordinates’...self-esteem, and capability to do the job” (Sup-1).

A subordinate elaborates that,

you're told to do something, and you think you grasp it. But then you walk away and then five minutes later you realize you don't know how to do it. But to find out how to actually do it again, you have to set up another half-hour call. You can't find time in the calendar for about three to four hours...Every single time I have a question it needs to be a half-hour meeting. I need to find a block on the schedule. (Sub-8)

As a result, tasks that “should have taken maybe 40 minutes end up taking like three hours” (Sup-1). Several interviewees also share that it can be easy to misinterpret supervisors' requests for a status update, leading subordinates to anxiously and frantically work to complete tasks immediately. One interviewee explains:

I had seniors who would check in on me and want to get status...and it came across as being a lot like, 'What are you doing? How can you be wasting all this time? Why aren't you already done with this?', when all they wanted to know is how far you've completed this [a task]...I've sent messages trying to get a percentage completion...I'm not trying to be rude or press them or judge them about their status...later [I find out] they were really stressed and nervous about it...They don't reply to me because they're worried about giving a number that's too low-level work, and then they'll work way too late at night. (Sup-3)

### ***Communication Strategies to Address Desires to Feel Competent and Perform Well***

In summary, my interviewees express a desire for competence; yet, communication in the remote environment leads to unease regarding how to perform well and how their performance is perceived. Thus, both supervisors and subordinates develop strategies to address their

psychological need to feel competent.

**Supervisor Strategies.** Within the context of feeling competent, I identify common themes of supervisor strategies to coach and knowledge share, improve audit efficiency (i.e., reduce the likelihood of miscommunication), and provide feedback in a remote environment. First, supervisors indicate that their ability to coach largely depends on the amount of face time they share with subordinates through platforms with video capability like virtual audit rooms, Microsoft Teams, Zoom, or Skype. Some supervisors set up virtual audit rooms, “like two hours in the morning, two hours in the afternoon” (Sub-1), to be available in real-time to coach subordinates immediately as they encounter work challenges and have questions. However, “sometimes it [the virtual audit room] could just be exhausting and...intimidating” (Sup-2). Thus, most supervisors are inclined to have routine team meetings and recurring one-on-one supervisor-subordinate meetings (referred to as “syncs”) to further enhance coaching effectiveness. Virtual team meetings, which typically include team members across levels (e.g., staff through partner), are useful because they promote knowledge sharing, allowing subordinates to “know what the other person is doing...so that they understand how the whole audit works” (Sup-5). It is equally necessary to host meetings exclusively for seniors and staff as one supervisor notes “there's a lot of efficiency that comes when it's just the staff and seniors...I try to have two separate meetings. I can ask what I think are dumb questions...It's nice to have the managers join the calls just because it gives the staff a chance to interact with the managers” (Sup-5).

Despite the knowledge-sharing benefits of team meetings, supervisors indicate that individualized coaching primarily occurs during recurring one-on-one supervisor-subordinate syncs where auditors “brief about everything...and [discuss] any questions” (Sup-3). Further, while supervisors tend to be accustomed to the norm that “everyone is working together as a team.

If somebody's overwhelmed and you have availability, you pick up some stuff off of their plate" (Sup-12), subordinates say "If I get a lot of them [tasks] all at once, I don't know which ones are most important...[which] brings on a lot of stress", and could, in turn, prevent subordinates from seeking out new tasks. Thus, syncs are beneficial for supervisors to not only prioritize subordinates' assignments but also delegate new tasks because subordinates "are not great about letting you [supervisors] know when they are running low on work" (Sup-12). One-on-one syncs should continue during busy season despite increases in workload and impending deadlines as supervisors express coordinating syncs "even when they don't feel like it" (Sup-5) "because it's such a barrier to entry to co-learn [in the remote environment]" (Sup-3). This also includes letting subordinates "know they can ask...whatever they want; there are no stupid questions" (Sub-11), which also improves subordinates learning. For example, a subordinate shares,

When we do get on a call, I typically don't feel rushed or feel bad for taking up their time...I feel like I have the time to communicate what I need to and to get a response. I think that's really important...not giving the sense of urgency like...this call is wasting my time...No stupid questions...No judgment. (Sub-9)

Video syncs are also beneficial because supervisors can share their screen to provide clearer explanations, and to be on camera so that subordinates "feel more present and...pay more attention [because] you could essentially be doing other work and not be participating in the conversation at all" (Sub-7).

I find that it's helpful if someone's explaining to me what to do while they show it to me. I feel like it doesn't make sense if you just write it out or if they just speak it to me without showing me. It helps because then if you have any questions that come up while you're looking at it, you can ask them right then versus later on. (Sub-7)

Further, being on camera helps to feel "like you're actually connecting with the subordinate...teaching them something, not just talking to a black screen" (Sup-7).

Next, supervisors implement basic strategies to improve audit efficiency, including

mechanisms to reduce the potential for miscommunications. Such strategies include “clear writing...being succinct, to the point, and clear” (Sup-9), while also being “as detailed as possible” (Sup-2), which helps to reduce the frequency of subsequent back-and-forth interactions and promotes audit efficiency. Yet, though basic, supervisors unknowingly have a “tendency to be a little more vague in expectations...now [since shifting to remote work] it's really easy to become extremely inefficient if you're not communicating effectively” (Sup-1), “it’s how eloquent you are when you explain...it’s very easy to type things out that you think make sense, but...they are confused.” (Sup-12). A supervisor shares an example where “I sent them an email, here’s step one through seven...In my head, I thought [I provided] everything that needs to get done both explicit and implied steps...[but] they never understood the implied steps in my head... I have learned that you can’t imply anything...[yet] it happens all the time and we're all guilty of it” (Sup-5).

Finally, I note that the previously discussed strategies (e.g., being on camera during video calls, detailed and clear communication) are also useful when providing feedback in a remote environment. In addition, and consistent with prior audit research (Payne et al. 2010; Favere-Marchesi 2006; Andiola and Bedard 2018), supervisors emphasize the importance of having feedback discussions “virtually versus written whether it be critical or just the good job” (Sup-4), and suggest that providing “immediate direct feedback is a lot more effective than trying to go back and forth with a workpaper with edits...let’s talk through this live” (Sup-5). These strategies are particularly important when providing negative feedback because negative feedback is “really hard to express over Teams or messages without seeming too harsh. You’re trying to keep it professional but also don’t want to hurt anybody’s feelings” (Sup-8). Another supervisor explains that “You can...get a better read on people if it’s over video...whereas sending an email is hard. I want to make sure my staff know that I’m not mad at them. I don’t want them to get an email from

me and be like she's frustrated. I don't want them to read it wrong" (Sup-7).

Although the strategies discussed above tend to be best practices for improving subordinates' learning and supervisors' coaching when working remotely, some supervisors are "bad seeds" (Sup-8) or choose not to implement these strategies due to factors unique to the remote auditing context. First, it is inherently easier for supervisors to ignore or put off subordinates in a remote environment, especially when work demands are high. A supervisor admits that "when I'm stressed out or when we are about to hit a deadline and I have all the senior managers coming at me from every direction, I definitely think my communication declines" (Sup-1). During these times, supervisors are "definitely harder to reach, not as communicative, and don't seem willing to take the time to explain in depth" (Sub-5). As a result, subordinate development declines, as one explains "I would just like to see more of 'I'll walk you through it' instead of 'This is what you need to do'. I'm like, 'How do I do that? I know what you're trying to have me do, but I don't know *how* to do it.'" (Sub-2). Further, supervisors may be more likely to provide feedback via email rather than face-to-face.

I've had this experience recently with an intern whom I was supervising...He wasn't doing a very good job, and I didn't know how to approach him because he was so nice and polite and everything when we had conversation one-on-one...I just outlined why he didn't meet expectations and what he needs to improve on for future success. To sum up, negative is easier to exchange in writing. (Sub-10)

Finally, when working remotely, supervisors and subordinates are more likely to experience virtual fatigue due to frequent video calls with team members and the client. One explains "Too many Zoom calls is annoying. While there is benefit in it...I feel like they're pointless sometimes...I think sometimes it can get a little overload" (Sup-9). Another says "It's definitely more fatiguing...I hop off a video call, I'm like okay, I need a few minutes to charge" (Sup-2). As a result, some avoid video calls, or disable the camera function, despite known



performance enhancements. In the following example, an immensely frustrated subordinate refers to a group of supervisors with disabled cameras during a team meeting as a “hidden jury”:

All the staff and seniors were expected to have their cameras on, but the managers all had theirs off...It was like we would present something, and then we could not read any facial expressions or anything. We're like does anyone have a question, anything going on? And just like crickets; don't hear anything...When there is something bad, then the managers would berate you, and you can't even look them in the eyes...You sit there in front of a hidden jury that is judging you more negatively than positively. It was constantly bringing us down so by the end of the audit there was a huge divide between the senior staff and the manager group...a lot of the seniors and staff ... requested to leave the team because of it. (Sub-8)

Virtual fatigue also leads supervisors and subordinates to place greater reliance on text-based mediums like email or instant messaging to provide explanations. Consequently, subordinates report audit inefficiencies due to miscommunication as one shares “I...did all this stuff. Then, when I sent it to her, she sent it right back and was like this isn't what I thought...she was trying to Skype message [instant message] me some of that information...It's just sometimes hard to explain without showing someone or sitting right next to them as they do it” (Sub-7).

**Subordinate strategies.** Subordinates implement communication strategies to continue learning, improve productivity, and make a good impression in the remote environment, particularly due to supervisor busyness and/or irresponsive (intentional or unintentional). Subordinates perceive that supervisors are “also serving...other clients” (Sub-8) which is “draining and tiring and maybe that's why they don't get back to us properly” (Sub-2). As a result, it is important for subordinates “to be a lot more organized” (Sub-11) and proactive to optimize the time supervisors have allotted for supervisor-subordinate interactions. For example, subordinates pay more attention to “everyone's calendars to make sure people have time for discussion” (Sub-11), and make sure they have “a prepared list of all questions” (Sub-11) with “potential solutions to those questions” (Sub-7) to “try not to waste...time” (Sub-6). To improve understandability at the time of task allocation, others “just try to get as clear expectations as they can” (Sub-1), and

“repeat back what they’ve [the supervisor] requested of me” (Sub-3), especially if the topic is “relatively complex [and] ask for live feedback...[because] it’s ten times harder to get on the same page later” (Sub-1).

I also learn that subordinate proactivity is increasingly important in the remote environment though it is a “hard to teach” (Sub-5) skill. A few share the importance of being “more proactive in self-learning, [such as] looking at other resources about how to complete work” (Sub-2), and express trying “to work on something as much as I can, try to figure out as much as I can” (Sub-6) before reaching out to the supervisor for help. Subordinates acknowledge that the remote setting “does kind of force you to find the answer yourself a lot more and not rely on just turning to the person next to you,” and though being proactive “might take a little longer...the ability to search for an answer properly is a great skill” (Sub-5). Moreover, it is a way for subordinates to give themselves “credibility” (Sub-1) and impress their supervisor. Lastly, if a supervisor is unavailable, some subordinates proactively brainstorm with their peers. One shares “If I did run into a problem and no one was available, the other staff and I could brainstorm together and try to figure out a solution from there” (Sub-8).

Although I identify that being proactive is important for subordinates to perform well when remote, subordinates may try to manage impressions due to “that fear of asking a dumb question” (Sup-2), especially when supervisors do not demonstrate openness to questions, and it’s much easier for subordinates’ to avoid supervisor communication when remote. Subordinates may also only ask questions to supervisors who make them feel comfortable. A subordinate shares “Some of them [supervisors] were like really good at teaching, and those I really enjoyed, and those are the people that I asked my questions to. Maybe it was not related to what I’m doing right now but just for future reference, I would ask other questions that I had in the past” (Sub-2).

Importantly, while subordinates attempt to implement strategies to learn and perform, there are times when supervisor input is necessary, especially when performing new or unfamiliar tasks. In these instances, helpless behavior can persist where subordinates “just sit back and wait” (Sub-2) until they can connect with the supervisor, but that could take “about an hour and a half...[through a] day” (Sub-2). These instances lead to inefficiencies in the audit and also can be quite frustrating and demotivating for subordinates, where one subordinate explained:

I would keep working on other things and try to compile as many questions as possible so that when I did meet her [the supervisor] I'd be able to give them all. But that was probably only the case 20 percent of the time. The other times I would just move my mouse around and wait to get an answer because I'd hit the roadblock, and I couldn't figure it out, and I was afraid if I kept trying to do it my way then I'd have to redo it all...So I would sit there for many hours on end just waiting for a response. (Sub-8)

**Summary.** In summary, both supervisors and subordinates expressed their desire to perform well despite communication challenges. Supervisors acknowledged several challenges of coaching and supervising subordinate work, while subordinates expressed frustration with learning and unease with performing well. Although both groups discuss communication strategies they adopted to accommodate the other party and improve workflow when remote (e.g., supervisors expressing the importance of upfront, detailed communication and consistent follow-up, subordinates learning to communicate efficiently and being proactive), it is apparent that these strategies are applied inconsistently and dysfunctional strategies can develop.

### **I Need to Feel Connected, but...**

Developing feelings of connectedness at work involves the recurring exchange of emotions between supervisors and subordinates, such as being empathetic, nurturing, or vulnerable (Kark and Shamir 2002). However, working remotely provides less opportunity for these emotional experiences, making it challenging to satisfy the ‘need to connect’ (e.g., observing someone struggling and offering help, physically clapping hands to celebrate). Consistently, my

interviewees indicate that working remotely makes feeling connected to other team members more difficult. For example, the interviewees acknowledge feeling “less connected with the people that they work with” (Sup-7) and that they “definitely miss a little bit of the personal touch” (Sup-12), just being with my team members is really what makes me want to go into the office now and then” (Sup-10). A subordinate similarly says “I did miss out on that a good bit...the camaraderie and hanging out with coworkers late, late, late [during busy season]” (Sub-3). One geographically distributed supervisor indicated a desire to regularly connect in person with her team but that budget constraints do not allow for that, “the supervisor told me I could come anytime I wanted...the first trip would be expendable and...the second one might not be. I’m not too interested in buying my own flight and hotel [to go work]” (Sup-6).

### ***Hindrances to Connectedness***

As both supervisors and subordinates express feeling disconnected due to remote work, they also share some primary root causes. Prior research indicates that feeling disconnected often stems from supervisors' and subordinates' inability to share and/or observe positive and negative emotions, both of which facilitate relationship development (Kark and Shamir 2002). A subordinate explains, “There are certain people who don’t let their personality come through on Zoom. I think it’s because they don’t enjoy it, they’re not comfortable...they’re just kind of more stoic in front of the camera” (Sub-9). Others explain that there are also fewer opportunities for supervisors to provide a sincere “good job...in the right timeframe!” (Sup-14):

‘Hey, that looked great! Good job on that!’ Somebody said that the other day [in person]. If I’m on a Zoom call with an intern, helping them, the senior may not be there so they didn’t hear it. So, that’s hard...In that case, it kind of fell in his lap, but if we hadn’t been in person, you’d have to look for that and look for those chances to encourage. They [supervisors] can always tell you about the work that they’ve reviewed, but as far as more of the personal interactions, they may or may not be a part of those. (Sub-9)

Another shares,

I do miss that aspect of in-person. In-person allows for more closeness...It allows you to give more empathy...It gives you that room to be more human...Zoom makes it a little more cutthroat...I had a situation where literally...she was crying [after providing feedback] and I really couldn't tell [visually]...In-person, I don't think I would even let it get to a point of her [the subordinate] feeling that bad and crying about it. (Sup-10)

Equally important is the “shared suffering” through negative emotional encounters, such as client frustrations and burnout, that auditors typically experience together during busy season, which establishes social bonds and creates feelings of loyalty and trust (Kark and Shamar 2002; Lomas 2015). However, “this environment helps hide emotions that are negative. I could be super frustrated and they won't even know it” (Sup-9) because negative emotion is “much more filtered” (Sub-11). Another supervisor says “Remote, it does seem like you're on an island all by yourself during busy season. In person, people come over to your desk and talk to you, and you can tell when someone is frustrated” (Sup-16). Supervisors further explain that expressing “any negative emotion is going to be amplified over Zoom or any sort of [computer-mediated] communication...I've learned from experience so I try to be as neutral as possible” (Sup-3). A subordinate also says they “try to keep it [negative emotions] to a minimum because I just want to log off” (Sub-1); however, is reminded of the value of negative emotional exchanges during an in-person encounter:

I definitely saw moments like that [negative emotions] during busy season, and it was kind of humanizing because I only met these people online for the most part. People that I did see in person and they would have that literal gasp or frustration, it was refreshing because when you're just IMing somebody, I guess other people probably do what I do is filter out emotion...to avoid confusion because it can be so easily misconstrued and it's just easier to keep it as sterile as you can. (Sub-1)

Finally, text-based CMC (e.g., email, instant messaging) is essential to remote work; however, it reduces or eliminates the presence of key social context cues (Short et al. 1976; Byron and Balridge, 2007; Byron, 2008). As a result, individuals are naturally inclined to search for cues in text-based messages to understand and feel more connected to the communicator (Bonaccio et

al. 2016; Boutet et al. 2021). Consistently, several of my interviewees search for social cues; however, these cues may not fairly represent how the communicator is feeling. Thus, misunderstandings occur which can dampen or slow feeling connected. For example, a subordinate explains “In Teams you can see the typing bubbles, which can be very foreboding. Especially if it's like, oh no, this manager’s typing something and then the bubbles go away...I think that can be stressful” (Sub-4). Others share that “sometimes if the happy face [emoji] or exclamation mark isn’t there [included in the message], maybe I’ll think oh, they’re disappointed” (Sup-9), and that sending short messages can make subordinates feel uncertain; “I was short, just said ‘redo these or something like that’, then I got a message, ‘Oh, I’m sooo sorry,’ and a really long [message]. And I was like, ‘Oh, I didn’t mean it like that.’ It just didn’t work” (Sup-8).

### ***Communication Strategies to Address Desires to Connect***

Both supervisors and subordinates express a desire to connect but acknowledge that working remotely interferes with effective relationship development. As such, both supervisors and subordinates developed strategies to address their psychological need to connect.

**Supervisor Strategies.** Within the context of feeling connected, supervisors consistently emphasize the importance of being intentional about sharing emotions given the interpersonal barriers of remote work. I find this common theme of intentionality is expressed through supervisor strategies to engage in nonwork-related conversations (“shoot the breeze”), exchange emotions, and make subordinates feel valued.

First, because communication is primarily initiated to discuss work-related topics (e.g., explain tasks, answer questions) when working remotely (Tsipursky 2023), it is easy to overlook engaging in nonwork-related chatter which is essential to relationship development (Kramer 2017). For example, “the small talk you do at the beginning [of a meeting] is significantly less

over Zoom... it's not as comfortable" (Sup-7). Accordingly, supervisors indicate purposefully "trying to have a casual conversation with the subordinate, maybe every other day" (Sup-6), and intentionally "keeping a light environment...joke...if you know they have something important going on in their life, ask about it" (Sub-8). Virtual team meetings also provide an opportunity to build team camaraderie by incorporating "an activity or a question of the day just to get to know people a little better" (Sup-1). Though simple, these strategies stand out in the remote environment given they inherently occur less frequently, and help subordinates feel more comfortable.

He's a managing director. I was an intern, and he just reached out to me and said, 'I wanted to say hello and welcome you and so can we have a 10-minute Zoom call?' At first it kind of creeped me out because I got this ping from someone I had no idea who it was but then I realized 'Oh, he's a managing director. Oh, that's so nice.' (Sub-9)

Second, "to create a trusting relationship with staff where they don't feel like they can't communicate" (Sup-5) when working remotely, it is necessary to be intentional about connecting, and sharing emotions. For instance, one says

I'm with a new team, and I feel like it took a while for people...above me and below me...to build that trust and relationship together. Things that helped us get to that trust level were those one-on-one syncs...just making sure that people always know what you're doing...and just open communication. (Sup-4)

One simple strategy that many participants excitedly discuss is using "exclamation points, gifs, those types of things" (Sup-8) to "make things fun and lively" (Sub-3). Subordinates, in particular, appreciate this strategy because "emojis are something we're [subordinates] used to with texting our friends, and it helps cut the edge...If I'm giving someone a review note...I'll add a little smiley face so they know I'm not being hostile or aggressive" (Sub-3). Moreover, supervisors can deviate from communication norms by intentionally excluding emojis to convey frustration or irritation. For example, a supervisor shares an instance where a subordinate performed a task incorrectly, and, as a result, "rewrote everything [instructions] out and added a couple of pointers...No smiley

face, I'm giving you that criticism and that feedback, and then I'm not using a Smiley face at the end of it.”

In addition to using emojis to share emotion, supervisors suggest being transparent, trusting, and vulnerable, which can help subordinates feel empowered when remote (Kark and Shamir 2002). A supervisor shares:

I think for me, I try to be transparent with my staff, especially when I'm overwhelmed during a deadline and maybe not being as detailed as I should in an explanation, or maybe I am not being as patient as I should be or available...it's really important for me to take ownership of that. And just be like, 'Hey, that was a lack of my communication, not necessarily a lack of your skill set or knowledge'. (Sup-1)

Another says “I think it is the relationship factor and the trust factor...You need to treat people as human beings. Things come up during the day that they may be like, 'Hey, I need these two hours' and that's totally fine if you do, just as long as you're communicating appropriately.” (Sup-4). As a result, subordinates feel empowered.

Most of those supervisors honestly were very good about... stressing what works for you...I realize that I'm really good at working from home when it comes to deep work and...only go to the office for collaboration... Having that flexibility and independence, that's been empowering. (Sub-5)

Third, while strategies like sending emojis and demonstrating trust are useful to promote supervisor-subordinate connectedness, they do not necessarily provide a dedicated safe space for subordinates to also share emotion throughout the audit. Thus, some supervisors have virtual audit rooms to create connectedness or hold virtual “open forums where people could complain about things” (Sup-4) to encourage emotion-ridden discussions that facilitate team connectedness. Subordinate auditors acknowledge the benefits of virtual audit rooms, viewing them as helpful to improving knowledge sharing and team bonding, “It's [the virtual audit room] a huge resource. It's the difference between asking one colleague one thing versus being able to ask five to six colleagues all at once. It's also especially good for keeping the communication strong between a



team” (Sub-4) and “We [team members] might not have any questions, but we’re all just sitting there and talking; I feel like that kind of gives you some bonding time” (Sub-12). The virtual open forums are less about knowledge sharing and more about connectedness, where a supervisor explains,

Over this past busy season, we created share Wednesdays. On Wednesday evenings, I will cold-call everyone on the team...seniors down. There are no managers because we want the staff to like be...super informal, very laid-back...Then, we would go around and say, one thing that you're super proud of...whatever brought you joy either that day or that week. We also talked about what is frustrating...because more often than not, what's frustrating you is most likely frustrating everyone else...That helped provide an outlet for people to kind of speak their minds and create a more balanced mental health for the week in general. And people look forward to that. Sometimes I will forget to cold call people and a staff would be like...are we doing our Wednesday thing? (Sup-5)

Congruently, a subordinate of the above supervisor similarly acknowledged the benefit of these meetings, “I think my senior was really good about this, and I want to be like that where we...senior-staff group just talk about whatever we want, whether that be good or bad. I feel like that’s where I’ve seen a lot of negative emotion” (Sub-7). Meetings like this also allow supervisors to “notice that someone is down...they’re not behaving like themselves because they’re being short or very serious...we would drop a meeting on the calendar to check in one-on-one” (Sup-5).

Finally, my interviewees want (and need) to feel more valued in the remote environment, which requires an intentional show of appreciation during virtual interactions. One subordinate explains “My team has done a really good job of making sure that those of us who are on the lower tiers feel valued and our work is important. I feel like the work I do is sort of a springboard for the audit” (Sub-9). A supervisor further acknowledges that “young staff especially are pretty easily crushed by that [constructive feedback] because when you’re in school if you get...an F, ‘oh my gosh I failed.’ So, I try to tell staff...I appreciate the effort. Make it real clear that it’s not a failure” (Sup-7). Others intentionally communicate “more clearly with staff to make sure they know

they're doing a good job and that I appreciate their help" (Sup-2), and "shout out different people based on feedback the other team members have given me and [say] 'Hey, this person did an exceptional job on this piece of the puzzle. Let's shout them out!' (Sup-3). This includes acknowledging a subordinate's effort despite performance challenges as one notes "the main thing for me is that...if I see the person's trying but making many mistakes, the main thing is they're trying" (Sub-10). As a result, a subordinate states "I think encouraging when I have done well on something helps me gain confidence. When you're confident about your questions, you're confident about your work, it makes your communication easier" (Sub-9).

While I learn that many supervisors make a conscious effort to connect with their subordinates through interpersonal conversations, emotional exchanges, and showing appreciation, some avoid emotional exchanges and use features of the remote audit context as an excuse for connection failures. For instance, a supervisor describes being "very stern [direct]...and keep it short to not bring in emotion...like here are the facts, this is what needs to be done better...I don't even say why I'm upset because there's no point of bringing emotion into it" (Sub-3). Unfortunately, subordinates may in turn perceive the supervisor as "scary, straight to the point, or intimidating" (Sup-1). Similarly, joking or sarcasm can be misconstrued:

Making a joke about something, or you'll say something that might be a little bit more sarcastic about a deadline and it comes across a lot more serious because you forgot that you're in sort of a position of power...It comes across as more stern or more direct than you intend to. It can come across as being...authoritarian. (Sup-3)

Second, even in the remote environment where CMC creates a barrier to emotional exchanges, busy season affects mood. However, I learn that instead of creating shared suffering experiences that forge relational bonds, my interviewees describe disconnectedness due to less frequent interpersonal communication. For example, "You see people coming in and out of really long calls and nobody looks like they're in a good mood...there's less joking...everyone is just

business” (Sup-12). Another similarly calls busy season a “dark time where the mood is down...people are just not speaking as much; they’re just sort of busy doing things” (Sub-6). Unfortunately, “staff can read into when their senior is overwhelmed or stressed, and that discourages them from communicating more...I have gotten the ‘oh, sorry. You just seem so busy. I didn't want to ping you or I didn't want to call you’ comments” (Sup-1).

Finally, while trusting subordinates makes them feel empowered, supervisors indicate that it is also necessary to “be stern about communicating specific deadlines...[because] sometimes that relaxed trusting [approach] doesn’t really...explain the severity of the situation...sometimes people may be working in the dark if I’m not pinpointing deadlines” (Sup-4).

**Subordinate Strategies.** I learn that effective relationship development largely depends on the supervisor’s mood and willingness and availability to connect. Thus, subordinates have implemented personal strategies to optimize supervisors’ unique connection efforts and/or accommodate supervisors’ preferences, including mentally adjusting, sharing emotions, and networking. First, subordinates recognize that “you have to be more intentional about the connection [in the remote environment]...Some people are not comfortable on Zoom having a fun conversation about the weekend or whatever. They just want to get on Zoom and get the meeting done” (Sub-9). Thus, subordinates have mentally adjusted to cope by not taking supervisors’ messages too personally. For example, one shares “since a lot of it [supervisor-subordinate interactions] is...text-based, it can be hard to interpret tone and real intention...It’s been kind of that lesson of patience and kind of trying to give people the benefit of the doubt” (Sub-5). Another says “Because I’m constantly texting...I’ve taken the stance...that I am reading a text message and that is all I’m doing, don’t look too much into it. [Unless] they explicitly write out ‘I am upset with you’, like don’t read their voice in your own mind with your voice. So, I have that stance in the

workplace as well” (Sub-3). The subordinate further elaborates saying,

If someone says something and I'm like ‘Wow, that was a little salty’, then I'm like ‘No, no, no. Hold on, get that negative thought out.’ They probably didn't mean it like that. And there's been a couple of situations where I was like, ‘Ooh, that was a little blunt.’ Then I go to the office the next day and...they're like, ‘Hey, you did a great job’ and I was like, ‘Oh, wait so you’re not mad?’ (Sub-3).

Second, subordinates stress the importance of attending video calls with the “camera on, just to have that personal feel” (Sub-1), and try to “just talk through other things that aren’t work [related]” (Sub-9). A subordinate shares an example where “I couldn’t connect the person’s face and their personality to the message. I remember being very intimidated, but that very quickly went away when we got on our first call together and we were able to connect and I could really sense her [the supervisor]” (Sub-4). One subordinate further explains,

The people who I’ve connected with the most and work the best with are the ones who I’ve taken a little more time to be like ‘Hey, what did you do this weekend?’ Taking a few minutes at the beginning or end to just talk about other things. It’s something about Zoom. It’s very easy to just jump on, jump right in, and jump off. It feels awkward... You have to be intentional about it, but that’s made a difference. (Sub-9)

Finally, subordinates are aware that performing well increases a supervisor’s willingness to connect. For instance, a subordinate suggests “staying on top of my work, making sure that I’m getting things done on time, making sure that I’m being proactive, [and] making sure I’m reaching out to the supervisor before they have to reach out to me” (Sub-11) earns a supervisor’s trust and builds supervisor-subordinate connectivity. Another explains “those [relationships] built over time, I ended up staying later and as they trusted me to take on tasks and take care of them effectively and ask the questions I needed to ask...I built relationships with...both loyalty and trust” (Sub-1).

Finally, many subordinates indicate meeting in person is the best way to connect with team members, including the supervisor. Many attend in-person networking events to build relationships

because virtual networking events are “not great. It’s just sort of a necessary evil... There’s nothing like going to a happy hour...and having a conversation with two other people” (Sub-9). For example, a subordinate has “gone to all of the team socials and outings that we have and tried hard to connect with the engagement team. I've also noted everyone's different personalities and tried to pay attention to that...It made me feel very confident and comfortable” (Sub-1).

**Summary.** In summary, supervisors and subordinates implement several strategies to connect in a remote environment. Further, though many strategies are obvious, such as shooting the breeze or using the camera function, many supervisors and subordinates neglect to implement them despite connection benefits. As a result, subordinates continue to experience connection issues. Though connection tends to develop over time, most interviewees express that some in-person work is necessary to truly develop relationships.

### **I Need to Feel in Control, but...**

Job control is a psychological need broadly defined as “the ability to exert some influence over one’s environment so that the environment becomes more rewarding or less threatening” (Ganster 1989, 3). It is associated with feelings of self-efficacy and empowerment, which can lead to a greater willingness to be proactive, increased aptitude to manage job demands and stressors, and better performance and well-being (Greasley et al. 2007; Meier et al. 2008). Organizational behavior research further suggests that altering certain job factors (e.g., environmental and/or job role changes) can reduce one’s perceived control; thereby, increasing the uncertainty felt at work (Ashford and Black 1996).

Both supervisors and subordinates seem to experience uncertainty settling into work-life norms (i.e., creating boundaries between home and work) and their roles after shifting to remote work. For instance, a supervisor shares “Work-life balance is probably the one thing that will

surprise people about working from home. I'm sure some people...can figure out a way to make it work. For me, I have a better work-life balance when I have a physical work-life balance...My work is in my house so for me the work-life balance gets more skewed" (Sup-11). Another supervisor expounds,

Initially, it was like this is awesome, but then you realize 'Oh, I'm doing laundry in the middle of the day, or I've gone to the kitchen six times. I went to walk my dog. And then dang, I still got all this stuff I have to do....It felt like you were working all the time even though your hours weren't showing that...When you're in the office you're not going to stay on your phone all day because people are walking around. I think after that busy season I was like something needs to change for me. I think everybody kind of came to that conclusion. (Sup-14)

As a result, participants consistently express that the remote environment, including communication obstacles, makes it difficult to effectively and efficiently execute their supervisor and subordinate roles. Specifically, there is more choice involved with using CMC relative to in-person communication, and supervisors' and subordinates' CMC preferences are not uniform, which disrupts the sense of security supervisors and subordinates feel within their roles. For example, participants share that "everyone has their preference" (Sub-17), and that CMC is "definitely different on a person-to-person basis...Some are exclusively instant messaging and...some exclusively Zoom" (Sub-1). A supervisor shares the following example, and describes CMC as "complicated" and "troublesome":

It was difficult because one subordinate was pretty good with direction, but wasn't asking a lot of questions. The other subordinate was asking a ton of questions but wasn't seeming to grasp the tasks. And of course, we're doing all of this via e-mail. One never used video and I had never met the subordinate. That was complicated. The other subordinate does use video but wouldn't ask many questions...Having to learn, there are two different styles, and how to manage them differently communication-wise was difficult...Communicating differently with two different associates was troublesome at first. (Sup-6)

A subordinate in turn feels,

Unequipped to perform the work. Like I was not professionally ready for the work and I was not being responsible for completing my work. In a sense letting the team down. We just felt so much guilt...just contacting supervisors just to ask questions. Not just for the audit

terminologies and the things that we need to consider but also simple Excel tricks...Then we stay on way longer than we should. That puts a toll on our personal lives as well. (Sub-2)

### ***Hindrances to Feeling in Control***

Remote work presents significant challenges in the area of job control which participants wish to overcome to improve their performance and well-being. First, participants express some uncertainty in managing work demands when working remotely. Many supervisors share the sentiment that “more so than in an in-person environment...there have been times where I've just been swamped” (Sup-4); thus, they spend “so many hours of the day working” (Sup-2). These challenges are largely due to the drastic uptick in CMC that fills up their hours during the day:

I'm participating where I would [normally] have a staff sit in or I would come back from the meeting and debrief with them. It's a lot more challenging to do that in a remote environment because I have to schedule a separate time, my calendar fills so fast because all these people want to communicate, and you have to have those meetings and face-to-face interactions to avoid miscommunication that happens when it's just IMs or Pings. (Sup-3)

I think the schedule just changed. Before a simple task that could take like 30 minutes if we were all in person, now it's taking a couple of hours because you have to go through the procedure of the scheduled call and talk it through...So, that's elongating the work day...It's taking longer because I'm home. (Sup-5)

Another explains that “the problem was cutting off work” (Sup-16) because “you don't ever turn your computer off” (Sup-15), e.g., “if my computer beeps while I'm walking by, it's ‘oh, let me check that real quick. So, it is harder to set boundaries being virtual. It doesn't feel like work stops” (Sup-12). Others acknowledge they just are not as efficient, “I found out I work longer from home. I get a solid eight hours done in the office, where I feel like I've achieved eight hours of greatness. Whereas at home my eight is more like a 10-, 11-hours that I feel like I've got 8 hours of work done” (Sup-16). As a result, supervisors experience “more burnout...[and] staff feel a certain amount of stress as well and burnout” (Sup-2).

Finally, supervisors struggle to hold subordinates accountable in the remote environment.

For instance, it is “really hard to know what they [subordinates] are doing...I don't know if they're just sitting there lost and confused...virtually, it's impossible to know, they could be sitting there staring at the screen with no idea what to do, but might feel scared to reach out...it's definitely tough in a remote environment” (Sup-2). Another explains “a lot of that accountability was built around the team. It was like we are a team that has a goal in mind that we’re trying to achieve...you don’t want to let the team down. When remote, you don’t have that...feeling” (Sup-14).

### ***Communication Strategies to Address Desires to Feel in Control***

In summary, both supervisors and subordinates express a desire to reduce uncertainty when executing their roles and managing their schedules in a remote environment. As such, both supervisors and subordinates developed strategies to address their need for job control.

**Supervisor Strategies.** Theory suggests that individuals may exhibit uncertainty-reducing behaviors to regain control within their environment and/or role (Ashford and Black 1996), which is demonstrated through the communication strategies participants implement in the remote environment. I identify themes of supervisor strategies to manage communication inflow from subordinates and more effectively balance their time at work. Many of the strategies implemented to improve job control are coping mechanisms that supervisors implemented to benefit themselves, particularly their capacity to satisfy their goals in and outside of work.

First, given supervisors' immediate need to overcome role uncertainty, many supervisors adapted to being “pretty direct with like ‘Hey, what is your learning style? What do you prefer?’” (Sup-7), or exert significant effort to find a suitable work dynamic for both the supervisor and subordinate. One says “Eventually I found what worked for the subordinate, and the subordinate picked up at the end. We resolved that frustration” (Sup-7).

Managing remote work also necessitates that supervisors train subordinates on how to



effectively communicate upwardly because “in this virtual environment, the staff doesn’t see me [the supervisor]. They don’t know what I’m doing. When we’re working with the staff [in-person], if they see me grinding, [they’ll think] let me wait a little bit. Whereas now, boom, they’ll just fire questions. They know I’m working, but don’t see that focus” (Sup-9). As a result, one supervisor bluntly tells subordinates “I’m trying to get my work done. I can’t handle all of these questions” which gets “the message across [because] they [subordinates] were kind of scared...from now on they have not sent more than one outstanding list of questions per day” (Sup-6). Others instruct subordinates to “ping me and let me know ‘Hey, I have a question. Is now a good time to talk?’ and I’ll tell you yes or no” (Sup-7), which is particularly useful when work demands are high. A subordinate also says “I was mainly taught that it’s ok to ask one-off questions, but at the same time if I’m asking a lot of one-off questions, I should consolidate them” (Sub-7). Supervisors also now commonly hold “virtual office hours...just a standing one-hour office hour every single day except on Fridays” (Sup-5) to more effectively and efficiently funnel and respond to questions. But, for this strategy to work “you have to trust that person is doing their work on the other side of the camera because you’re not there to see.” (Sup-5).

Second, supervisors indicate they must set stricter communication and work management boundaries to have undisturbed time to complete their own tasks, but this is “easier said than done” (Sup-2). Supervisors “definitely need to own their schedule...more so than in an in-person environment” (Sup-4). Thus, many strategically choose to “go heads down” (Sup-4), or “block off time [on the calendar] as being busy or having a meeting...[to turn the] Skype status...red” (Sup-7), which discourages subordinates from reaching out. Further, “if it’s not that important, doesn’t need to be addressed right away, [then]...let’s schedule a call later in the day and take care of it then. Otherwise, my day would be ruined through pings” (Sup-9). Supervisors also now have the

unique ability “to shut off communication” (Sup-5), giving them more control over when they pursue supervisor-subordinate interactions. For example, some “try not to have back-to-back-to-back meetings to...have time to myself” (Sub-7), and “pull back on the unnecessary meetings like the one-on-ones” (Sup-4) especially during busy season. A supervisor explains that there is “a tendency of over trying to look at someone face-to-face...because we do want to build trust and a relationship...but during crunch time...really being intentional about when you’re meeting and not just meeting for the sake of meeting” (Sup-4).

If we can talk about this topic through pings or IMs or Teams, let's do it...I was very guilty at the beginning because I felt like I had to talk to someone. So, I spent most of my time on video calls...But now I've learned to adapt more to discuss through messaging rather than a call if I can, I will, because that helps me multitask a little bit better...It helps me continue my own work. (Sup-5)

Another supervisor explains how she “had to change my thinking because at first, I was like I don’t ever get my work done. I had to change my tack to...being on these calls is part of my work...Like the relationship building with a client, that’s technically part of my job” (Sup-12).

Finally, supervisors implemented several strategies to hold subordinates accountable. Yet, the “invasiveness” of the strategy tends to depend on “the skill level of staff and how comfortable the supervisor is letting them work independently” (Sup-1), the complexity of the assignment, the deadline, and prior experience with the subordinate. One supervisor shares,

It also depends on what they’re working on, and what the due date is. If it’s something that’s not that important, we got time, okay. I’ll let them do their thing and maybe I’ll check in with them at the end of the day. As the importance rises, the check-ins rise. And as their level rises, the check-ins decrease...If it’s someone I am not confident in, I’m going to be on them way more than someone who has established themselves and shown me that they can run with what they’re doing. So, I think there are a lot of things to consider. (Sup-9)

While some supervisors train by doing, exposing subordinates to the various forms of CMC available to support supervisor-subordinate interactions and providing a protocol for how to effectively use each medium, others feel forced to micromanage (e.g., “I really do not like to be a

micromanager... but] once we went remote, it became a lot more micromanaging” (Sup-14)

and “hand-holding” (Sup-16) to ensure subordinates are completing their work. One supervisor explains a “slow release strategy”,

You have to sort of start from ground 0 and build those daily or weekly habits. For me, I’ll start by scheduling all the meetings, opening the communication for them by having those regular syncs, sending messages to them, you know opening up that door to communication. Then over time, releasing the reins to say, ‘Hey, you know, if you still need my support, you can still use the same channels we established’. (Sup-3)

Supervisors also may begin working “an hour earlier...to plan out the day for subordinates” (Sup-1), send “budget hours so subordinates know this is the number of hours it typically takes [to complete a task]” (Sup-2), and monitor subordinates' instant messaging activity status to determine if the subordinate is currently working, rationalizing that “it’s kind of the same thing as being in the office and...seeing doors shut, you can see when people have the busy symbol or do not disturb” (Sub-3). A supervisor shares an example where,

That manager was very, very much a status stalker and was 100 percent one of those people who would make note of how long you’ve been online or how long you’ve been offline and would maybe make a comment about it if you’ve been offline for too long...It is frustrating when you’re trying to get your work done and every 45 minutes they send you an email, ‘Hey, any update on this workpaper I’m looking for?’ And you’re like, ‘Well, I would get a lot further if I could stop emailing you every ten minutes.’ (Sup-7)

Supervisors are also more inclined to “cold-call” subordinates where the supervisor will “just willy nilly call...I know they’re working with me...I don’t feel like if we weren’t remote that it would be any different” (Sub-3), and should be more attuned to “staff...being awfully quiet” (Sup-7) throughout the day which is a good indication for a supervisor to check-in. A subordinate agrees with this intuition nothing,

You can kind of tell with like the lack of them asking questions. Especially as a new staff, you can have tons of questions. We know that this is all so new to you, and college doesn't prepare you exactly for the work that we're doing... I think a lack of questions is kind of a sign of them not feeling comfortable asking questions because it's pretty rare for a new staff to not have questions. That could be a little suspicious. (Sub-2)

Despite supervisors' efforts to implement strategies that reduce role and environmental uncertainty, "when to stop communicating" (Sup-5) remains challenging for supervisors to navigate. A supervisor elaborates saying:

I'm trying to get a hold of a lot of people. I'm trying to get hold of the staff to get their status. I'm trying to get a hold of managers to ask them questions so I can help move along certain things. For managers, they are super busy and they're juggling a few clients so sometimes the only time I can talk to them is in the evening or close to dinner time. It has been super difficult to set that boundary to say, okay, I have not talked to this manager, I can jeopardize my afternoon because I need to talk to them...But I'm super guilty of...they have pinged me at 5:15 or 5:30 to say like, 'Hey, I have a question for you.' I don't have the guts to be like, No, I'm about to go walk my dog. I'm about to start dinner. (Sup-5)

Another says,

I think it's a problem when you're micro-managing...checking in on people because you're not seeing them...I think it's been challenging...You can set timelines, but you don't want to dictate every single move that somebody's doing or micromanage or over-communicate in that way but at the same time, you want to provide the support and guidance. (Sup-3)

Finally, effective communication management takes time and effort that some supervisors are not willing to sacrifice atop standard audit work demands. A supervisor explains "Sometimes it's easier if we're in a virtual environment to just do it myself...if something wasn't done correctly the first time, I'll go and just redo it instead of trying to explain either through typing it out or then hopping on a call to get it redone" (Sup-8). Another shares an example where "I told her that several times, she reconfirmed with me over Teams and she still did not get it completely right. So, I hit her up and I was like 'Hey, I already adjusted it'" (Sub-3). To save time, a supervisor also describes strategically giving "subordinates small and simple things that I don't need to explain" (Sup-2). While these strategies may allow for efficiency of the audit, they put stress on the supervisor and also prevent the subordinate from learning from their mistakes. Lastly, some supervisors solely work from the office, and in these cases, may avoid CMC altogether. "The manager on that job is pretty notorious for not responding to any emails or messages. But he [the supervisor] is also 100 percent in the office. So, I guess if you have to ask the manager a question,

it's probably better to be in the office for that" (Sub-4).

**Subordinate Strategies.** I identify that subordinates implemented communication strategies to improve job control through managing supervisors' impressions, personal accountability, and creating boundaries between work and life. From a performance perspective, subordinates often struggle to discern the appropriate time to contact a supervisor with questions. Subordinates explain "There's this balance of do I ask this question right now or do I keep going and wait until I have four or five questions. How stuck am I?...when do I make the call" (Sub-9), or "maybe today's not the day to ask that question that you need to ask" (Sup-7). As a result, subordinates manage supervisors' impressions as one describes "faking it until I made it basically. Acting like I had a better grasp on the task than I actually did", further explaining that "I'd just send up crappy work, and get notes back and then fix it from there...If it wasn't good, I'd get 30 review notes back, and then I learned from that" (Sub-8). Another interviewee strives to be as available as possible to not only impress the supervisor but also as a ploy for supervisors to later act in the subordinates' favor: "To be honest, if I'm...as available as possible to them, if I need something on my end...they know that I've always been available to them, so let's try to...be flexible for him if he needs our help for whatever reason" (Sup-5).

Second, many subordinates struggle to stay engaged during the day when working from home, and as a result, are prone to work in the office to hold themselves accountable. A subordinate shares "When I come into the office, much fewer windows, fewer things to distract me, and also more people around to hold me accountable. When I'm at home, I can move the mouse around and people think I'm working all day long" (Sub-8). Congruently, a supervisor says subordinates will "sit on something for a long time, and it's like 'hey, why didn't you say something?' 'Oh, you looked like you were busy, or it showed you were busy online'" (Sup-16).

Finally, to create work-life boundaries, many work in the office full-time or have adopted a hybrid work schedule.

When it comes to the office, I have a backpack that I throw all my stuff in. When I come home, I put that backpack on the floor and pick it up in the morning when I head to work again...When I was working from home, my laptop would always be open. I never closed it at the end of the day, and my phone would always be sitting on the desk. When I'd be in the kitchen cooking, and cleaning, I'd hear emails go off. Then, I'd walk over and read it—after hours and on the weekend. (Sub-8)

Others work hard to create distinct boundaries at home,

I make it a point to shut down my laptop every night...Then, I have two separate phones. My work phone I won't look at unless I need to check to see if there's an early morning meeting that I have to get to...or I'm expecting an email or something...I find that helpful. If I turn off my laptop completely, it forces me not to log on at all. If I leave it open, I'm the type of person that's going to go, 'Oh, let me just quickly log in to see what's going on.' I feel like that's helped in creating a balance. (Sub-7)

Nonetheless, a few subordinates find working from home preferable because they can use CMC to strategically manage communication flow. One shares, "I feel like it [working from home] allows me to get my work done sometimes because I can choose not to answer...not to accept any meetings for a certain period or block my calendar," further explaining that "you can change your Skype status to offline and still keep working for a little bit...That's another time where no one's going to ask you questions, and then you can actually get your work done" (Sub-7).

**Summary.** In summary, supervisors and subordinates desire job control and implement strategies (favorable and unfavorable) to reduce uncertainty. Though shutting off communication is personally beneficial, it can negatively affect the other party or could send unintended signals of neglect or dismissiveness that could lead to disconnectedness. Further, supervisors feel forced to micromanage to some extent, which can also impair supervisor-subordinate relationship development and reduce subordinates' feelings of empowerment.

## V. DISCUSSION

Theory suggests that individuals have three basic psychological needs—competence,

connection, and control—that they desire to satisfy at work. Without specifically inquiring about these needs, the participants consistently discuss the implications of remote work on their ability to satisfy these needs. As a result, they have implemented several communication strategies to re-satisfy each need in the remote environment. Theory further suggests that needs and the process to satisfy needs are unique to each person which may yield both favorable and unfavorable outcomes, and that the most optimal outcomes are present when all needs are collectively met. Accordingly, I summarize my key results and identify outcomes in Figure 3.1, and discuss the implications on team dynamics and audit quality below.

[INSERT FIGURE 3.1]

High-quality supervisor-subordinate relationships are a necessary component for effective supervisor-subordinate communication, and in turn audit quality (Andiola et al. 2019). Yet, remote work disrupts auditors' ability to satisfy this psychological need and establish successful supervisor-subordinate relationships. Importantly, supervisors in the sample emphasize that coaching subordinates to help them perform well hinges on their ability to connect with the subordinates. One says “As a senior, it is my responsibility to coach staff because *I am supposed to train them to be me...*to do that, I have to first build a relationship...it is a lot more time-consuming, I must say” (Sup-13). This supervisor acknowledges that communication is critical to developing relationships, but that these team dynamics are intertwined with audit quality by their influence on learning and performance. Further, CMC can lead to miscommunications or misinterpretations that can strain relationships. For example,

A staff that I felt like I was struggling to instruct and lead, and there was like a comment that she made. I asked her ‘Hey, how do you learn best? How can I adjust my teaching style to help you?’ She made this comment ‘Oh, maybe use sock puppets?’. And I was like, ‘Are you being sarcastic with me right now?’ In my head I...take it as she was being sarcastic and kind of not appreciative of the time that I was putting in to help her. But, that was just her humor. That created just like a really interesting shift because I'm here investing my time into you to help

you grow and I was like, ‘What the heck, That's kind of rude’. (Sup-2)

Importantly, subordinates indicate that supervisors who build connections early through the strategies I discuss above share, “Previously, I would be too scared to say something...now, I don't care. Honestly, when you work with someone...enough times, you just end up laughing...I don't take it seriously, but when I first worked with the supervisor, I wondered ‘What am I doing? What's wrong with me?’” (Sub-1). However, in many instances, my interviewees acknowledge that these relationships develop over long periods. One interviewee expounds,

I'm lucky. I've worked with the same manager for the last 2.5 years and the supervisor is phenomenal. The supervisor recognizes me almost more than my parents. I feel like I know the supervisor... any small victories in my work or my personal life, I'm always getting positive affirmation and support. (Sup-3)

The length of time to form bonds in a primarily remote environment is concerning, given that new subordinates tend to require some level of comfort with a supervisor to feel confident speaking up about audit issues (Clor-Proell et al. 2022, 2023). Future research should examine mechanisms that can help to build relationships to develop comfort and trust between supervisors and subordinates more quickly when working remotely and the effect on key audit quality outcomes (e.g., speaking up, task performance). From a practical perspective, firms could consider incorporating training on effective communication strategies for both supervisors and subordinates to improve communication practices when working remotely, including educating on appropriate communication etiquette when working remotely and implementing formal processes, including mentorship programs, to guide supervisors and subordinates in relational development. Further, to incentivize the development of supervisors' tacit skills and build relationships with their subordinates, firms should consider aligning corresponding supervisor performance expectations.

Beyond learning and performance, another supervisor emphasizes the connection between relationships and turnover, stating that “coaching these days is really important for us *because*



*people work*. If the work is hard, I can tolerate that. But, if there's a problem with the team or people, *people will leave*" (Sup-17). This is consistent with prior research that indicates that individuals will generalize feelings about their supervisor to the organization, and this projection can inform their organizational commitment, and in turn, turnover intentions (Andiola et al. 2020).

I see this concept come to the forefront in my interviews where a frustrated subordinate states,

Towards the end [of the audit] *no one cared about each other*. It was just like let's just get this done and be done with it...*I could care less about the team*. I'm done with the whole 'we're a family'. Now, we just get paid to work...I'm very detached from caring...I'm just like 'Hey, we have a job here'. *My whole goal is to minimize the number of hours I do this job so I can live the life I enjoy outside of work hours. That's my mentality now.* (Sub-8)

The individual has lost motivation to perform well, and it seems directly due to the lack of connection to the team, which in turn affects his commitment to the firm. Alternatively, another with a stronger connection to their supervisor stayed with the firm due to that loyalty, sharing

Right after busy season, the day we filed, I called them [supervisors] and I said, 'I got an interview and I got an offer'. For me, why I did not leave was I just felt bad. I had gotten an offer, and it was everything I wanted...I told my manager, let me just stay for maybe two months and see, and I just kept pushing it forward. December came around and I thought 'Oh, I can't quit during busy season'. Let me try to push it a little bit past. (Sup-10)

Shifting to audit efficiency and effectiveness more specifically, my interviewees acknowledge that efficiency has become difficult to achieve in the remote environment due to communication challenges. My interviewees acknowledge communication shortcomings (e.g., communicating vaguely, remaining neutral to not include social cues, overlooking the need for nonwork-related conversation), and suggest that they contribute to audit inefficiency when remote. I observe that these inefficiencies are further exacerbated because most audit work requires supervisor-subordinate interdependency and the quick and in-depth interactions to perform such work require significantly more coordination and typically a lengthy call that disrupts workflow and production. These inefficiencies lead some to prioritize getting the work done over

professional development. Where a supervisor explains,

In terms of clearing review comments, typically you kick it back to your staff. We didn't trust this staff so it ended up coming back to me where I had to clear the comments...because of the lack of trust, we couldn't afford to have someone not doing things correctly. It put more work on my plate and my manager's plate. (Sup-2)

In some cases, leadership may put pressure on teams when these inefficiencies occur, as a subordinate states, "We had *bad margins* last year, where we lost money, [so] the whole goal this year is to minimize hours, minimize expenses. We put all this hard work doing it [audit work] in less time and minimizing expenses so now we can't even have happy hours as a group" (Sub-8). These stressors may, in turn, have negative effects on relationship development within the team. Not only is efficiency a challenge but this can lead to effectiveness issues as well, as a supervisor notes that "we saw *a drop in quality, a drop in our realization*, hours on each engagement going up, timing for delivery of what we would see in the past for an engagement extend longer...The *quality of what we were getting when we were reviewing it wasn't as good*" (Sup-14).

## VI. CONCLUSION

High-quality supervisor-subordinate communication is important in auditing for several reasons. Not only is communication a regulatory requirement, but it also directly affects the effectiveness of subordinates' development and supervisors' coaching effectiveness. However, more prevalent remote work arrangements in auditing have changed the communication dynamics between supervisors and subordinates such that they encounter challenges satisfying their basic psychological needs for competence, connection, and control. Leveraging concepts from self-determination theory and accommodation theory, my study provides an in-depth examination of supervisor-subordinate communication in the contemporary audit environment to consider communication strategies supervisors and subordinates implement and identify implications for team dynamics and audit quality.

Through my interviews, I observe that many supervisor and subordinate auditors implement communication strategies to more effectively perform well, connect, and reduce uncertainty in the remote environment. These strategies range from developing specific CMC practices depending on the task or information to convey to learning to adjust to the other person's communication style. However, consistent with theory, I observe variation in the strategies individuals implement to satisfy their needs. Consequently, I also observe that not all supervisors and subordinates implement optimal communication strategies. Further, because supervisors and subordinates rely on one another to meet work objectives, I note that some strategies, though optimal to satisfy personal needs, can frustrate the other's path to satisfying their needs. This can cause tension and negatively affect team dynamics and audit quality.

My findings need to be considered in light of some limitations. First, my analysis and selected quotes in the paper show instances where miscommunications occur, and many acknowledge the challenges auditors face, which implies that interviewees spoke candidly, but interviewees could have also attempted to manage impressions. Second, the sample is not random, which is common in qualitative research (Malsch and Salterio 2016). Importantly, I collected data from several firms of various sizes and multiple ranks to triangulate our findings.

Overall, my in-depth analysis allows us to examine within team interactions that are critical to the audit, but are often complex and nuanced (e.g., Bobek et al. 2012), particularly in the contemporary audit environment (Bauer et al. 2021). My findings identify the communication choices supervisors and subordinates make to re-satisfy their psychological needs (i.e., competence, relatedness, control) that can affect their motivation, and in turn, team dynamics and audit quality. Further, my findings identify communication best practices that seem to promote subordinate development and performance, but that future empirical research should examine.

Finally, I add to the limited but growing literature examining the effects of CMC on audit quality (e.g., Brazel et al. 2004; Agoglia et al. 2009, 2010; Bennett and Hatfield 2013, 2018).

## **Part IV: Motivating Novice Auditors' Proactivity in the Remote Audit Environment**

### **I. INTRODUCTION**

The implementation of remote work practices in auditing to support more widespread geographic team distribution has fundamentally changed how audit supervisors and novice subordinates interact. In particular, supervisors and subordinates increasingly rely on technologies such as chat and email to communicate which could adversely affect the efficiency and effectiveness of their interpersonal interactions, and in turn impact audit quality (Bauer et al. 2021; Kuselias et al. 2023; Tighe 2024). Importantly, a disconnect occurs such that supervisors often need novice auditors to be proactive when working remotely (e.g., provide status updates, speak up about audit issues); however, novice auditors are often uncomfortable being proactive (Clor-Proell et al. 2023). Audit research suggests that novice auditors may consider the positive characteristics and actions of their supervisor (e.g., team-oriented, intrinsically motivating) before behaving proactively (Nelson et al. 2016; Kadous et al. 2019), but these factors are difficult for novices to observe in a remote environment (Bauer et al. 2021). Further, acclimating to professional norms when working remotely is challenging (Bailey et al. 2023); thus, novice auditors may be unattuned to the importance of being proactive. The purpose of this study is to identify ways for supervisors to improve novice auditors' willingness to be proactive in a remote work environment.

In audit, one important way for novices to be proactive is to pursue change-oriented behaviors that benefit their team (termed *team-oriented proactivity*) (Griffin et al. 2007; Parker et al. 2019). These behaviors can include speaking up about audit issues (i.e., voice), suggesting innovative improvements to existing work processes (i.e., taking charge), or assisting another team member (i.e., interpersonal helping), all of which are fundamental to team efficiency and effectiveness, and critical to delivering high-quality audits (Baroudi et al. 2019; Kadous et al.

2019). Organizational behavior research suggests team-oriented proactivity is a goal-driven process that can be motivated by affective (i.e., ‘energized to’) and value-oriented (i.e., ‘reason to’) states (Parker et al. 2010; Parker and Wang 2015). However, prior research shows that aspects of the supervisor’s coaching and communication vary widely in audit practice which affects novice auditors’ motivation (Andiola and Bedard 2018; Andiola et al. 2021). Thus, I examine whether two practical and implementable supervisor communication mechanisms—*supervisor expression* and *psychological ownership*—can motivate team-oriented proactivity in novice auditors’ when they are working remotely.

First, I examine supervisor expression as a communication mechanism that supervisors can use to affectively motivate their novice subordinates to be proactive when working remotely. Expressions are the emotional cues one conveys (consciously or subconsciously) that bring clarity to a message by providing insight into the individual’s emotional state (Boutet et al. 2021). This can involve using expressive social context cues, such as emojis and exclamation points, when using text-based communication technology (i.e., an email, instant messaging) to interact. Research suggests that expressive cues like these are emotionally arousing, and the affect they generate can be comforting and reduce uncertainty (Harris and Paradise 2007; Byron 2008; Byron and Balridge 2017). However, no study to date bridges the gap to understanding whether these social context cues are enough to motivate team-oriented proactive behaviors in a remote environment. Thus, I investigate the efficacy of supervisor expression as an antecedent to novice auditors’ team-oriented proactivity.

Next, I investigate psychological ownership as a mechanism that can impose duty and obligation over tasks through the assignment of responsibility which may provide a value-oriented

reason for novice auditors to be proactive when working remotely.<sup>27</sup> Research suggests that psychological ownership can lead individuals to feel more responsible for their work tasks, resulting in greater initiative and higher-quality work outcomes (Pierce et al. 2004; Dawkins et al. 2017). For example, higher psychological ownership increases valuation specialists' cognitive processing and improves their performance (Bauer et al. 2023). Whether a sense of ownership can encourage novice auditors, who are inexperienced and unacclimated to professional norms, to behave proactively is an open empirical question. Nonetheless, novice auditors have the same professional responsibility to be proactive (e.g., speaking up about audit issues - PCAOB 2010) as those who are experienced; thus, it is important to examine the viability of psychological ownership as an antecedent to team-oriented proactivity.

Finally, I consider the joint effect of supervisor expression and psychological ownership on team-oriented proactivity. I leverage social cognitive and determination theories, which posit that the interplay of individual, situational, and contextual factors, specifically those relating to one's competence, sense of relatedness, and autonomy, motivate the pursuit of costly behaviors (Neighbors et al. 2007; Sawatsky et al. 2021). In line with this reasoning, I predict that supervisor expression and psychological ownership will interact to yield a greater likelihood of novice auditors' team-oriented proactivity than either communication mechanism alone.

I conducted a 2x2 between-subjects experiment investigating the individual and joint effects of supervisor expression (present or absent) and psychological ownership (heightened or not heightened) on team-oriented proactive behaviors that audit supervisors may reasonably expect their novice subordinates to pursue (e.g., speaking up). Following prior research (Bennett and

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<sup>27</sup> Though responsibility and accountability are closely related, they are distinct constructs. Responsibility refers to a person owning or being in charge of a specific task (task-focused), while accountability refers to how a person reacts or owns the results of their task (results-focused).

Hatfield 2018; Clor-Proell et al. 2023), I used 115 graduate audit students from three U.S.-based universities to proxy for novice auditors. I manipulate supervisor expression within an email communication provided by the novice auditor's supervisor that either includes or excludes expression with positive emojis, exclamation points, and words that are in all caps. I manipulate psychological ownership by indicating to the participant that the novice auditor is either directly responsible for the work in the inventory audit area or the auditor is assisting with the work, while the supervisor is directly responsible for it. Outcome measures of team-oriented proactivity include the likelihood of speaking up about an audit issue (i.e., a form of cooperative voice), taking charge by suggesting an alternative approach to audit testing, and showing interpersonal helping behavior by letting a supervisor know upcoming availability to take on additional work.

Consistent with my prediction, I find that the presence of supervisor expression motivates novice auditors to pursue speaking up and interpersonal helping behaviors. These results extend the audit literature that indicates an audit supervisor's disposition can affect novice auditors' willingness to be proactive by identifying a specific communication strategy that supervisors can implement to motivate their novice auditors when working apart. I do not find an effect of supervisor expression on taking charge. Further, and consistent with my prediction, I find heightened psychological ownership motivates novice auditors to pursue interpersonal helping but it does not effectively motivate speaking up or taking charge. This result provides some evidence that psychological ownership invoked by assigning responsibility can motivate team-oriented proactivity for novices, which differs from prior research that suggests the contrary—i.e., that responsibility must develop over time to be effective (Cummings and Anton 1990; Fuller et al. 2006). While I find helping behaviors increase with either supervisor expression or heightened psychological ownership, I do not find an incremental effect of both, suggesting these mechanisms



are substitutes.

Collectively, these findings suggest that in a remote environment, a supervisor's willingness to show emotion (termed supervisor expression) is an important and primary way to motivate novice auditors to speak up about audit issues. Yet, both supervisor expression and psychological ownership are effective at promoting helping behavior. Further, my findings provide initial evidence that antecedents to team-oriented proactive behaviors can vary in effectiveness. I attribute this variation to differences in how novice auditors perceive the possible benefits and/or costs associated with each behavior (e.g., Ashford and Cummings 1983), which I discuss as supplemental analysis in this paper.

This study makes several important academic contributions. First, proactivity in the audit environment is understudied (Peecher et al. 2023). While prior audit research examines factors influencing auditors' willingness to speak up about audit issues (e.g., Nelson et al. 2016; Kadous et al. 2019; Clor-Proell et al. 2022), research on other proactive behaviors is rare (Peecher et al. 2023). Thus, my study contributes by introducing two other proactive behaviors, taking charge and helping behaviors. Examining other behaviors is important, as my results show that not all proactive behaviors have the same costs, and thus, auditors react differently depending on the context. Second, my study extends prior research on psychological ownership (MacKenzie and Agoglia 2022; Bauer et al. 2023), by examining a supervisor-driven mechanism that creates ownership, and in turn, improves the helping behavior of novice auditors. Finally, existing organizational behavior research devotes insufficient attention to the role that affect and value-oriented motivators play in proactivity (Grant and Ashford 2008; Parker and Wang 2015), particularly in controlled experimental settings to establish causation. Examining both affect and value-oriented motivators in this study provides an opportunity to learn how two important

psychological mechanisms drive different forms of team-oriented proactivity.

My findings are also relevant to audit practice. Practitioners and regulators express interest in how the geographic distribution of core engagement team members affects team dynamics and performance (PCAOB 2019, 2020; SEC 2022; Bauer et al. 2021). My findings identify mechanisms that may improve audit quality by motivating novice auditors to be proactive when working remotely. Further, my results may alter the negative view of tools like emojis at work, which audit practitioners are slow to adopt due to longstanding concerns regarding their appropriateness in professional work settings (Westermann et al. 2015; Gitlin 2022).

## **II. THEORY AND HYPOTHESES DEVELOPMENT**

### **Team-oriented Proactivity in the Audit Environment**

Proactivity involves “actively taking control of oneself and one’s environment to ‘make things happen’” (Parker and Wang 2015, 62). It describes the self-initiation one anticipatorily enacts to take charge, make innovative suggestions, and affect future problems (Parker and Collins 2010; Parker et al. 2010). These behaviors evoke change, and while they are historically examined at the individual level (e.g., individual job change negotiation, seeking feedback; Grant and Ashford 2008; Parker and Collins 2010), recent studies seek to understand the interpersonal aspects of proactivity, such as *team-oriented proactivity*, as teamwork and task interdependence are a focal point of many organizations’ work design and vision (Baroudi et al. 2019; De Stobbeleir et al. 2020).

Research examining team-oriented proactivity identifies several ways to proactively benefit one’s team, such as speaking up to benefit others rather than oneself (i.e., cooperative voice), taking charge (constructive, innovative efforts to solve team-related problems), and interpersonal helping behaviors (future-oriented behavior to benefit a team member) (Morrison

and Phelps 1999; Griffin et al. 2007; Baroudi et al. 2019). These behaviors can improve team effectiveness, efficiency, and cohesiveness (Parker and Collins 2010; Baroudi et al. 2019), and are key drivers of organizational success (Parker et al. 2019; Baroudi et al. 2019; De Stobbeleir et al. 2020). This stream of research further identifies several individual and contextual antecedents that can affect an individual's motivation to pursue team-oriented proactive behaviors, such as personality and job design, respectively (Grant and Ashford 2008, Parker et al. 2019; Baroudi et al. 2019). Of particular importance are the perceived costs associated with proactive behaviors which can reduce an individual's motivation to be proactive. For example, an individual may shy away from speaking up due to the perceived risk of appearing incompetent if a suggestion is unhelpful (Ashford and Northcraft 1992; Baroudi et al. 2019).

The remote audit environment, including this study's specific focus on novice auditors, serves as a unique context to examine team-oriented proactivity. Specifically, novice auditors work in hierarchically structured engagement teams and represent the first line of defense in identifying and proactively reporting potential audit issues to supervisory team members (i.e., proactive voice behavior; Clor-Proell et al. 2022). This expectation is often imposed upon novice auditors from organizational entry, before acclimating to professional norms (Bailey et al. 2023). Thus, the decision to speak up is not always easy and may depend on several contextual factors.

To date, audit research identifies attributes of the supervisor (e.g., being team-oriented, intrinsically motivating, and providing psychological safety, Nelson et al. 2016; Gissel and Johnstone 2017; Kadous et al. 2019), work environment (firm culture, team autonomy; Gold et al. 2014; Proell et al. 2022), and work task (ambiguity, materiality, deadlines; Kadous et al. 2019; Clor-Proell et al. 2022) as antecedents to novice auditors' voice behavior (i.e., speaking up about audit issues). Novice auditors may also consider the perceived costs associated with speaking up

before proactively doing so. For example, they may perceive that simpler topics related to learning, accuracy, and professionalism require less effort and are more straightforward to proactively discuss relative to complex audit topics that can potentially affect their image and performance evaluation if reported in error (Clor-Proell et al. 2022). In such circumstances, reassurance from a supervisor may alleviate pressure and provide comfort to speak up (Kadous et al. 2019). Collectively, prior audit research indicates that motivating novice auditors to speak up is nuanced, and it is important to identify ways to motivate this behavior and other team-oriented proactive behaviors (e.g., taking charge).

In addition to the contextual factors discussed above, remote work adds an additional layer of uncertainty that may deter novice auditors from being proactive. Specifically, physical distance between team members and greater reliance on communication technology introduces new communication challenges (e.g., lack of social context cues) and makes it difficult to establish social bonds (Bauer et al. 2021). Audit research also highlights accountability concerns regarding novice auditors' ability to perform well when working apart from their supervisor, which emphasizes the need to explore additional antecedents that motivate novice auditors in this environment (e.g., Brazel et al. 2004; Tighe 2024). Consistent with research on proactivity that suggests 'affect' and 'values' motivate proactivity (Parker et al. 2010; Parker and Wang 2015), I examine how supervisor expression, an affect-driven antecedent, and psychological ownership, a value-oriented antecedent, can motivate novice auditors' team-oriented proactivity in a remote environment.<sup>28</sup> Figure 4.1, adapted from Parker and Wang (2015), models how motivational states promote team-oriented proactivity.

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<sup>28</sup> While prior research indicates that the interplay of 'affective', 'value-oriented', and 'personal' motivational states are necessary to motivate proactivity, I focus on 'affective' and 'value-oriented' motivators because they are contextual factors external to the individual. These factors are more malleable providing supervisors the opportunity to encourage team-oriented proactivity. As part of my experiment, I measure self-efficacy to rule it out as a causal reason for my results.

[INSERT FIGURE 4.1 HERE]

### **Supervisor Expression and Team-oriented Proactivity**

Emotions are positive (e.g., happiness, joy), negative (e.g., anger, disgust), and neutral states that individuals intentionally express to communicate their feelings (Byron 2008).<sup>29</sup> Both positive and negative emotional exchanges can help establish social bonds and add value to preexisting relationships (Kark and Shamir 2002; Byron 2008). At work, emotions may be exchanged to show empathy, vulnerability, and humor, which are necessary to authentically build team camaraderie and facilitate relationship development among team members (Kark and Shamir 2002; Baroudi et al. 2019). Prior research further suggests that when emotional exchanges occur between supervisors and their subordinates, subordinates can more easily relationally identify with their supervisor which increases their job satisfaction, organizational commitment, and comfort in pursuing riskier behaviors at work (Sluss et al. 2012; Strauss and Kelly 2012; Gkorezis et al. 2015).

Research on proactivity suggests that positive emotion-driven experiences may provide *affective* motivation to be proactive (Parker and Wang 2015). For example, an individual's positive affect is positively associated with taking charge behavior (Fritz and Sonnentag 2009), and emotional support from a supervisor can encourage speaking up (e.g., expressing work-related ideas, information, and opinions; Wang et al. 2012). However, these findings are based on traditional in-person work environments where emotions are often easy to express and observe (e.g., facial expressions, hand gestures; Ekman 1989, Knapp and Hall 2002). Alternatively, the shift to more flexible work structures (e.g., hybrid, fully remote work) in many organizations has reduced the daily amount of face time team members share (Brownlee 2022). As a result, team

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<sup>29</sup> While emotions and mood are closely related – both are predictors of affect – emotions are considered intentional, are often outwardly expressed, and are typically triggered by an external source. Alternatively, a mood is an internal state of mind less intense than emotions and tends to be longer lasting (Beedie et al. 2005).

members extensively rely on text-based computer-mediated technology (“CMC”; e.g., email, instant messages) to interact.<sup>30</sup> This makes it more difficult to exchange emotions, and in turn, challenging to understand messages and build relationships which can increase the level of uncertainty team members feel at work (Derks et al. 2008; Byron and Balridge 2007; Derks and Bakker 2010; Boutet et al. 2021). Nonetheless, people have a natural desire to feel a sense of belonging at work. Therefore, they often actively search for social context cues in text-based messages to make inferences about a sender’s emotional state and bring clarity to the message’s content (Bonaccio et al. 2016; Boutet et al. 2021).

Organizational communication literature examines ways to strategically convey emotion when using text-based communication technology to interact, such as lagged response time (Walther and Tidwell 1995), punctuation marks (e.g., exclamation points; Lea and Spears 1992), capitalization (e.g., all caps; Byron and Balridge 2007), and emojis (Byron 2008; Derks et al. 2008; Derks and Bakker 2010).<sup>31</sup> These social context cues convey emotional intent and offer contextual information (e.g., tone, emotional state) that enhances the meaning of a message; often these cues are more heavily considered than the message’s content itself (Walther and D’Addario 2001; Boutet et al. 2021). Moreover, emojis can convey warmth, kindness, and sincerity, build trust, and reduce uncertainty, which are emotional outcomes that are difficult and slow to establish when team members are working apart and/or are unfamiliar (Byron and Balridge 2007; Boutet et al. 2021). Conveyance of these positive emotions may help new team members more efficiently form

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<sup>30</sup> Employees also use other types of communication technology to interact each day, such as telephone, video conferencing. However, text-based forms of communication technology (i.e., email, instant messaging) remain the most frequently used (Derks and Bakker 2010; Hoory and Main 2023). Further, email is identified as the media form most involved in miscommunication (e.g., misinterpretation, misunderstanding; Hindi et al. 2004; Byron 2008).

<sup>31</sup> Emojis are graphic representations used to portray facial expressions in a text-based message (e.g., 😊; Walther and D’Addario 2001). Other communication factors examined in prior research include email signatures (Sherblom 1988), communication styles (Yates 1997), and typing errors (Filik et al. 2015).

meaningful, comfortable relationships at work (Byron 2008; Boutet et al. 2021).<sup>32</sup> However, prior studies do not consider whether emotional conveyance through communication technology can motivate team-oriented proactivity.

I examine the efficacy of supervisor expression in the audit environment where emotional exchanges may directly or indirectly affect audit quality (e.g., Andiola et al. 2019), but are more challenging to exchange when working remotely. Audit research, which traditionally assumes an in-person work structure, suggests that the personal disposition of one team member can affect another team member's performance (Cianci and Bierstaker 2009; Blum et al. 2022), well-being (Jefferson et al. 2023), and willingness to pursue team-oriented proactive behaviors (Clor-Proell et al. 2022). These studies emphasize the importance of the emotions audit supervisors convey to their subordinates given the uncertainty novice auditors can feel on their engagements (Clor-Proell et al. 2022, 2023). For example, an audit supervisor's conveyance of stress and frustration and reactions of irritation discourage novice auditors' proactive voice behavior, but supervisors' openness to questions and positivity encourages it (Nelson and Proell 2018; Clor-Proell et al. 2023). These results suggest that audit supervisors' emotional expressions matter and may be essential to creating comfort and relational identification to motivate team-oriented proactivity.

While the audit findings above suggest that supervisor expression might motivate team-oriented proactivity, there are a few reasons why results might differ for novice auditors working remotely. First, remote work limits novice auditors' familiarity with their supervisor. Though incorporating social context cues in text-based messages knowingly generates affect in another, it is not clear whether they effectively generate feelings of comfortability and connectedness in

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<sup>32</sup> In addition to conveying positive emotion, emojis can be used to convey negative emotion, such as sadness (e.g., frown face 😞), anger, and/or frustration (Jaeger et al. 2019). Emojis (positive and negative) can also be overused and result in message misinterpretation. Thus, they should be used strategically to appropriately convey the intended message. Moreover, as individuals become more familiar with one another over time, how one interprets the social context cues included in a message may be affected (Fulmer and Gelfand 2012).

remote environments to motivate team-oriented proactivity. Second, team-oriented proactive behaviors are risky; even more so for novice auditors who are unacclimated to team norms and concerned about making good impressions (Clor-Proell et al. 2022). For example, Clor-Proell et al. (2022) indicate that perceived reputational costs discourage lower-level auditors from speaking up about audit issues. Whether simple expressive communication strategies are adequate for novice auditors to overcome the discomfort of behaving proactively remains unknown. Despite these possibilities, I predict:

**H1:** When working remotely, the presence of supervisor expression will increase novice auditors' willingness to pursue team-oriented proactivity relative to when supervisor expression is absent.

### **Psychological Ownership and Team-oriented Proactivity**

Psychological ownership arises when an individual perceives that something is their own (Pierce et al. 2001; Pierce et al. 2004), which can lead individuals to feel personally obligated or responsible for bringing about constructive change at work (Morrison and Phelps 1999). It establishes a sense of control that is empowering, and as a result, employees may be motivated to participate in thoughtful decision-making, take greater pride in their work, increase work production, and feel more comfortable taking initiative (Frese et al. 1996; Morrison and Phelps 1999; Frese and Fay 2001; Fuller et al. 2006; Liu et al. 2013; Dawkins et al. 2017). By invoking a sense of responsibility, psychological ownership can also create feelings of belongingness to one's team which in turn improves performance, job satisfaction, and relationship development (Fuller et al. 2006; Dawkins et al. 2017; Liu et al. 2013; Parker and Wang 2015).

Organizational behavior research recognizes psychological ownership as an important value-oriented reason to be proactive (Grant and Ashford 2008; Parker et al. 2010). Specifically, ownership at work suggests that individuals will feel responsible for their tasks and that they value the trajectory of work outcomes at a personal and team level (Parker and Wang 2015). Studies



examining the effect of *felt* responsibility on proactivity find that it is positively associated with cooperative voice behavior (Fuller et al. 2006), taking charge behavior (Morrison and Phelps 1999), and personal initiative to pursue individually beneficial behaviors (Frese et al. 1996). However, *felt* responsibility is a characteristic (or feeling) that naturally develops over time as individuals gain more experience and expertise at work (e.g., experienced individuals naturally feel more personally obligated to bring about change) (Morrison and Phelps 1999; Fuller et al. 2006). Bauer et al. (2023) find that higher psychological ownership of valuation specialists improves their cognitive processing and performance, but these individuals are also highly experienced. No studies to date consider whether creating psychological ownership through the assignment of responsibility is a strategic mechanism that can facilitate an *early* sense of professional responsibility, particularly for novice auditors who lack the level of experience necessary to be proactive. Prior research also suggests that job autonomy, such as that associated with remote work, can inhibit an individual's aptitude to feel responsible (e.g., Fuller et al. 2006), emphasizing the need to identify how to promote a sense of responsibility in a remote setting.

For auditors, responsibility is essential to audit quality; thus, it is embedded into the identity of the accounting profession through regulatory standards, firm training, and professional certifications (Kalbers and Cenker 2008; PCAOB 2010; KPMG 2022; Deloitte 2022). Prior research finds that heightened professional identity, a form of responsibility, improves auditors' judgments and professional skepticism (Bauer 2015), performance (Mendoza and Winn 2022), and the likelihood of reporting unethical behavior (Taylor and Curtis 2010). However, like *felt* responsibility, professional identity develops as professionals become more acclimated (Strauss and Kelly 2012). Thus, it is likely that novice auditors, who are not yet socialized into the profession, will feel a limited professional obligation to behave proactively highlighting the need

to examine the efficacy of psychological ownership.<sup>33</sup>

One way that audit supervisors may create psychological ownership is through the allocation of work, such that novice auditors are assigned responsibility for a particular part of the audit (e.g., the novice auditor may be responsible for the cash audit program; Saunders et al. 2023). While it is common practice for supervisors to routinely delegate tasks to their novice subordinates, the assignment of work has generally not been viewed as strategic practice. This is likely because supervisors traditionally work in close proximity to their subordinates allowing them to more easily monitor and troubleshoot novice auditors' behaviors (Bauer et al. 2021). Given increases in remote work, it is important to understand whether heightening one's psychological ownership will be an effective strategy to create feelings of responsibility and to promote proactive behaviors despite extant research that suggests otherwise (Cummings and Anton 1990). In line with theory, I predict:

**H2:** When working remotely, heightened psychological ownership will increase novice auditors' willingness to pursue team-oriented proactivity relative to when psychological ownership is not heightened.

### **Interaction of Supervisor Expression and Psychological Ownership**

In the above discussion, I describe how supervisor expression and psychological ownership can individually motivate team-oriented proactivity. However, each factor alone may not yield the greatest level of proactive behavior. Social cognitive theory posits that one's behavior can be explained by the relationship between cognition, behavior and social context, self-efficacy and regulation, and learning (Bandura 1986). This is in line with prior research that suggests proactivity is a cognitively induced state motivated by the interplay of various contextual (e.g., team size),

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<sup>33</sup> I conducted two pilot studies where I manipulated professional identity (PI) rather than psychological ownership. However, professional identity did not influence team-oriented proactivity in either pilot. Appendix E provides additional detail regarding these pilot studies. This led me to pursue an alternative strategy to inducing novice auditors' sense of psychological ownership.

situational (e.g., task ambiguity), and individual factors (e.g., self-efficacy) (e.g., Grant and Ashford 2008). For example, self-efficacy may mediate the positive relationship between ethical leadership and interpersonal proactive behaviors (Baroudi et al. 2019). Moreover, social determination theory, which extends the social cognition frame of thought (Andersen et al. 2000), posits that individuals have three basic needs, including the need to (i) gain control of their environment (e.g., competence), (ii) experience a sense of belonging and connection (e.g., relatedness), and (iii) feel in control of their goals (e.g., empowered); all are necessary to feel intrinsically motivated (Deci and Ryan 2012). This is consistent with research on proactivity that suggests multiple forms of motivation, i.e., ‘*can do*’ (I *can* be proactive; e.g., efficacy), ‘*energized to*’ (I am *energized* to be proactive; e.g., affect), and ‘*reason to*’ (I have *reason* to be proactive; e.g., values), are important to stimulate the greatest level of proactivity (Parker et al. 2010; Parker and Wang 2015). Therefore, it is reasonable to expect that the combination of supervisor expression and psychological ownership will be synergistic in motivating team-oriented proactivity for novice auditors whose efficacy to pursue them may naturally be low. I predict the following interaction which is depicted in Figure 4.2:

**H3:** When working remotely, the presence of supervisor expression and heightened psychological ownership will interact to yield a greater likelihood of team-oriented proactivity than when either is present alone or neither is present.

[INSERT FIGURE 4.2 HERE]

### III. METHOD

This study investigates whether novice auditors’ team-oriented proactivity depends on supervisor expression and psychological ownership. I use a 2x2 between-subjects design with two manipulated factors: (1) supervisor expression (present or absent) and (2) psychological ownership (heightened or not heightened).

## **Participants and Data Collection**

Participants include 115 graduate accounting students from three U.S.-based universities who had substantially or fully completed a financial statement audit course.<sup>34</sup> Of the 115 participants, 82 percent had completed an internship with a public accounting firm and 60 percent were female. See Table 4.1 for participant demographics. Research suggests that graduate accounting students are a practical and appropriate proxy for novice auditors with minimal experience (e.g., Bennett and Hatfield 2013; Buchanan and Piercey 2021) and deems intern and novice auditors an appropriate participant pool to examine auditor proactivity (Clor-Proell et al. 2022, 2023).

[INSERT TABLE 4.1 HERE]

Data collection occurred in April 2023 during students' regularly scheduled class time. I provided each of the three instructors who offered to administer the study the same instructions. Instructions asked the instructors to conduct the experiment during class time to maintain a controlled environment and provided detailed steps to administer the study. I asked instructors to distribute via email or paste to their class website a recruiting statement that contained the Qualtrics link to access the study. Finally, I asked instructors to reward participants with nominal extra or participation credit for participating in the study or the alternative assignment and provided a debriefing video for the instructors to play after students completed the study.

## **Experimental Task**

The Qualtrics link provided to instructors allowed participants to access the experiment, which began by describing Sam, a new staff auditor on an engagement team auditing a publicly

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<sup>34</sup> I obtained Institutional Review Board approval before collecting data.

traded company.<sup>35</sup> Consistent with anecdotal evidence that suggests novice auditors often feel uncertain beginning their career in a remote environment (Bailey et al. 2023; Tighe 2024), I provide the below information to help participants visualize the uncertain environment Sam is working in as a novice auditor working remotely:

- Sam feels a bit uncertain given his lack of experience and unfamiliarity with his team.
- Sam’s team primarily works remotely from home; therefore, Sam must complete most of his assignments in isolation which increases his feelings of uncertainty.
- Because Sam’s team primarily works remotely, it is difficult to coordinate meetings, and it is challenging to develop relationships with his team.

Prior literature on newcomers indicates that being in a new role and environment sparks feelings of uncertainty (Ashford and Black 1996), and greater reliance on communication technology when working remotely can exacerbate this feeling (Byron and Balridge 2007; Byron 2008).

After learning about Sam, participants proceed to read about Sam’s assignment to complete work in the inventory area of the audit and receive a welcome email from Sam’s direct supervisor, Chris. Next, participants respond, on behalf of Sam, to three different scenarios that each provide an opportunity for Sam to pursue a different type of team-oriented proactivity.<sup>36</sup> Lastly, participants respond to a post-experimental questionnaire that includes manipulation checks and questions related to demographics and work experience.

## **Independent Variables**

I manipulate supervisor expression, *EXPRESSION*, as present or absent. In the present condition, participants read a welcome email from Sam’s direct supervisor that includes emotive

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<sup>35</sup> The study began by asking all students to provide consent. Any non-consenting students could complete an alternative assignment similar in length and content that could be downloaded during the consent process. All students consented to participation.

<sup>36</sup> Consistent with prior research examining novice auditors’ proactivity (e.g., Nelson et al. 2016; Kadous et al. 2019), participants respond on behalf of Sam to reduce the risk of social desirability bias in responses. Having participants act on behalf of Sam allows participants to make decisions more closely associated with their own behaviors than predictions of what they would do (Gronewold et al. 2013, 197; see Nelson et al. 2016 and Kadous et al. 2019 for examples of vignette use in audit research).

and expressive social context cues, including positive smiley emojis, exclamation points, and all caps. This approach to conveying emotion when using text-based CMC is consistent with prior literature which suggests each cue is commonly used and individually stimulating but the combination of cues (e.g., emojis, emotion words, all caps, expressive punctuation) elicits the greatest emotional reaction from a message recipient (e.g., Byron and Balridge 2007; Harris and Paradice 2007; Byron 2008).<sup>37</sup> Participants in the absent condition read the same welcome email; however, emojis, exclamation points, and all caps are excluded. Specifically, emojis are removed, exclamation points are replaced with periods, and all caps are lowercase. The welcome email maintains a positive tone in both conditions so that the added social context cues in the present condition would merely strengthen, rather than confuse, the tone of the message (Riordan 2017). This design choice prevents confounds to the supervisor expression manipulation where the presence of both positive and negative emotion (e.g., positive and negative emoji or positive emoji with negative tone) can neutralize the overall emotion of the message (Riordan 2017).

I manipulate psychological ownership, *OWNERSHIP*, as heightened or not heightened. Consistent with research that suggests psychological ownership is positively associated with perceived individual responsibility (Morrison and Phelps 1999; Pierce et al. 2001; Parker and Wang 2015), and because delegating responsibility is common practice in audit, I choose to manipulate psychological ownership through the assignment of responsibility. In the heightened condition, participants read that *Sam is directly responsible* for the inventory audit area and that

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<sup>37</sup> I conducted a pilot test to examine the effectiveness of another supervisor expression manipulation which consisted of mixed emojis (both negative and positive) present or absent. The manipulation was not successful in effecting team proactivity. Consistent with prior literature (Byron and Balridge 2007; Harris and Paradice 2007), to improve the effectiveness of the supervisor expression manipulation, I include all caps and exclamation points with only positive emojis to increase the affective motivation. Further, research suggests the appropriate number and type of emojis to include in a message can vary depending on context (e.g., familiarity, marketing/persuasion, work, text-message; Lee and Wang 2017). For purposes of this study, I include four smiley emojis, two expressive words in all caps, and four exclamation points to generate a higher affective response from participants completing the study in a short 15-minute window.

his direct supervisor is there to guide him as needed. In the not heightened condition, participants read that *Sam's direct supervisor is responsible* and that Sam is there to provide assistance as needed. The language used in this manipulation is consistent with how supervisors may set expectations for novice auditors in practice. However, there is variation in how supervisors set expectations for novice auditors' task completion, including the type of work that is assigned (Saunders et al. 2023), and it remains unclear how novices will respond to such variation. Responsibility in both conditions involves performing the audit work and working with the manager and partner to make decisions as they arise. All participants were randomly assigned to one of the four treatment groups. See Appendix C for the experimental instrument.

### **Dependent Variables**

My dependent variable measures willingness to pursue three different types of team-oriented proactivity: (1) speaking up, (2) taking charge, and (3) interpersonal helping. Specifically, participants rated how willing Sam would be to pursue the proactive behavior described in a series of three mini vignettes.<sup>38</sup> Consistent with prior audit studies measuring proactivity (e.g., Nelson et al. 2016; Kadous et al. 2019), participants respond using a 101-point scale with endpoints labeled 0 (*Not at all willing*) and 100 (*Very willing*), and the midpoint labeled 50 (*Somewhat willing*). I also ask what Sam would do rather than what participants themselves would do to reduce the risk of social desirability bias in the responses (Cohen et al. 2002; Chung and Monroe 2003; Kadous et al. 2019; Blum et al. 2022).

I adapt the first scenario, *VOICE*, from Kadous et al. (2019) to evaluate speaking up behavior. This scenario describes a situation that requires Sam to decide whether to proactively

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<sup>38</sup> Participants respond to the following questions: “how willing do you think Sam would be to suggest to his direct supervisor that additional procedures may be needed to investigate this information and inventory sampling might need to be increased?” (scenario 1); “how willing do you think Sam would be to suggest using a data analytics bot to test inventory in the current year to his direct supervisor?” (scenario 2); and “how likely do you think Sam would be to provide his direct supervisory a status update this evening?” (scenario 3).

speak up about a potential audit issue. For the second and third scenarios, I create mini vignettes similar to scenario one and consistent with the guidelines provided by Bledow and Frese (2009), which suggest that a barrier or obstacle be included to evoke the personal initiative decision-making process.<sup>39</sup> The topics for scenarios two and three were derived from (i) responses to a survey of seven practicing senior associate auditors who provided a list of example proactive behaviors reasonable for novice auditors to pursue and (ii) my review of the team-oriented proactivity literature for common proactive behaviors (Grant and Ashford 2008; Parker and Collins 2010; Baroudi et al. 2019).<sup>40</sup> Scenario two, *TAKINGCHARGE*, evaluates team-oriented taking charge behavior. It describes a situation that requires Sam to decide whether to proactively suggest an alternative approach to audit testing by implementing a data analytics bot. Scenario three, *HELPING*, evaluates interpersonal helping behavior. It describes a situation that provides an opportunity for Sam to proactively provide a status update to his supervisor which indicates a willingness to take on more work. While each scenario can affect audit efficiency and effectiveness to some extent, scenario one likely has a greater effect on audit effectiveness by addressing the identification of a potential audit issue (e.g., Nelson et al. 2016; Clor-Proell et al. 2023), and scenarios two and three likely have a greater effect on audit efficiency by directly addressing the speed of completing work. See Table 4.2 for each scenario.

[INSERT TABLE 4.2 HERE]

#### IV. RESULTS

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<sup>39</sup> I created and vetted, through pilot testing, several iterations of the mini vignettes to ensure they appropriately captured the scenario and provided a true opportunity to be proactive. I also obtained and leveraged the complete instrument developed by Bledow and Frese (2009) to develop each vignette.

<sup>40</sup> I surveyed seven practicing senior associate auditors by sending a Qualtrics link to audit professionals within my professional network. Consistent with Bledow and Frese (2009), I asked them to describe three specific situations where a staff auditor demonstrated proactive behaviors and/or actions to benefit themselves, them (as their supervisor), and/or the engagement team. I also asked participants to describe why the behavior described in each situation was beneficial, and why the participant viewed each behavior as proactive rather than standard job behaviors/tasks.



## Manipulation Checks

To evaluate participant's emotional response to the social context cues included in the email from Sam's supervisor, I measured the degree of emotion participants believe Sam felt from the email message received from his supervisor on an 11-point scale with the endpoints labeled -5 (*Highly negative*) and 5 (*Highly positive*), and the midpoint labeled 0 (*Neutral*).<sup>41</sup> Participants in the *EXPRESSION present* condition rated the degree of emotion (mean = 2.53) significantly higher than those in the *EXPRESSION absent* condition (mean = 0.51;  $t_{113} = 5.27, p < 0.001$ , two-tailed). This test indicates a successful manipulation.

To evaluate the effectiveness of my psychological ownership manipulation, I asked participants to rate on a 7-point scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*) how strongly they agree that the inventory area of the audit was Sam's responsibility and the degree of ownership Sam had over the inventory area of the audit. Participants in the *OWNERSHIP heightened* condition rated that the inventory area of the audit was Sam's responsibility significantly higher (mean = 5.44) than those in the *OWNERSHIP not heightened* condition (mean = 4.36;  $t_{113} = 4.14$ , two-tailed  $p < 0.001$ ) (e.g., Morrison and Phelps 1999). Participants in the *OWNERSHIP heightened* condition also rated Sam's degree of ownership significantly higher (mean = 5.09) than those in the *OWNERSHIP not heightened* condition (mean = 4.62;  $t_{113} = 2.12$ , two-tailed  $p = 0.037$ ).<sup>42</sup> Collectively, these results indicate that the manipulation was successful.<sup>43</sup>

## Tests of Hypotheses

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<sup>41</sup> Given that overusing emojis can send unintended emotional signals, I elect to use an 11-point scale with endpoints from -5 (*Highly negative*) and 5 (*Highly positive*) to allow participants the opportunity to express whether the context cues included in the message from Sam's supervisor made participants feel either negatively or positively.

<sup>42</sup> To rule out the possibility that I manipulate accountability rather than responsibility, I also ask participants about the degree of accountability Sam felt to his team for the inventory area of the audit in the post-experimental questionnaire. I find that responses of those in the *heightened* (mean=5.30) versus *not heightened* (mean=5.05) condition are not significantly different ( $t_{113}=1.08$ , two-tailed  $p=0.282$ ).

<sup>43</sup> Four participants failed the attention check question, "During the case, was Sam working in the same location as his supervisor, or was he working remotely?". I ran each ANOVA excluding these four participants, results were unchanged. Therefore, I include all responses in my analyses.

Table 4.3 presents the results for scenario 1 (*VOICE*), Table 4.4 presents the results for scenario 2 (*TAKINGCHARGE*), and Table 4.5 presents the results for scenario 3 (*HELPING*). Panel A in these tables shows descriptive statistics and Panel B presents the ANOVA results of manipulating the independent variables for each type of proactive behavior.<sup>44</sup> Figure 4.3 provides a graphical depiction of the results for each behavior.

[INSERT TABLES 4.3, 4.4, 4.5 AND FIGURE 4.3]

### ***Supervisor Expression***

H1 predicts that when working remotely, novice auditors will be more willing to behave proactively when *EXPRESSION* is present versus absent. For scenario 1 (*VOICE*), descriptives presented in Table 4.3 Panel A show that the mean willingness to proactively speak up about audit issues is higher for those in the *EXPRESSION present* condition (mean = 61.91) than the *absent* condition (mean = 50.65), and the ANOVA test shown in Table 4.3 Panel B indicates the difference is significant ( $F_{1,111} = 9.136$ , one-tail equivalent  $p = 0.002$ ), providing support for H1. I also find support for H1 in my assessment of scenario 3 (*HELPING*). Specifically, Table 4.5 Panel A shows that the mean likelihood of proactively providing a status update to indicate a willingness to take on more work is higher for those in the *EXPRESSION present* condition (mean = 68.31) than the *absent* condition (mean = 56.14), and the ANOVA test in Table 4.5 Panel B indicates this difference is significant ( $F_{1,111} = 9.199$ , one-tailed equivalent  $p = 0.002$ ). Alternatively, for scenario 2 (*TAKINGCHARGE*), I find that although the mean willingness to implement a data analytics bot as an alternative approach to testing is higher for those in the *EXPRESSION present* (mean = 47.10) versus the *absent* condition (mean = 44.70), the difference is not significant ( $F_{1,111} = 0.478$ , one-

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<sup>44</sup> I ran several iterations of each ANOVA including several covariates, such as GPA and internship experience. I also included the average of eight items measuring self-efficacy, a personal motivator. The inclusion of an individual or combination of these covariates did not change my results. As such, I exclude these covariates from the ANOVA tests.

tail equivalent  $p = 0.246$ ). Further, I find that the model for the ANOVA test in Table 4.4 Panel B is not significant (Model  $F=1.18$ , one-tailed equivalent  $p = 0.161$ ); therefore, I cannot make conclusive inferences related to the underlying tests of the main and interactive effects.

I also report simple effects for participants' willingness to pursue team-oriented proactivity in Table 4.3 Panel C for speaking up, Table 4.4 Panel C for taking charge, and Table 4.5 Panel C for helping behavior. These tests show that when *OWNERSHIP* is either heightened or not heightened, there is a significant difference between participants in the supervisor expression present versus absent conditions in terms of speaking up (heightened one-tailed equivalent  $p = 0.004$  or not heightened one-tailed equivalent  $p = 0.057$ ). Alternatively, for taking charge behavior, the difference between supervisor expression conditions is marginally significant only when *OWNERSHIP* is heightened (one-tailed equivalent  $p = 0.088$ ), while for helping behavior, the difference between supervisor expression conditions is only significant when *OWNERSHIP* is not heightened (one-tailed equivalent  $p = <0.001$ ). Overall, these results suggest that the presence of supervisor expression can effectively motivate some forms of team proactivity for novice auditors in remote work environments.

### ***Psychological Ownership***

H2 predicts that when working remotely, novice auditors will be more willing to behave proactively when psychological ownership is heightened versus not heightened. For scenario 1 (*VOICE*), Table 4.3 Panel A shows that the mean willingness to proactively speak up about audit issues is lower for those in the *OWNERSHIP heightened* condition (mean = 55.53) than the *not heightened* condition (mean = 57.12), and the ANOVA test in Table 4.3 Panel B indicates this difference is not significant ( $F_{1, 111} = 0.211$ , one-tailed equivalent  $p = 0.324$ ). Thus, I do not find support for H2 in this scenario. This is also the case for scenario 2 (*TAKINGCHARGE*).

Specifically, the mean willingness to suggest using a data analytics bot as an alternative approach to testing is higher for those in the *OWNERSHIP heightened* condition (mean = 48.07) than the *not heightened* condition (mean = 43.79), but the ANOVA test in Table 4.4 Panel B indicates this difference is not significant ( $F_{1, 111} = 1.473$ , one-tail equivalent  $p = 0.114$ ).

Alternatively, for scenario 3 (*HELPING*), Table 4.5 Panel A shows that the mean likelihood of providing a status update is higher for those in the *OWNERSHIP heightened* condition (mean = 65.32) than the *not heightened* condition (mean=59.29), and the ANOVA test presented in Table 4.5 Panel B shows the difference is marginally significant ( $F_{1, 111} = 2.253$ , one-tailed equivalent  $p = 0.068$ ), providing partial support for H2.

I report simple effects for participants' willingness to pursue team-oriented proactivity in Table 4.3 Panel C for speaking up, Table 4.4 Panel C for taking charge, and Table 4.5 Panel C for helping behavior. These tests show that when *EXPRESSION* is present (versus absent), there is a significant difference between the ownership heightened and not heightened condition for taking charge (supervisor expression present one-tailed equivalent  $p = 0.042$  versus absent one-tailed equivalent  $p = 0.491$ ). The difference between the ownership conditions when *EXPRESSION* is present is not significant for speaking up (one-tailed equivalent  $p = 0.410$ ) or helping (one-tailed equivalent  $p = 0.490$ ). Alternatively, in the absence of *EXPRESSION*, there is a significant difference between the ownership heightened versus not heightened conditions in the case of helping behavior (one-tailed equivalent  $p = 0.017$ ). For speaking up (one-tailed equivalent  $p = 0.192$ ) and taking charge (one-tailed equivalent  $p = 0.491$ ), there is no significant difference between the ownership conditions. Collectively, these findings suggest that assigning responsibility can create feelings of ownership for novice auditors to pursue team-oriented proactive behaviors in some instances.

### ***Interactive Effect of Supervisor Expression and Psychological Ownership***

H3 predicts that *EXPRESSION* and *OWNERSHIP* will have an interactive effect on novice auditors' team-oriented proactivity. First, I evaluate the interactive effect of *EXPRESSION* and *OWNERSHIP* on *VOICE* behavior (scenario 1). Results of the ANOVA presented in Table 4.3 Panel B indicate that the interactive effect is not significant ( $F_{1, 111} = 0.612$ , one-tailed equivalent  $p = 0.218$ ). Second, I evaluate the interactive effect of *EXPRESSION* and *OWNERSHIP* on *TAKINGCHARGE* behavior (scenario 2). Results of the ANOVA presented in Table 4.4 Panel B indicate that the interactive effect is not significant ( $F_{1, 111} = 1.555$ , one-tailed equivalent  $p = 0.108$ ). Finally, I evaluate the interactive effect of *EXPRESSION* and *OWNERSHIP* on interpersonal *HELPING* behavior (scenario 3). Results of the ANOVA presented in Table 4.5 Panel B indicate that the interactive effect is marginally significant ( $F_{1, 111} = 2.36$ , one-tailed equivalent  $p = 0.064$ ). However, the pattern of results shown in Figure 4.3 Panel C is not consistent with my prediction shown in Figure 4.2. Rather, the results suggest that supervisor expression promotes helping behavior regardless of ownership, but in the absence of expression, psychological ownership motivates novice auditors to be proactive.

### ***Additional Analysis***

Literature examining the role of emotions at work suggests that sharing emotions helps to establish more comfortable, professionally close relationships at work (Harris and Paradice 2007; Strauss and Kelly 2012). In remote work environments, incorporating social context cues, such as emojis, exclamation points, and all caps, in text-based computerized messages may yield similar results (Boutet et al. 2023; Byron and Balridge 2007; Byron 2008). This study provides a unique opportunity to examine how participants may relationally respond to these cues in a professional work context.

I measured the degree of comfort participants believe the email from Sam's supervisor made him feel about interacting with his supervisor. Participants respond on a 7-point scale with the endpoints labeled -3 (*Highly uncomfortable*) and 3 (*Highly comfortable*), and the midpoint labeled 0 (*Neutral*) (e.g., Harris and Paradice 2007).<sup>45</sup> Participants rated their degree of comfort significantly higher with *EXPRESSION present* (mean = 1.14) versus *absent* (mean = 0.12;  $t_{113} = 3.91, p < 0.001$ , two-tailed). I also measured the level of professional closeness participants believe the email from Sam's supervisor made him feel toward his supervisor. I assess Sam's professional closeness with his supervisor by asking participants to select one of seven images of Venn diagrams with two circles (one for Sam and one for the supervisor) of varying degrees of closeness (Aron et al. 1992; Tropp and Wright 2001; Bauer 2015). Participants in the *EXPRESSION present* condition selected images representing a significantly greater degree of professional closeness (mean = 2.72) than those in the *EXPRESSION absent* condition (mean = 2.14;  $t_{113} = 3.23, p = 0.002$ , two-tailed). These tests provide further evidence of a successful supervisor expression manipulation.

To examine whether comfort (*COMFORT*) and professional closeness (*CLOSE*) mediate the relationship between supervisor self-expression and team-oriented proactive behaviors, including *VOICE* and *HELPING*, I conduct mediation analyses using SPSS Hayes PROCESS v4.2 Model 4. I employ the bias-corrected bootstrapping procedure with 10,000 iterations, consistent with Preacher and Hayes 2008. Figure 4.4 presents the results of this analysis. I find that *EXPRESSION* significantly increases *VOICE* ( $t = 1.71$ , one-tailed equivalent  $p = 0.045$ ) and *HELPING* ( $t = 1.81$ , one-tailed equivalent  $p = 0.073$ ). Each of these relationships is mediated by

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<sup>45</sup> Given that overusing emojis can send unintended emotional signals, I elect to use a 7-point scale with endpoints from -3 (*Highly uncomfortable*) and 3 (*Highly comfortable*) to allow participants the opportunity to express whether the context cues included in the message from Sam's supervisor made participants feel uncomfortable or comfortable.

*COMFORT* (*VOICE*:  $\beta = 4.85$ , 90% *CI* = [2.235, 7.738]; *HELPING*:  $\beta = 4.734$ , 90% *CI* = [1.881, 8.049]). I also find the relationship between *EXPRESSION* and *HELPING* is mediated by *CLOSE* ( $\beta = 2.61$ , 90% *CI* = [0.636, 5.052]); however, *CLOSE* does not mediate the relationship between *EXPRESSION* and *VOICE* ( $\beta = 1.70$ , 90% *CI* = [-0.410, 3.989]).<sup>46, 47</sup> Collectively, these findings are consistent with the main results and with theory that suggests sharing emotions at work is necessary to increase comfort and closeness between two individuals. I also extend such theory by showing that relational factors such as comfort and professional closeness (in some cases) can be developed through the use of social context cues, and each factor can motivate pertinent subordinate behaviors at work. Further, my results extend audit literature examining emotions (Andiola et al. 2019; Jefferson et al. 2023) by showing that sharing emotions may facilitate relationship development and can motivate novice auditors' team-oriented proactivity.

[INSERT FIGURE 4.4 HERE]

### **Discussion and Analysis of Variation in Results**

The purpose of this paper is to examine the individual and joint effect of supervisor expression and psychological ownership on team-oriented proactivity. While I propose that motivational antecedents will similarly affect team-oriented proactive behaviors, the results suggest that the effectiveness of these antecedents varies. The difference in results may be attributed to the costs novice auditors perceive are associated with their decision to be proactive. For example, appearing incompetent to their team members if a suggestion is unhelpful (Parker

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<sup>46</sup> Using SPSS Hayes PROCESS v4.2 Model 4, I conduct a mediation analysis to examine whether *COMFORT* or *CLOSE* mediates the relationship between *EXPRESSION* and *TAKINGCHARGE*. I employ the bias-corrected bootstrapping procedure with 10,000 iterations (Preacher and Hayes 2008). I find that neither *COMFORT* ( $\beta=2.096$ , 90% *CI*=[-0.186, 4.476]) nor *CLOSE* ( $\beta=0.751$ , 90% *CI*=[-1.199, 2.873]) mediates this relationship.

<sup>47</sup> Using SPSS Hayes PROCESS v4.2 Model 6, I conduct a mediation analysis to examine whether the relationship between *EXPRESSION* and *VOICE* or *HELPING* is mediated by *COMFORT* and *CLOSE* collectively. Specifically, I examine whether *EXPRESSION* increases *COMFORT* which may increase *VOICE* or *HELPING*. I find that this model specification is significant for the relationship between *EXPRESSION* and *HELPING* ( $\beta=0.56$ , 90% *CI*=[0.015, 1.460]) but not *VOICE* ( $\beta=0.21$ , 90% *CI*=[-0.701, 0.880]).

and Collins 2010; Baroudi et al. 2019; Clor-Proell et al. 2022). Such costs stem from uncertainties surrounding the decision to be proactive and are categorized as either image/reputational costs (how one is perceived socially and reputationally in the eyes of others), effort costs (the level of attention and/or time required to be proactive), and inference costs (the amount of strategic reasoning required to be proactive) (Ashford and Cummings 1983).<sup>48</sup> Research suggests that while each cost typically has some bearing on the proactive decision-making process, they are not uniformly impactful and may vary in weight across behavior types (Parker and Collins 2010).

In my study, novice auditors likely perceive varying levels of costs depending on the team-oriented proactive behaviors, and this likely influences the effectiveness of the antecedent motivators. To examine the efficacy of this possibility, I conducted a subsequent experiment with 36 audit students from a U.S.-based university to examine how they perceive the image, effort, and inference costs associated with each team-oriented proactive behavior, including speaking up, taking charge, and helping. The experimental task is setup similarly to the main study experiment except that all manipulations of the supervisor's communication are removed. See Appendix D for the experimental instrument.<sup>49</sup>

First, I evaluate whether participants perceive varying image costs associated with each team-oriented proactive behavior. Specifically, I ask participants to respond on an 11-point scale with endpoints labeled -5 (*Highly negative*) and 5 (*Highly positive*), and midpoint labeled 0

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<sup>48</sup> Effort cost is a function of how familiar one is with the key contextual factors involved, such as the task and/or individuals, prior research suggests that the less familiar one is with the task and/or individuals involved, the less likely the individual is to pursue the proactive behavior (Ashford and Cummings 1983). Image costs are a function of concern about one's social image or reputation, and encompasses the strategies one activates to manage how others perceive them (Ashford and Cummings 1983; De Stobbeleir et al. 2010). Prior research indicates that the greater the risk of making a bad impression or damaging one's reputation, the less likely one is to pursue proactive behavior (Ashford and Cummings 1983; Ashford and Northcraft 1992). Finally, inference costs refer to the strategies one implements to purposefully and thoughtfully be proactive, such as considering the trustworthiness of the individuals involved. Research suggests that the greater the inference cost, the less likely one is to be proactive (Ashford and Cummings 1983).

<sup>49</sup> Before responding to each of the three proactive-behavior scenarios, participants are provided with Sam's assignment and the participant's task. Specifically, that Sam's work area is inventory which involves completing internal control and substantive testing in this area. The participant's task is to review and respond three scenarios that describes decisions Sam faces at work. I also indicate to participants that there are no right or wrong answers.



(*Neutral*), to the question “*What effect do you think Sam performing the team-oriented proactive behavior would have on his image and reputation with the audit team?*”. I find that participants perceive greater image costs associated with speaking up (mean = 1.56) relative to helping (mean = 3.11) and the results of a paired t-test show that the difference between the means for each behavior is significant ( $t_{35} = -3.63$ , two-tailed  $p = 0.001$ ). This is also the case for taking charge (mean = 1.31) relative to helping (mean = 3.11) ( $t_{35} = -5.39$ , two-tailed  $p < 0.001$ ). Participants do not perceive that the mean image costs associated with speaking up and taking charge are significantly different ( $t_{35} = 0.56$ , two-tailed  $p = 0.577$ ).

Next, I examine whether participants perceive varying effort costs associated with each team-oriented proactive behavior. Specifically, I ask participants to respond on an 8-point scale with endpoints labeled 0 (*No effort*) and 7 (*Extreme effort*) to the question “*What degree of effort, including attention, time, and physical exertion, do you think Sam would need to put in to perform the team-oriented proactive behavior?*”. I find that participants perceive greater effort is required to speak up (mean = 5.19) relative to helping (mean = 3.97) and the results of a paired t-test show the difference between the means for each behavior is significant ( $t_{35} = 4.378$ , two-tailed  $p < 0.001$ ). Participants also perceive more effort is required to take charge (mean = 5.14) relative to helping (mean = 3.97), and the difference between the means is significant ( $t_{35} = 3.19$ , two-tailed  $p = 0.003$ ). The difference between the level of effort involved with speaking up and taking charge is not significant ( $t_{35} = 0.20$ , two-tailed  $p = 0.423$ ).

Finally, I examine whether participants perceive varying inference costs for each team-oriented proactive behavior by asking participants to respond to the question “*How much reasoning and strategy do you think Sam would need to put into pursuing the team-oriented proactive behavior?*”. Participants respond using an 8-point scale with endpoints labeled 0 (*None*)

and 7 (*A substantial amount*). I find that participants perceive more strategical inference is necessary to speak up (mean = 4.83) than help (mean = 3.86), and the results of a paired t-test show the difference between the means for each behavior is significant ( $t_{35} = 3.31$ , two-tailed  $p = 0.001$ ). This is also true for taking charge (mean = 4.83) relative to helping (mean = 3.86) ( $t_{35} = 2.75$ , two-tailed  $p = 0.009$ ).<sup>50</sup> There is no difference between the mean inference cost to speak up (mean = 4.83) and take charge (4.83).

These results infer that novice auditors likely consider how their engagement team will perceive them before speaking up or taking charge. Particularly, the additional work speaking up could cause the engagement team if an error is found (Nelson et al. 2016) or the potential of speaking up in error may prevent novice auditors pursuance of this behavior. This is also the case for taking charge as suggesting the implementation of a data analytics bot as an alternative approach to testing is risky, and novice auditors may perceive the engagement team will view them negatively if the suggestion is inaccurate or unfeasible. Alternatively, interpersonal helping behavior is perceived as less costly (or as an image benefit) given a supervisor is likely to appreciate assistance from a subordinate in general. Similarly, speaking up and taking charge require greater effort and have a high inference cost (i.e., requires more strategy) relative to helping given the nature of each behavior. Alternatively, providing a status update to take on more work (i.e., interpersonal helping behavior) requires little upfront effort and essentially no strategy as the novice auditor is not privy to the details of the additional work at the point of being proactive.

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<sup>50</sup> In addition to asking about how participants perceive the costs associated with each team-oriented proactive behavior, I asked participants about their willingness to pursue each team-oriented proactive behavior. These questions were asked prior to participants' cost evaluation, and participants responded to the same scaled questions presented in the main study but in random order. I find that participants are most likely to pursue speaking up behavior (mean = 60.06) and least likely to pursue helping behavior (mean = 48.58). The mean willingness to pursue taking charge behavior is 50.67. I also perform paired t-tests to compare the means for each behavior, and find the mean willingness to speak up is significantly different from taking charge ( $t_{35} = 2.30$ , two-tailed  $p = 0.028$ ) and helping ( $t_{35} = 2.61$ , two-tailed  $p = 0.013$ ). The mean willingness to take charge and help is not significantly different ( $t_{35} = 0.37$ , two-tailed  $p = 0.717$ ).

My results provide evidence that motivating novice auditors to pursue team-oriented proactivity is necessary given they are associated with potential costs. This is true for riskier behaviors (i.e., speaking up and taking charge) that require novices to overcome the costs associated with being proactive, as well as less risky behaviors where novice auditors may not see the immediate benefit to being proactive (i.e., helping). In relation to the results of my main study, I interpret these findings to mean comfort and closeness through supervisor expression are important and beneficial in remote environments to motivate novice auditors to overcome the costs of speaking up and see the value in interpersonal helping behavior. Likewise, psychological ownership may help novice auditors prioritize interpersonal helping behavior. Regarding taking charge behavior, the results of my primary study indicate that neither supervisor expression nor psychological ownership is motivating. Perhaps this is because the greater image, effort, and inference costs associated with taking charge create a high level of uncertainty for novice auditors, or because taking charge behavior only marginally improves audit quality in the current year. Similarly, psychological ownership also does not motivate speaking up. Indeed, novice auditors are not adequately socialized into the accounting profession which limits their ability to appropriately consider the professional risk of failing to follow through on a possible error.

In summary, the results of my cost analysis reveal that novice auditors perceive the image, effort, and inference costs associated with pursuing various team-oriented proactive behaviors differently. This finding is important as it identifies a key nuance when considering whether novice auditors will pursue team-oriented proactivity. Future research is necessary to examine if and/or how other antecedents will motivate each unique behavior.

## **V. CONCLUSION**

Increases in remote work necessitate investigating ways to motivate novice auditors' team-

oriented proactivity, which is inherently challenging; yet, important given its critical contribution to audit quality (Clor-Proell et al. 2022). For example, novice auditors' willingness to proactively speak up about audit issues (i.e., cooperative voice; Nelson et al. 2016), suggest innovative improvements to existing audit procedures (e.g., taking charge; Morrison and Phelps 1999), and pursue future-oriented actions that benefit team members (e.g., helping; Baroudi et al. 2019) can directly affect audit efficiency and effectiveness. Prior audit research primarily focuses on ways to motivate novice auditors to speak up about audit issues, identifying that characteristics of the supervisor, work task, and work environment are antecedents to this behavior (Nelson et al. 2016; Kadous et al. 2019; Clor-Proell et al. 2022, 2023; Proell et al. 2022). Of particular interest are the supervisor characteristics that encourage or discourage novice auditors' proactive behavior as they represent external antecedents whereby another individual can motivate proactivity. However, more prevalent remote work structures in the accounting profession are making it increasingly difficult for supervisors to assist in this way. Further, prior audit research does not consider the broader proactivity construct (i.e., other team-oriented proactive behaviors besides voice) to determine if behaviors are uniformly motivated. As remote work structures persist and the audit environment becomes increasingly dynamic and complex (Downey et al. 2020; Bauer et al. 2021), it is necessary to identify practical and implementable strategies to motivate novice auditors' team-oriented proactivity.

In this study, I examine supervisor expression and psychological ownership as ways to motivate novice auditors to pursue team-oriented proactive behaviors. My selection of these variables is in line with theory on proactivity which suggests that affect and values are individually motivating, but when combined, orient individuals to a greater motivational state. Using an experiment, I predict and find that supervisor expression significantly motivates speaking up and

interpersonal helping behavior. I also find that psychological ownership significantly motivates interpersonal helping behavior, but not speaking up, providing partial evidence regarding the effectiveness of psychological ownership. Importantly, my finding that psychological ownership through the assignment of responsibility matters for novices extends extant research which suggests the contrary (Cummings and Anton 1990). Regarding the interaction, I find that supervisor expression and psychological ownership act as substitutes rather than complements to motivate interpersonal helping behavior, and the two do not jointly motivate speaking up and taking charge behaviors. My findings identify two important ways in which audit supervisors can motivate their subordinates to pursue team-oriented proactive behaviors. My findings also provide evidence that not all proactive behaviors are created equal, and their antecedents may vary in effectiveness due to variation in how novice auditors perceive the possible benefits or costs (i.e., image, effort, inference) associated with pursuing each behavior.

This study offers several important insights and implications to practitioners, regulators, and academics. First, regulators and practitioners are interested in how audit quality can be improved when engagement teams are distributed (PCAOB 2019; Downey et al. 2020; Bauer et al. 2021; SEC 2022). My findings directly address this concern by investigating an understudied area in audit research (proactivity; Peecher et al. 2023) and identifying two ways to motivate proactivity in a remote environment. Each is a readily implementable communication strategy whereby firms can train audit supervisors to motivate novice auditors when geographically distributed. My findings regarding supervisor expression also identify a way for supervisors to connect with novice subordinates who are uncertain and unfamiliar with their new work settings. This finding is particularly important for those working in audit where supervisors may frequently rotate and novice auditors need to feel comfortable quickly to be proactive. Firms should highlight

the benefits of supervisors using expressive text-based communication mechanisms that increase newcomers' comfort with being proactive when remote.

Second, socializing new employees is difficult in remote environments (Bailey et al. 2023). I specifically examine two mechanisms that are aspects of socialization (supervisor expression as an interpersonal emotional exchange and psychological ownership as a professional duty), whereby novice auditors can more quickly feel comfortable and acclimate amidst new role, team, and environmental uncertainties (e.g., Ashford and Black 1996). Finally, proactivity researchers call for research examining the combined effects of affect and values on proactive behavior (Grant and Ashford 2008). Though I find that supervisor expression and psychological ownership individually motivate novice auditors to pursue interpersonal helping behavior, this is not the case for more costly behaviors like speaking up about audit issues. This suggests that affect and values may not uniformly work together to motivate *all* proactive behavior types. That is, affect and values may work as substitutes or complements depending on the type of proactive behavior. I posit that this variation may be attributable to the perceived costs associated with different types of behaviors where variation is more likely to occur when behaviors are more costly.

There are several areas for future research. Additional research is needed to disentangle how affective and value-centric antecedents affect team-oriented proactivity. Future research can explore how other mechanisms (e.g., interpersonal relationships, professional identity) work together to motivate proactive behavior. Second, I examine psychological ownership in this study given novice auditors do not naturally feel responsible upon organizational entry. Future research can investigate at which hierarchical rank or level of experience novice auditors begin to feel professionally responsible for pursuing change-oriented behaviors, particularly in remote environments. Likewise, research can take an in-depth look at the relationship development

process in remote environments to identify what other tools may be useful to develop relationships when working apart. Finally, this study adds to the very few studies that experimentally examine proactivity. Future research should design innovative experimental studies to continue identifying how various antecedents cause individuals to behave proactively.

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## APPENDIX A Literature Review Matrix

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
<b>Audit Research Examining <i>Message - Content</i></b>					
1	Almer et al. (2023)	Message – content <ul style="list-style-type: none"> <li>• Verbal and nonverbal features (leader-member exchange broadly)</li> </ul>	To understand supervisor-subordinate auditor relationships through the lens of leader-member exchange, and the downstream effect on subordinates' organizational commitment and turnover intention.	Survey	1) Leader-member exchange significantly affects subordinates' organizational commitment and turnover intention. 2) Female subordinates form lower-quality relationships with supervisors, regardless of supervisor sex, which can affect the impact of leader-member exchange on their organizational commitment.
2	Andiola and Bedard (2018) <sup>51</sup>	Message – content <ul style="list-style-type: none"> <li>• Feedback features broadly</li> </ul> Message – treatment <ul style="list-style-type: none"> <li>• Feedback framing (goal framing: learning or performance)</li> </ul> Channel <ul style="list-style-type: none"> <li>• Feedback channel (electronic review notes or face-to-face)</li> </ul>	To provide an in-depth understanding of negative feedback, and identify factors that might moderate its effects.	Experiential questionnaire	1) Auditors recall both adverse and beneficial reactions to more negative feedback, including worse attitudes toward coaching relationships, more attempts to manage supervisors' impressions, but greater performance improvements. 2) Auditors' reactions to negative feedback are moderated by their feedback orientation and sometimes goal framing.
3	Andiola et al. (2019)	Message – content <ul style="list-style-type: none"> <li>• Feedback features broadly</li> </ul>	To explore how subordinate auditors understand, rationalize, and internalize recollections of their best and worst feedback experiences.	Experiential questionnaire	1) Auditors attribute their best reviews to effective communication with their supervisor, and these produce feelings of appreciation and a sense of control for subordinates that inspires comradery and a desire to work hard. 2) Auditors often perceive that their supervisor in worst reviews is careless, incompetent, or impersonal, and indicate that they are not provided constructive feedback.

<sup>51</sup> In addition to examining message content, Andiola and Bedard (2018) and Nelson et al. (2016) also examine message treatment. In addition to examining an aspect of the message, content and treatment; respectively, Andiola and Bedard (2018) and Lambert and Agoglia (2011) examine the channel.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
4	Andiola et al. (2021)	Message – content <ul style="list-style-type: none"> <li>Coaching behaviors broadly</li> </ul>	To investigate coaching quality in the context of the multiple supervisor audit environment, and to investigate inhibiting factors that explain variation in coaching quality across supervisors.	Survey	1) The effect of a perceived low coaching quality supervisor on organizational commitment and turnover intention is mitigated when the coaching quality of another supervisor is high or when a relatively high coaching quality supervisor is also a mentor. 2) Supervisors' guidance behaviors are of lower quality than both facilitation and inspiration behaviors, suggesting that audit supervisors are more successful at encouraging improvement than in providing staff with specific sufficient guidance on how to improve.
5	Blum et al. (2022)	Message – content <ul style="list-style-type: none"> <li>Communication choices (oral “in-process” review feedback)</li> </ul>	To examine the effect of a positive (negative) reputation on auditors' skeptical behavior.	Experiment	1) Subordinate auditor's positive or negative reputation operationalized through supervisor's “in-process” feedback affects the subordinates' decision to engage in audit quality enhancing behaviors (i.e., requesting explanations and supporting documentation) where the rate of requests was higher for those in the positive reputation condition.
6	Bobek et al. (2012)	Message – content <ul style="list-style-type: none"> <li>Knowledge sharing features broadly</li> </ul>	To investigate how auditors successfully resolve audit challenges personally encountered on an audit engagement.	Experiential questionnaire	1) More than 70 percent of audit challenges are successfully resolved through communication with other auditors on the engagement, along with communication with the client.
7	Brazel et al. (2010)	Message – content <ul style="list-style-type: none"> <li>Fraud brainstorming features</li> </ul>	To examine how brainstorming quality affects auditors' fraud decision-making processes.	Survey	1) Auditors that pre-plan fraud brainstorming meetings by preparing an agenda and checklist lead to higher quality sessions. 2) High-quality brainstorming improves the relations between fraud risk factors and fraud risk assessments. 3) Brainstorming quality positively moderates the relations between fraud risk assessment and fraud testing.
8	Clor-Proell et al. (2022)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features broadly</li> </ul>	To provide specific examples of supervisor behaviors that enhance and harm upward communication.	Experiential questionnaire	1) Supervisors discourage speaking up by conveying that they value task completion above other goals and that they are too busy to be interrupted. 2) Supervisors encourage speaking up by communicating an openness to questions, responding positively to issues raised, and closing the loop.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
9	Commerford et al. (2017)	Message – content <ul style="list-style-type: none"> <li>Communication choices (written testing responsibility: self or peer)</li> </ul>	To examine how information foraging by auditors affects audit evidence.	Multiple experiments	1) When a supervisor sends task instructions to a subordinate to select and personally test (rather than peer test) a sample, the subordinate exhibits information foraging behaviors by reacting to the felt cost of information collection (e.g., time, effort) at the expense of a more global consideration of information value. 2) Foraging behavior is moderated by removing the personal cost (identifying audit evidence for another member of the audit team) to the individual auditor.
10	Cooper et al. (2019)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features (conflict management: collaborative, dominant, avoidant)</li> </ul>	To investigate whether individual perceptions of supervisor conflict management style (collaborative, dominating, avoidance) are antecedents of role stressors (role conflict, role ambiguity, role overload) in accountants' exhaustion.	Survey	1) Collaborative and dominating conflict management styles are important antecedents to the role stressors that precede exhaustion in public accounting. 2) Collaborative and dominating management styles have an indirect effect on exhaustion through role conflict and overload.
11	Dalton et al. (2015)	Message – content <ul style="list-style-type: none"> <li>Feedback (unfavorable feedback environments, external mentoring)</li> </ul>	To examine how unfavorable supervisory feedback environments affect subordinates' job attitudes and outcomes, and to investigate whether external mentoring attenuates this effect.	Survey	1) Unfavorable supervisory feedback environments, characterized by feedback quality and feedback delivery) are associated with lower job satisfaction and role clarity which leads to lower organizational commitment and higher turnover. 2) External mentoring can attenuate the effect of unfavorable supervisory feedback environments on subordinates' job attitudes and outcomes.
12	Dalton et al. (2023)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features (personal/family needs, procedural justice)</li> </ul>	To examine whether factors under the organization's controls (e.g., supervisor support) influence perceived organizational support for telecommuting and whether such support is linked with perceived career penalties from telecommuting usage and turnover intentions.	Survey	1) Supervisor support for personal/family needs and procedural justice regarding telecommuting requirements are positively associated with perceptions of organizational support for telecommuting. 2) Greater perceived organizational support for telecommuting is associated with both lower perceived career penalties from telecommuting usage and lower turnover intention.
13	Dennis and Johnstone (2018)	Message – content <ul style="list-style-type: none"> <li>Communication choices (quality-differentiated leadership: partners' general or targeted prompts)</li> </ul>	To examine how partner leadership and subordinate knowledge jointly influence brainstorming processes and outcomes.	Experiment	1) Quality-differentiated leadership (i.e., discussing the importance of effective and efficient fraud brainstorming and professional skepticism and emphasizing fraud brainstorming as a learning opportunity) improves the mental representations of fraud risk for seniors, but not managers. 2) Seniors have more room for improvement in their mental representations than managers.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
14	Duh et al. (2020)	Message – content <ul style="list-style-type: none"> <li>Knowledge sharing features broadly</li> </ul>	To examine the effect of knowledge sharing in audit firms on audit quality and efficiency.	Survey	1) Knowledge sharing within an audit firm is positively associated with audit quality. 2) Knowledge sharing within audit firms is associated with higher audit efficiency.
15	Gissel and Johnstone (2017)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features (psychological safety: more or less)</li> </ul>	To investigate the joint effects of partner leadership behavior and task knowledge on subordinates' willingness to share privately known, fraud-relevant information during fraud brainstorming.	Experiment	1) Less-knowledgeable subordinates' change in willingness to share privately known, fraud-relevant information is positively associated with perceived psychological safety within the brainstorming team, whereas more-knowledgeable subordinates' change in willingness to share is insensitive to perceived psychological safety.
16	Herda et al. (2019)	Message – content <ul style="list-style-type: none"> <li>Coaching behaviors (big-picture view)</li> </ul>	To investigate the effect of staff auditors' workplace mindfulness on premature sign-off, and to examine whether supervisor coaching is an effective means to engender workplace mindfulness.	Experiential questionnaire	1) Auditors who are coached by supervisors to appreciate the importance of their work to external financial statement users are more likely to be mindful in their work setting. 2) Greater workplace mindfulness about financial statement user considerations is associated with a reduced likelihood of auditor sign-off through workplace mindfulness.
17	Kadous et al. (2019)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features (intrinsic motivation: intrinsic or extrinsic)</li> </ul>	To examine how audit leadership motivational emphasis (intrinsic versus extrinsic) and ambiguity surrounding the audit issue affect auditors' willingness to raise audit issues.	Multiple experiments	1) Auditors whose leaders emphasize intrinsic goals, whether directly or through tone at the top and firm culture, are more likely to speak up than other auditors.
18	Knechel and Leiby (2016)	Message – content <ul style="list-style-type: none"> <li>Communication choices (decision authority: high or low)</li> </ul>	To examine whether assessment contrariness or estimate precision depends on a consultant's status motives.	Experiment	1) Active status motives lead consultants with higher specialized knowledge to provide recommendations that are less contrary, but more precise. 2) Higher consultant decision authority (i.e., an audit partner directing the subordinate's colleagues to solicit their input and to take and document actions consistent with the advice they provide) constrains precision.
19	Nelson et al. (2016)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features (team-orientation)</li> </ul> Message – treatment <ul style="list-style-type: none"> <li>Communication framing (supervisor concern: audit efficiency or effectiveness)</li> </ul>	To examine the effect of a team-oriented leader and a supervisor's concern about audit issues on auditors' likelihood of speaking up, and to examine team members' commitment to the team as a mediator.	Experiment	1) Subordinate auditors demonstrate greater willingness to raise audit issues to their audit supervisors when the supervisor is team-oriented. 2) Subordinate auditors' willingness to raise audit issues is affected by what the audit supervisor has to say and how they think their message will be received which may potentially affect audit effectiveness and efficiency.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
20	Peecher et al. (2010)	Message – content <ul style="list-style-type: none"> <li>Communication choices (supervisor intervention: active or absent)</li> </ul>	To examine how supervisors who have directional goals and guide their subordinates via active intervention finalize team judgments (compared to those who do not intervene).	Multiple experiments	1) Subordinates' judgments are influenced by their supervisor's active intervention which is reflected in the supervisors' final judgment. 2) A supervisor's intervention leads to incremental bias in their final judgment beyond that attributable to any effects on subordinates' judgments.
21	Shanker and Tan (2006)	Message – content <ul style="list-style-type: none"> <li>Communication choices (review preferences: similar or dissimilar)</li> </ul>	To investigate whether and how the requirement for preparers to justify an audit conclusion to a reviewer with task preferences that are similar to or dissimilar from their explicitly stated initial task preferences determine the nature and extent of workpaper justifications, and how this effect is moderated by technical and tacit knowledge.	Experiment	1) Subordinates' evaluation techniques for deriving their conclusions to agree or disagree with the client's accounting treatment are affected by supervisors' review preferences. 2) Auditors with high tacit knowledge and high technical knowledge consider a wider breadth of issues when they justify their conclusions to review supervisors with dissimilar task preferences. 3) High tacit knowledge subordinates who justify to review supervisors with similar initial task preferences employ an evidence-framing approach.
22	Stallworth (2003)	Message – content <ul style="list-style-type: none"> <li>Coaching behavior (mentoring)</li> </ul>	To examine the influence of mentoring relationships on each dimension of organizational commitment.	Survey	1) Mentoring relationships have a positive impact on each of the dimensions of commitment, and affective commitment is the most influenced.
23	Stallworth (2004)	Message – content <ul style="list-style-type: none"> <li>Coaching behavior (mentoring)</li> </ul>	To examine a variety of antecedent variables of organizational commitment, and the consequence of intention to leave the public accounting organization.	Survey	1) Organizational commitment in the public accounting environment can be conceptualized in terms of affective, moral, and economic attachment to the firm. 2) Several other antecedents unique to the public accounting profession affect organizational commitment, including a supervisor's willingness to regularly invite subordinates to social events.
24	Stefaniak and Robertson (2010)	Message – content <ul style="list-style-type: none"> <li>Verbal and nonverbal features (supervisors' reactions)</li> </ul>	To investigate the effect of superiors' historical reactions to mistake admissions on the likelihood that staff auditors will admit mistakes.	Experiment	1) Staff auditors are more likely to admit errors when their superiors have reacted positively.
25	Stevens et al. (2019)	Message – content <ul style="list-style-type: none"> <li>Task instructions (supervisor style: supportive or unsupportive)</li> </ul>	To examine how the style used by a partner when allocating a task impacts skepticism.	Experiment	1) When team identity salience is high, auditors demonstrate greater skepticism when a partner's style is supportive rather than unsupportive.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
26	Vagner (2022)	Message – content <ul style="list-style-type: none"> <li>Task instructions (written personalized communication: personalized or not personalized)</li> </ul>	To explore the effects of personalized task communication on auditors’ judgments and decisions.	Experiment	1) Communication personalization (i.e., including text that provides support, emphasizing the importance of understanding the task, and the supervisor’s profile picture) elicits affect and increases effort levels for purposes of improving pre-task information processing and subsequent collectability judgments.
27	Vera-Munoz et al. (2006)	Message – content <ul style="list-style-type: none"> <li>Knowledge sharing features broadly</li> </ul>	To examine factors that may enhance or hinder knowledge sharing in public accounting firms.	Review	1) Information technology, formal and informal interactions (including supervision and feedback of subordinates), and reward systems significantly impact knowledge sharing in public accounting firms.
<b>Audit Research Examining <i>Message - Treatment</i></b>					
1	Andiola (2023)	Message – treatment <ul style="list-style-type: none"> <li>Feedback (goal framing: learning or performance)</li> </ul>	To investigate how novice auditors’ reactions and follow-through performance after negative feedback are influenced by the reviewer’s framing and preparer’s feedback orientation.	Experiment	1) Novice auditors with stronger feedback orientations have more positive reactions to negative feedback when reviewers emphasize learning goals, but framing does not influence performance. 2) Novice auditors with weaker feedback orientations have worse reactions to negative feedback regardless of framing, but performance is better when framed with learning goals.
2	Bauer (2015)	Message – treatment <ul style="list-style-type: none"> <li>Communication framing (client identity: “we”/”us” or “they”/”them”)</li> </ul>	To examine the joint effect of professional and client identity as mechanisms for promoting auditor independence, specifically auditors’ professional skepticism.	Multiple experiments	1) Auditors who identify more strongly with their clients by sharing their values (i.e., a partner referring to the client using terms such as “we”/”us” versus “they”/”them), agree more with the client’s preferred accounting treatment unless the salience of their professional identity (through their supervisor) is heightened.
3	Carpenter (2007)	Message – treatment <ul style="list-style-type: none"> <li>Fraud brainstorming broadly</li> </ul>	To investigate audit team brainstorming sessions and the resulting fraud judgments.	Experiment	1) Brainstorming audit teams generate more quality fraud ideas than individual auditors generate before the brainstorming session although the overall number of ideas is reduced.
4	Carpenter and Reimers (2013)	Message – treatment <ul style="list-style-type: none"> <li>Fraud brainstorming emphasis (professional skepticism emphasis: high or low)</li> </ul>	To examine how components of professional skepticism (i.e., partner’s emphasis and level of fraud indicators) affect auditors’ identification of fraud risk factors, their fraud risk assessments, and their selection of audit procedures.	Experiment	1) A partner’s emphasis on professional skepticism is critical for effective and efficient identification of relevant fraud risk factors and choice of relevant audit procedures.
5	Dong et al. (2021)	Message – treatment <ul style="list-style-type: none"> <li>Communication framing (audit evidence sensitivity: high or low)</li> </ul>	To examine the effect of supervisor influence on novice auditors’ accounting estimate assessments.	Experiment	1) Auditors assign a higher (lower) risk of misstatement when their supervisor places high (low) emphasis on evidence suggesting accounting adjustment.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
6	Harding and Trotman (2017)	Message – treatment <ul style="list-style-type: none"> <li>Fraud brainstorming framing (partner communication: management representations and auditor judgments or personal views)</li> </ul>	To investigate the effect of partner communication on the level of professional skepticism in auditor judgments and actions within the context of fraud brainstorming.	Multiple experiments	1) Auditors exhibit higher levels of professional skepticism when the partner expresses management’s view, rather than their own view or no view, that there is a low likelihood of fraud
7	Lambert and Agoglia (2011)	Message – treatment <ul style="list-style-type: none"> <li>Feedback framing (electronic review notes: documentation or conclusion)</li> </ul> Channel <ul style="list-style-type: none"> <li>Feedback timing (review notes: delayed or timely)</li> </ul>	To examine the part of the review process where reviewees close review notes, specifically how review timeliness and review note frame influence reviewee follow through.	Experiment	1) Supervisors’ timely review leads to greater subordinate effort than a delayed review. 2) Supervisors’ conclusion-framed review notes result in greater subordinate effort and performance when the review is timely.
8	Nelson and Proell (2018)	Message – treatment <ul style="list-style-type: none"> <li>Communication framing (partner communication: audit efficiency or effectiveness)</li> </ul>	To examine audit team leader reactions to auditors who speak up about potentially important audit issues.	Experiment	1) Audit supervisors react with irritation to subordinates who speak up about issues that misalign with the partner’s audit efficiency or effectiveness emphasis.
9	Robertson (2007)	Message – treatment <ul style="list-style-type: none"> <li>Communication framing (supervisor’s preference: audit quality or meeting a deadline)</li> </ul>	To examine the effect of superior preference on staff auditor reporting decisions in the presence of time deadline pressure.	Experiment	1) Most participants reported information concerning a subjective materiality issue regardless of their supervisor’s preference.
<b>Audit Research Examining Channel</b>					
1	Agoglia et al. (2009)	Channel <ul style="list-style-type: none"> <li>Feedback channel (electronic review notes or face-to-face)</li> </ul>	To examine how alternative workpaper review methods affect sequential audit review team judgments through their impact on preparer workpaper documentation.	Experiment	1) Reviewers' (i.e., supervisors') judgments are ultimately affected by the form of review expected by the preparer (i.e., subordinate). 2) The effect of review mode on reviewer judgments is mediated by a documentation quality assessment gap. 3) With electronic review, reviewers' burden to recognize and compensate for lower quality documentation is greater, resulting in lower quality reviewer judgment than when the mode is face-to-face.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
2	Agoglia et al. (2010)	Channel <ul style="list-style-type: none"> <li>Feedback channel (electronic review notes or face-to-face)</li> </ul>	To examine a reviewer's choice of review format and factors that influence this choice.	Survey, Experiment	1) Reviewers perceive face-to-face interaction during review as more effective and electronic interaction as more convenient. 2) Workload pressure can increase the likelihood of electronic review, but only with low misstatement.
3	Ater et al. (2019)	Channel <ul style="list-style-type: none"> <li>Feedback channel (electronic review notes or face-to-face)</li> </ul>	To examine how an auditor's defined role leads to perceived differences in what initiates the workpaper review process, the preferred methods for performing reviews, and the stylization of communicated review comments.	Survey	1) The majority of reviewers believe face-to-face is an effective way to discuss review notes and facilitate learning, and preparers prefer this method because it cuts down on the back and forth. 2) Reviewers think they primarily provide conclusion-based notes, but preparers view notes as both documentation and conclusion-based.
4	Brazel et al. (2004)	Channel <ul style="list-style-type: none"> <li>Feedback channel (electronic review notes or face-to-face)</li> </ul>	To examine the effects on preparers of using two different methods of review: face-to-face and electronic.	Experiment	1) The method of review affects the preparer's effectiveness and efficiency. 2) Preparers anticipating a face-to-face review with their supervisor are more concerned with audit effectiveness, produce higher quality judgments, are less efficient at their task, are less likely to be influenced by prior year workpapers, and feel more accountable than preparers in both electronic review and no-review conditions.
5	Chen et al. (2015)	Channel <ul style="list-style-type: none"> <li>Fraud brainstorming channel (electronic nominal or electronic interacting teams)</li> </ul>	To examine the effects of structured and unstructured interacting brainstorming platforms on audit team brainstorming performance.	Experiment	1) In fraud hypothesis generation, a structured brainstorming platform does not improve audit team fraud brainstorming performance. 2) A structured brainstorming platform reduces the differences in brainstorming performance and mental simulations between managers and seniors.
6	Chen et al. (2022)	Channel <ul style="list-style-type: none"> <li>Fraud brainstorming channel (electronic structured or electronic non-structured teams)</li> </ul>	To examine the effects of structured and unstructured interacting brainstorming platforms on audit team brainstorming performance.	Experiment	1) In fraud hypothesis generation, a structured brainstorming platform does not improve audit team fraud brainstorming performance. 2) A structured brainstorming platform reduces the differences in brainstorming performance and mental simulations between managers and seniors.
7	Favere-Marchesi (2006)	Channel <ul style="list-style-type: none"> <li>Feedback channel (oral review discussion concurrently or after review)</li> </ul>	To investigate how the inclusion and timing of face-to-face discussions between the preparer and reviewer affects audit team performance, and to examine how familiarity affects this relationship.	Experiment	1) A subordinate's post-review discussion with the supervisor and the supervisor's familiarity with the subordinate are both, independently, important sources of audit team performance gains in a review process that includes face-to-face discussions.



#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
8	Gimbar et al. (2018)	Channel <ul style="list-style-type: none"> <li>Feedback channel (electronic review notes or face-to-face)</li> </ul>	To examine communication behaviors during the audit review process, including communication style, the likelihood of taking over the audit work of preparers, and their propensity to self-correct preparers' documentation.	Survey	1) Reviewers are more likely to discuss review notes face to face with below-average-performing subordinates than with above-average-performing subordinates, and instead, use alternative forms of communication with above-average performers. 2) Reviewers self-correct and/or update documentation themselves more frequently for below-average subordinates than for above-average subordinates. 3) Reviewers are likely to revise the work of subordinates, whether below average or above average for a variety of reasons including ease of doing so, efficiency, and pending deadlines.
9	Kuselias et al. (2023)	Channel <ul style="list-style-type: none"> <li>Computer-mediated communication broadly</li> </ul>	To examine the joint effect of team member proximity (distributed or co-located) and assignment length (temporary or continuing) on subordinates' reliance on the supervisor's preferences.	Experiment	1) Subordinates distributed from their supervisors are less influenced by their supervisor's preferences than co-located subordinates when they are on temporary assignment. 2) Distributed subordinates react similarly to co-located subordinates when on a continuing assignment.
10	Lynch et al. (2009)	Channel <ul style="list-style-type: none"> <li>Fraud brainstorming channel (electronic or face-to-face)</li> </ul>	To investigate the effectiveness of computer-mediated fraud brainstorming.	Experiment	1) Brainstorming effectiveness is significantly higher for teams brainstorming electronically compared to teams using face-to-face brainstorming.
11	Miller et al. (2006)	Channel <ul style="list-style-type: none"> <li>Feedback channel (oral review discussion or no discussion)</li> </ul>	To explore whether the addition of a discussion of performance as a feedback mechanism during audit review enhances preparers' subsequent performance.	Survey	1) Supervisors incorporation of a performance discussion with written review notes enhances subordinates' motivation to improve performance relative to when no discussion is incorporated.
12	Murthy and Kerr (2004)	Channel <ul style="list-style-type: none"> <li>Audit team communication channel (face-to-face versus bulletin board or chat tool)</li> </ul>	To examine the relative effectiveness of alternative modes of audit team communication in a task requiring the exchange and processing of uniquely held information.	Experiment	1) Teams using the bulletin-board tool outperformed teams using the chat tool and teams communicating face-to-face. 2) There were no significant performance differences between teams using the chat tool and teams interacting face-to-face.
13	Payne et al. (2010)	Channel <ul style="list-style-type: none"> <li>Feedback channel (electronic review notes or interactive review discussion)</li> </ul>	To compare the effects of preparers anticipating a real-time interactive review to the effects of those anticipating receipt of a written review, and to examine how the two review types affect audit performance.	Experiment	1) An interactive review leads subordinate auditors to focus more on cognitively demanding, conclusion-oriented audit procedures which leads to better performance.

#	Citation	Aspect(s) of communication investigated	Purpose	Research method	Key research findings related to this review
14	Sidgman et al. (2021) <sup>52</sup>	Channel <ul style="list-style-type: none"> <li>Audit team communication channel (face-to-face versus discussion board or chatroom)</li> </ul>	To examine auditors' performance of multi-tasking under alternative modes of communication (face-to-face, discussion board, and chatroom).	Experiment	1) When multitasking, the performance of audit teams communicating face-to-face is greater than the performance of teams using CMC.

**Note:** The table summarizes the papers synthesized in this review, including the aspect(s) of communication investigated, study purpose, research method, and key research findings.

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<sup>52</sup> Brazel et al (2021) is a practitioner summary to Sidgman et al. (2021). In the summary, they find that compared to face-to-face interaction and discussion board, auditors prefer and are familiar with, chatroom features because of its similarities to text messaging.

## **APPENDIX B**

### **Interview Questions**

#### **Panel A: Interview Questions for Subordinate Auditor**

1. Tell me what it's like communicating with your supervisor when working in two different physical locations.
2. What is most difficult about communicating with your supervisor when you're working in different locations? What challenges have you experienced?
3. In what ways, if any, do you feel you misunderstand your supervisor's messages (e.g., task instructions, feedback) to you when working in different locations? Tell us about a specific experience.
4. In what ways, if any, does your supervisor communicate his/her positive (e.g., appreciation, excitement) and negative (e.g., stress, frustration) feelings to you while working remotely? How does your supervisor's conveyance of emotions to you affect you? the audit?
5. Describe a specific experience where you think you misread your supervisor's feelings.
6. Tells us about a specific experience where you think your supervisor misread your feelings or misunderstood your message to him/her.
7. If you could change anything about the current communication between you and your supervisor when you're working in two different locations, what would you change? Why?

#### **Panel B: Interview Questions for Supervisor Auditor**

1. Tell me what it's like communicating with your subordinate when working in two different physical locations.
2. What is most difficult about communicating with your subordinate when you're working in different locations? What challenges have you experienced?
3. In what ways, if any, do you feel your subordinate misunderstands your messages (e.g., task instructions, feedback) to them when working in different locations? Tell us about a specific experience.
4. In what ways, if any, do you communicate your positive (e.g., appreciation, excitement) and negative (e.g., stress, frustration) feelings to your subordinate while working remotely? How does your ability to convey emotions affect you? your subordinate? the audit?
5. Describe a specific experience where you think your subordinate misread your feelings.
6. Tell us about a specific experience where you think you misread your subordinate or misunderstood his/her message to you (e.g., asking questions about a task, speaking up about an audit issue, providing status updates).
7. If you could change anything about the current communication between you and your subordinate when you're working in two different locations, what would you change? Why?

## APPENDIX C Experiment Instrument

### Study Instrument

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#### Information about Being in a Research Study Virginia Commonwealth University

#### KEY INFORMATION ABOUT THE RESEARCH STUDY

**Voluntary Consent:** Dr. Lindsay Andiola is inviting you to volunteer for a research study. Dr. Andiola is an Accounting Professor at Virginia Commonwealth University (VCU) conducting the study with Devon Jefferson, a doctoral candidate at Virginia Commonwealth University.

**Alternative to Participation:** Participation in this study is entirely voluntary. You can decide to not participate in this study or to stop taking part in the study at any time.

**Study Purpose:** The purpose of this research is to investigate how staff auditors perform their work when working remotely.

**Activities and Procedures:** Your part in the study will be to read background information and a company overview, for a staff auditor, Sam. You will then review Sam's task, an email from Sam's supervisor, and a set of brief scenarios about Sam's workday and respond to questions about what you think Sam will do in each scenario. There are also some questions about how you think Sam will evaluate each scenario, your work experience, and demographics.

**Participation Time:** It will take less than 15 minutes to complete the study.

**Risks and Discomforts:** We do not believe there are any risks or discomforts associated with your participation in this research study.

**Possible Benefits:** We anticipate that the results of this study will increase our understanding of how novice auditors behave when working remotely and develop best practices for audit firms to implement in the future.

#### PROTECTION OF PRIVACY AND CONFIDENTIALITY

The results of this study may be published in scientific journals, professional publications, or educational presentations. The information collected during the study will not be used or distributed for future research studies. Please do not include any information within the survey that might identify you, your firm, your client, or others.

#### CONTACT INFORMATION

If you have any questions or concerns about your rights in this research study, please contact the VCU Office of Research at (804)-827-2157. If you have any questions or concerns about this study specifically, if any problems arise, or you would like to receive information on the results of the study, please contact Dr. Lindsay Andiola (lmandiola@vcu.edu).

## CONSENT

By participating in the study, you indicate that you have read the information written above, and you are voluntarily choosing to take part in this research. You do not give up any legal rights by taking part in this research study.

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### Background Information

**Instructions:** Today, you will be making decisions on behalf of Sam. Sam is a new audit associate eager to begin a career in public accounting. Please read the background information about the client and the engagement Sam is assigned to.

### Background

Sam officially began working at FgH CPA, LLP a few weeks ago, and briefly met his new engagement team last week, including his direct supervisor, *Chris*.

Although Sam is excited to begin his career in audit, he feels a bit uncertain given his lack of experience and unfamiliarity with his team. In addition, the firm Sam works for has recently changed its policy to support more flexible work arrangements. This allows Sam to work from home a few days a week. As a result, Sam only works in the same location as his team a couple of times each week. When he is not working in the same location as his team, they primarily use email or instant messaging to communicate. Sam is happy to work for a firm that offers such flexibility; however, this work structure increases Sam's feelings of uncertainty as he must complete most of his assignments in isolation. This makes it more difficult to coordinate meetings and challenging to develop relationships with his team. Nonetheless, Sam is eager to get started and make a good impression.

Sam is assigned to the audit of Advize Office Supply (Advize), a long-standing client of his firm. It is busy season, and the audit partner emphasized during this morning's virtual team meeting that the audit work needs to be completed quickly as the client's filing deadline is rapidly approaching. As a result, everyone is very busy, and **it can be challenging to connect with team members right now, especially on days when Sam works remotely.**

### Company Overview

Advize is a medium-sized publicly-traded retailer of office supplies and office furniture with a December 31st year-end. For over 34 years, Advize has served a variety of customers, including local businesses and schools. Over the past three years, the company's net income grew at a 3 percent annual rate. Advize is well-established and hires competent and experienced people of high integrity. Based on the team's prior experience with the client, Sam learns that the client also has strong internal controls and management has generally been cooperative in the past.

**Please click the arrow to proceed.**

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## Psychological Ownership Heightened Condition

### Sam's Assignment

During the team meeting, the audit partner indicated that Sam's work area is inventory. **Sam is directly responsible for this audit area**, including all internal control and substantive testing. Responsibility for this area includes performing the audit work and working with the manager and partner to make decisions on issues as they arise. **Chris, Sam's direct supervisor, is there to guide him if needed.**

Please click the arrow to proceed.

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## Psychological Ownership Not Heightened Condition

### Sam's Assignment

During the team meeting, the audit partner indicated that Sam's work area is inventory. **Sam's direct supervisor, Chris, is directly responsible for this audit area**, including all internal control and substantive testing. Responsibility for this area includes performing the audit work and working with the manager and partner to make decisions on issues as they arise. **Sam is there to assist his supervisor as needed.**

Please click the arrow to proceed.

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## Supervisor Expression Present Condition

Today, Sam is working **remotely** away from his direct supervisor, Chris. Since Sam began working at the firm, he has only worked in the same location as his supervisor one time. As a result, Sam is still getting to know his supervisor and learning his supervisor's style. **Sam relies heavily on the emails he receives from his supervisor to understand his tasks and connect with his supervisor as a person.**

Sam is just starting his day and receives the below email from his supervisor, Chris:

Hello!

Welcome to the engagement team! 😊 I am HAPPY to have you join us! 😊 The Partner indicated that your work area will be inventory. 😊

I believe the client has provided the team all requested inventory items to complete the audit work in this area. If you have questions, let me know! 😊

Have a GOOD day! 😊

Thanks!

*Chris*  
Senior Associate

---

### **Supervisor Expression Absent Condition**

Today, Sam is working **remotely** away from his direct supervisor, Chris. Since Sam began working at the firm, he has only worked in the same location as his supervisor one time. As a result, Sam is still getting to know his supervisor and learning his supervisor's style. **Sam relies heavily on the emails he receives from his supervisor to understand his tasks and connect with his supervisor as a person.**

Sam is just starting his day and receives the below email from his supervisor, *Chris*:

Hello,

Welcome to the engagement team. I am happy to have you join us. The Partner indicated that your work area will be inventory.

I believe the client has provided the team all requested inventory items to complete the audit work in this area. If you have questions, let me know.

Have a good day.

Thanks,

*Chris*  
Senior Associate

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### **Proactivity Scenarios**


#### **Scenario 1**

During Sam's initial review of the inventory workpapers, he comes across some potentially important information that did not seem to be considered in the initial risk assessment. If this is the case, the audit team may need to change its approach to inventory testing. This could increase audit cost by increasing planned audit hours, but also could potentially increase audit quality. Sam remembers during the morning meeting the engagement partner's emphasis on the audit client being low-risk and his concern about audit costs, but without any prior experience Sam worries the information may not be relevant.

Please slide the bar to rate on a scale from 0 (Not at all willing) to 100 (Very willing).

Not at all willing      Somewhat willing      Very willing

0   10   20   30   40   50   60   70   80   90   100

How willing do you think Sam would be to suggest to his direct supervisor, Chris, that additional procedures may be needed to investigate this information and inventory sampling might need to be increased?	
---	--


**Scenario 2**

Part of Sam's tasks for the day include designing the substantive procedures to test inventory. No other detailed instructions were provided. The workpaper is prepopulated with the procedures that were performed last year. Sam recently learned about a new data analytics tool that can expedite testing while maintaining audit effectiveness. Implementing the data analytics tool would likely benefit the team in future years, but it would take time to figure out how to use the tool right now. Sam also worries about doing the work incorrectly and causing further inefficiencies. Sam knows the audit partner is worried about costs, and considers following last year's procedures.

Please slide the bar to rate on a scale from 0 (Not at all willing) to 100 (Very willing).

Not at all willing      Somewhat willing      Very willing

0   10   20   30   40   50   60   70   80   90   100

How willing do you think Sam would be to suggest using the data analytics tool to test inventory in the current year to his direct supervisor, Chris?	
---	--

**Scenario 3**

Sam is waiting on the client for some additional requested documents and does not have any other work in the inventory area that he can complete today. He has accomplished a lot of work and is tired. Some of his team members are still working, and some are not. In the morning meeting, staff were asked to provide a status update to their supervisors to ensure they stay on schedule, and so work can be reallocated based on each team member's workload. It is getting close to the end of the work day, but Sam can see that his direct supervisor, Chris, is still online and working. Sam wonders whether he should send a status update now to his direct supervisor, Chris, to indicate he can be allocated additional work, but also considers logging off and sending a status update in the morning.



Please slide the bar to rate on a scale from 0 (Not at all willing) to 100 (Very willing).

Not very willing      Somewhat willing      Very willing  
 0 10 20 30 40 50 60 70 80 90 100

How likely do you think Sam would be to provide his direct supervisor, Chris, a status update this evening?	
---	--

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**Post-Experimental Questionnaire**

Please respond to the following questions.

To what extent do you agree with the statement below. Use the sliding scale to respond.

Strongly Disagree    Somewhat    Neither    Somewhat    Agree    Strongly  
 disagree            disagree    agree or    agree            agree  
    disagree    disagree

1      2      3      4      5      6      7

The inventory area of the audit was <u>Sam's</u> direct responsibility.	
---	--

Use the sliding scale to respond to the question below.

Highly Negative    Somewhat Neutral    Somewhat Positive    Highly Positive  
 negative            negative            positive            positive



-5   -4   -3   -2   -1   0   1   2   3   4   5

What degree of emotion did you feel from the email message Sam received from his supervisor?	
--	--

To what extent do you agree with the statements below. Use the sliding scale to respond.

Strongly Disagree    Somewhat    Neither    Somewhat    Agree    Strongly  
 disagree            disagree    agree or    agree            agree  
    disagree    disagree


1      2      3      4      5      6      7

I feel Sam had a high degree of ownership for the inventory area of the audit.	
I feel Sam had a high degree of accountability to his team for the inventory area of the audit.	


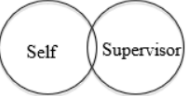
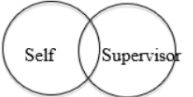
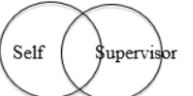
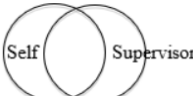


Use the sliding scale to respond to the question below.

Highly uncomfortable      Uncomfortable      Somewhat uncomfortable      Neutral      Somewhat comfortable      Comfortable      Highly comfortable

-3      -2      -1      0      1      2      3

How comfortable do you think the email from Sam's supervisor made him feel about speaking with him or asking him questions?	
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Select the picture below that best describes Sam's professional closeness with his direct supervisor, *Chris*.

- 
- 
- 
- 
- 
- 
- 

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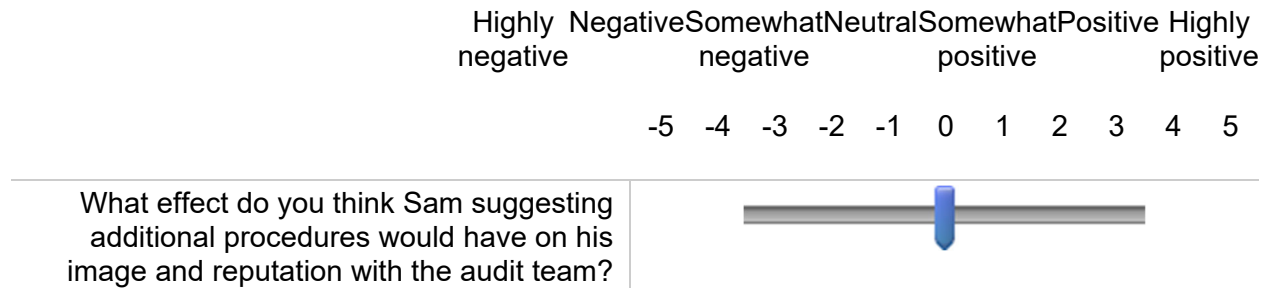
**Instructions:** Reflecting back on your responses about Sam's willingness to perform the behaviors in each scenario (as described below), please respond to the following questions.

**Scenario 1**

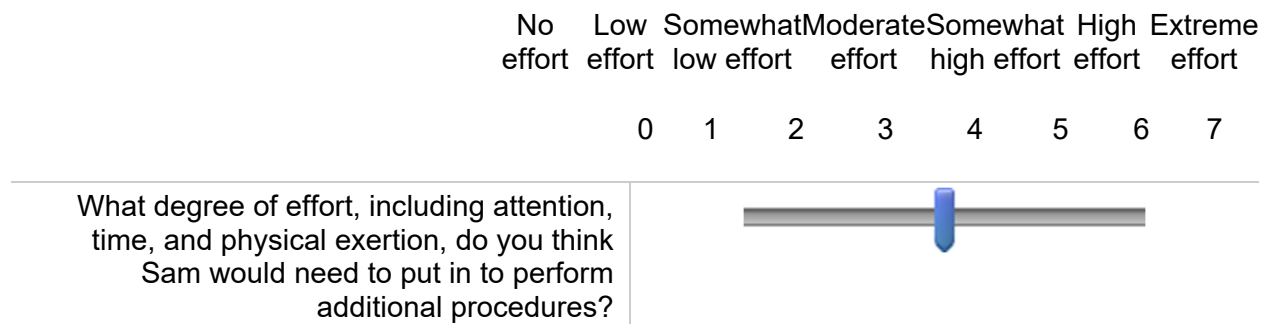
During Sam's initial review of the inventory workpapers, he comes across some potentially important information that did not seem to be considered in the initial risk assessment. If this is the case, the audit team may need to change its approach to inventory testing. This could increase audit cost by increasing planned audit hours, but also could potentially increase audit quality. Sam remembers during the morning meeting the engagement partner's emphasis on

the audit client being low-risk and his concern about audit costs, but without any prior experience Sam worries the information may not be relevant.

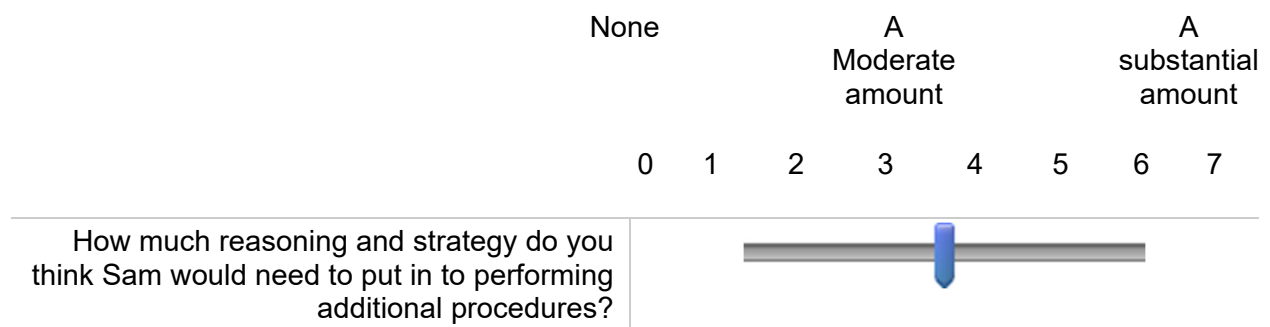
**Please slide the bar to rate on a scale from -5 (Highly negative) to 5 (Highly positive).**



**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**



**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**



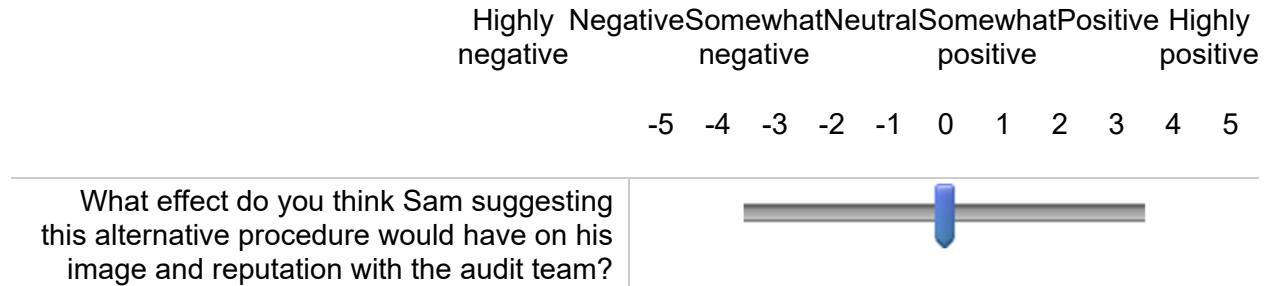
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**Scenario 2**

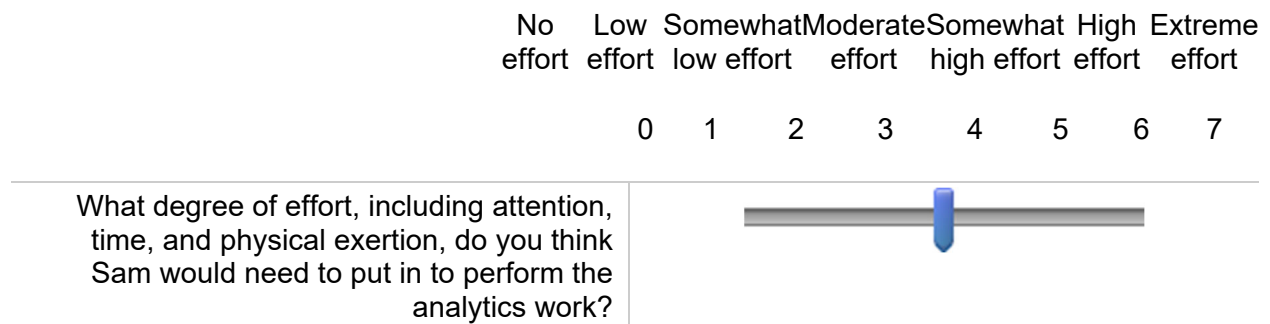
Part of Sam's tasks for the day include designing the substantive procedures to test inventory. No other detailed instructions were provided. The workpaper is prepopulated with the procedures that were performed last year. Sam recently learned about a new data analytics tool that can expedite testing while maintaining audit effectiveness. Implementing the data analytics tool would likely benefit the team in future years, but it would take time to figure out how to use the tool right now. Sam also worries about doing the work incorrectly and causing further

inefficiencies. Sam knows the audit partner is worried about costs, and considers following last year's procedures.

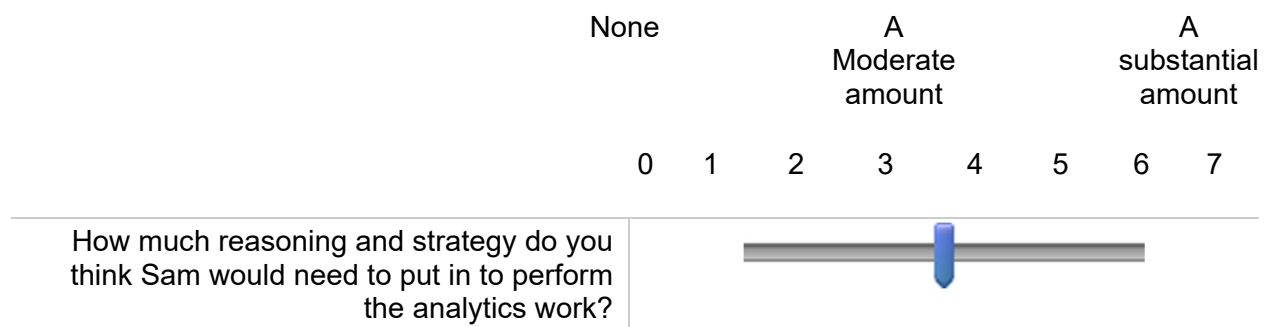
**Please slide the bar to rate on a scale from -5 (Highly negative) to 5 (Highly positive).**



**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**



**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**



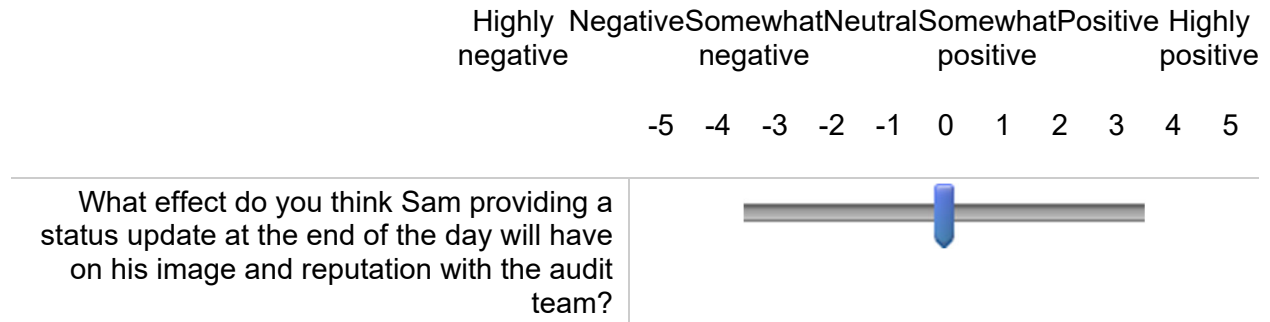
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**Scenario 3**

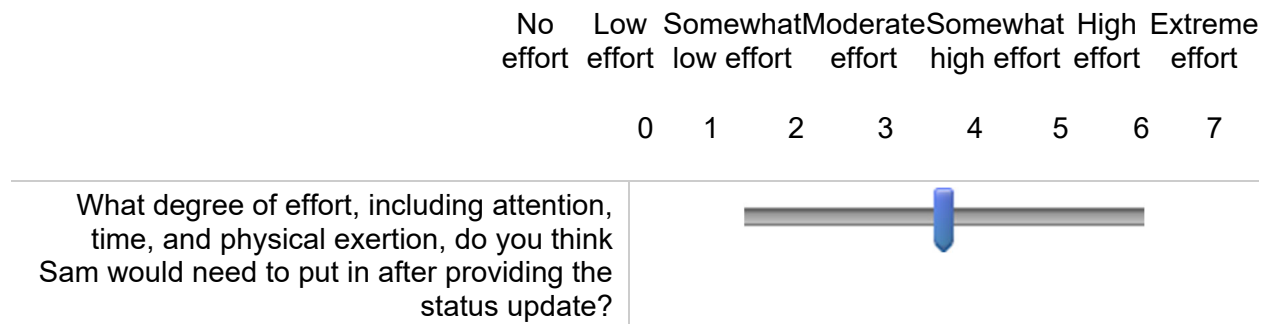
Sam is waiting on the client for some additional requested documents and does not have any other work in the inventory area that he can complete today. He has accomplished a lot of work and is tired. Some of his team members are still working, and some are not. In the morning meeting, staff were asked to provide a status update to their supervisors to ensure they stay on schedule, and so work can be reallocated based on each team member's workload. It is getting close to the end of the work day, but Sam can see that his direct supervisor, Chris, is still online

and working. Sam wonders whether he should send a status update now to his direct supervisor, Chris, to indicate he can be allocated additional work, but also considers logging off and sending a status update in the morning.

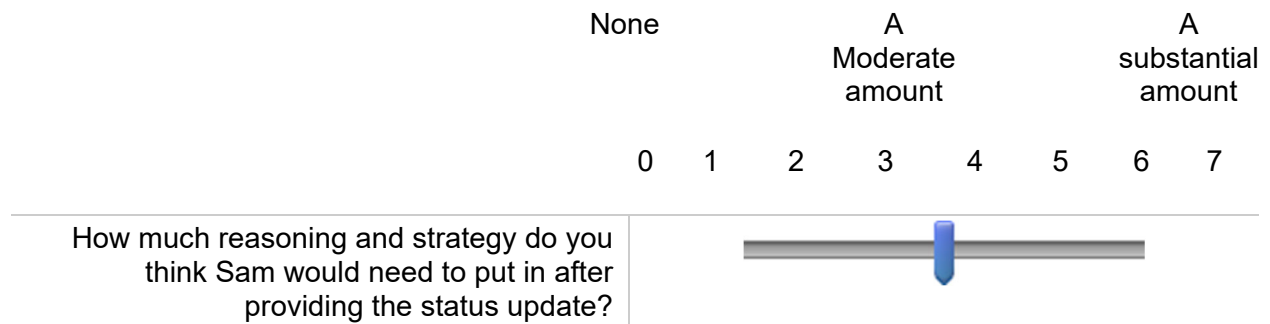
**Please slide the bar to rate on a scale from -5 (Highly negative) to 5 (Highly positive).**



**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**



**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**



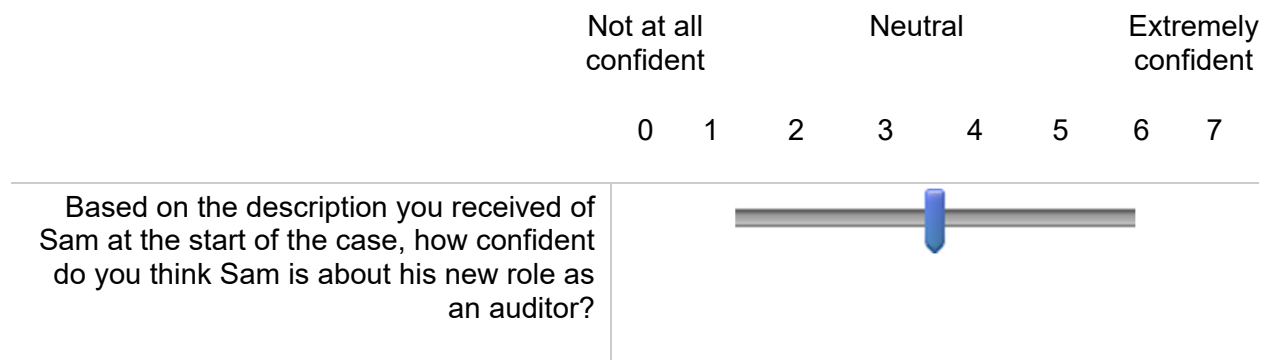
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During this case, was Sam working in the same location as his supervisor, or was he working remotely (not in the same physical location as his supervisor)?

- They were working in the same location.
- Sam was working remotely, in a different physical location.

---

**Please slide the bar to rate on a scale from 0 (Not at all confident) to 7 (Extremely confident).**



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To what extent do you agree with the following statements about yourself:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I will be able to achieve most of the goals that I have set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When facing difficult tasks, I am certain that I will accomplish them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I think that I can obtain outcomes that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe I can succeed at most any endeavor to which I set my mind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will be able to successfully overcome many challenges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can perform effectively on many different tasks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to other people, I can do most tasks very well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when things are tough, I can perform quite well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



**Demographics and Background Questions:**

What type of firm are you currently employed at?

- Big-4 CPA Firm
  - National non-Big 4 CPA Firm (Grant Thornton, RSM McGladrey, BDO Seidman, etc.)
  - Regional CPA Firm
  - Local CPA Firm
- 

What is your current job position at your firm?

- Associate
  - Senior associate
  - Manager or above
- 

How much work experience do you have in months? \_\_\_\_\_

---

Please indicate your gender:

- Woman
  - Non-binary
  - Man
  - Prefer not to say
- 

**--Experiment Complete--**

## APPENDIX D

### Experimental Instrument for Supplemental Analysis

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#### Start of Block: Information Sheet - Consent

#### Information about Being in a Research Study

#### Virginia Commonwealth University

#### KEY INFORMATION ABOUT THE RESEARCH STUDY

**Voluntary Consent:** Dr. Lindsay Andiola is inviting you to volunteer for a research study. Dr. Andiola is an Accounting Professor at Virginia Commonwealth University (VCU) conducting the study with Devon Jefferson, a doctoral candidate at Virginia Commonwealth University.

**Alternative to Participation:** Participation in this study is entirely voluntary. You can decide to not participate. Those students who wish not to participate will have the opportunity to complete an equivalent task for the same amount of credit if offered by your instructor. The equivalent task will involve students analyzing a similar case on their own.

**Study Purpose:** The purpose of this research is to investigate how staff auditors perform their work when working remotely.

**Activities and Procedures:** Your part in the study will be to read background information and a company overview, for a staff auditor, Sam. You will then review Sam's task, and a set of brief scenarios about Sam's workday and respond to questions about how you think Sam will respond to each scenario. There are also some questions about how you think Sam will evaluate each scenario, your work experience, and demographics.

**Participation Time:** It will take less than 15 minutes to complete the study.

**Risks and Discomforts:** We do not believe there are any risks or discomforts associated with your participation in this research study.

**Possible Benefits:** We anticipate that the results of this study will increase our understanding of how staff auditors behave when working remotely and develop best practices for audit firms to implement in the future.

#### PROTECTION OF PRIVACY AND CONFIDENTIALITY

The results of this study may be published in scientific journals, professional publications, or educational presentations. The information collected during the study will not be used or distributed for future research studies. Please do not include any information within the survey that might identify you, your firm, your client, or others.

#### CONTACT INFORMATION

If you have any questions or concerns about your rights in this research study, please contact the VCU Office of Research at (804)-827-2157. If you have any questions or concerns about this study specifically, if any problems arise, or you would like to receive information on the results of the study, please contact Dr. Lindsay Andiola ([Imandiola@vcu.edu](mailto:Imandiola@vcu.edu)).

## CONSENT

I have read the preceding information describing this study, and am voluntarily choosing to take part in this research. You do not give up any legal rights by taking part in this research study.

- I consent to allowing my responses to be used for this research study. (3)
- I do not consent to allowing my responses to be used for this research study. I will complete the alternative assignment. (4)

End of Block: Information Sheet - Consent

---

Start of Block: Participation Credit

Thank you for agreeing to participate in this research study. To ensure your professor is notified of your participation, please enter your first and last name in the box below. Please be assured that your responses will remain anonymous; only your name will be provided to your professor. Your professor will NOT be provided any of your responses to the actual task.

First and Last Name:

---

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Please also enter the last name of your audit professor in the box below.

Audit Professor Last Name:

---

End of Block: Participation Credit

---

Start of Block: Background Information

### Background Information

**Instructions:** Today, you will be making decisions on behalf of Sam. Sam is a new audit associate eager to begin a career in public accounting. Please read the background information about the client and the engagement Sam is assigned to.

#### Background

Sam officially began working at FgH CPA, LLP a few weeks ago, and briefly met his new engagement team last week, including his direct supervisor, *Chris*.

Although Sam is excited to begin his career in audit, he feels a bit uncertain given his lack of

experience and unfamiliarity with his team. In addition, the firm Sam works for has recently changed its policy to support more flexible work arrangements. This allows Sam to work from home a few days a week. As a result, Sam only works in the same location as his team a couple of times each week. When he is not working in the same location as his team, they primarily use email or instant messaging to communicate. Sam is happy to work for a firm that offers such flexibility; however, this work structure increases Sam's feelings of uncertainty as he must complete most of his assignments in isolation. This makes it more difficult to coordinate meetings and challenging to develop relationships with his team. Nonetheless, Sam is eager to get started and make a good impression.

Sam is assigned to the audit of Advize Office Supply (Advize), a long-standing client of his firm. It is busy season, and the audit partner emphasized during this morning's virtual team meeting that the audit work needs to be completed quickly as the client's filing deadline is rapidly approaching. As a result, everyone is very busy, and **it can be challenging to connect with team members right now, especially on days when Sam works remotely.**

### **Company Overview**

Advize is a medium-sized publicly-traded retailer of office supplies and office furniture with a December 31st year-end. For over 34 years, Advize has served a variety of customers, including local businesses and schools. Over the past three years, the company's net income grew at a 3 percent annual rate. Advize is well-established and hires competent and experienced people of high integrity. Based on the team's prior experience with the client, Sam learns that the client also has strong internal controls and management has generally been cooperative in the past.

**Please click the arrow to proceed.**

End of Block: Background Information

---

Start of Block: Task Instructions

### **Sam's Assignment**

During the team meeting, the audit partner indicated that Sam's work area is inventory. This means that Sam's primary tasks involve completing internal control and substantive testing in this area. This also means that Sam has to make decisions throughout the workday to meet his work requirements.

### **Your Task**

On the coming screens, you will view three scenarios that describe decisions Sam faces at work. You should read each scenario carefully. Then, respond to the questions that follow about how you think Sam will respond to each scenario. **There are no right or wrong answers.**

**Please click the arrow to proceed.**

End of Block: Task Instructions

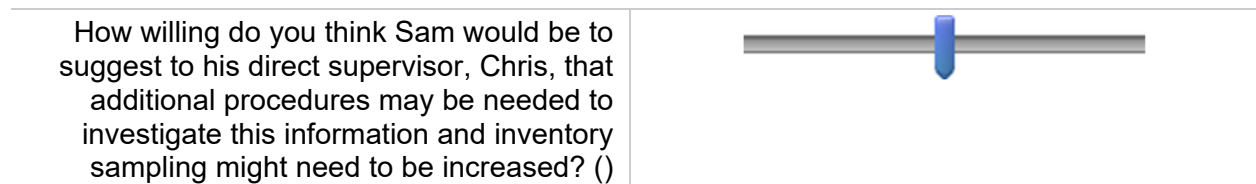
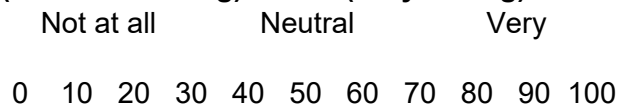
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Start of Block: Dependent Variable

Case Scenario:

During Sam's initial review of the inventory workpapers, he comes across some potentially important information that did not seem to be considered in the initial risk assessment. If this is the case, the audit team may need to change its approach to inventory testing. This could increase audit cost by increasing planned audit hours, but also could potentially increase audit quality. Sam remembers during the morning meeting the engagement partner's emphasis on the audit client being low-risk and his concern about audit costs, but without any prior experience Sam worries the information may not be relevant.

Please slide the bar to rate on a scale from 0 (Not at all willing) to 100 (Very willing).

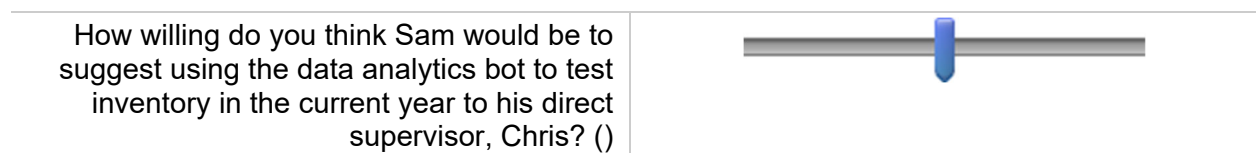
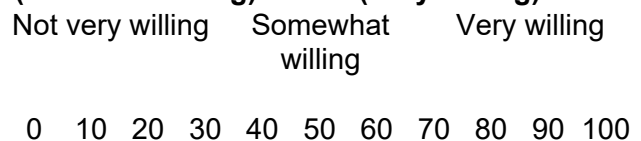


---

Case Scenario:

Part of Sam's tasks for the day include designing the substantive procedures to test inventory. No other detailed instructions were provided. The workpaper is prepopulated with the procedures that were performed last year. Sam recently learned about a new data analytics bot that can expedite testing while maintaining audit effectiveness. Implementing the bot would likely benefit the team in future years, but it would take time to figure out how to use the bot right now. Sam also worries about doing the work incorrectly and causing further inefficiencies. Sam knows the audit partner is worried about costs, and considers following last year's procedures.

Please slide the bar to rate on a scale from 0 (Not at all willing) to 100 (Very willing).



---


Case Scenario:

Sam is waiting on the client for some additional requested documents and does not have any other work in the inventory area that he can complete today. He has accomplished a lot of work and is tired. Some of his team members are still working, and some are not. In the morning meeting, staff were asked to provide a status update to their supervisors to ensure they stay on schedule, and so work can be reallocated based on each team member's workload. It is getting close to the end of the work day, but Sam can see that his direct supervisor, Chris, is still online and working. Sam wonders whether he should send a status update now to his direct supervisor, Chris, to indicate he can be allocated additional work, but also considers logging off and sending a status update in the morning.

**Please slide the bar to rate on a scale from 0 (Not at all willing) to 100 (Very willing).**

Not very willing      Somewhat willing      Very willing

0   10   20   30   40   50   60   70   80   90   100

How likely do you think Sam would be to provide his direct supervisor, Chris, a status update this evening? ()	
--	--

---

End of Block: Dependent Variable

---

Start of Block: Cost Eval Instructions

Now that you have reviewed each scenario and indicated how you think Sam would respond, please evaluate each scenario for *why* you think Sam made these decisions. On the coming screens, you will view each of the scenarios that describe decisions Sam faces at work again. Then, for each scenario please respond to questions about (i) how each scenario might affect Sam's reputation with his team, (ii) the amount of effort involved with performing each scenario, and (iii) the amount of strategy and reasoning needed to perform each scenario. There are no right or wrong answers.

**Please click the arrow to proceed.**

---

End of Block: Cost Eval Instructions

---

Start of Block: Cost Evaluation - Scenario 1

Case Scenario:

During Sam's initial review of the inventory workpapers, he comes across some potentially important information that did not seem to be considered in the initial risk assessment. If this is the case, the audit team may need to change its approach to inventory testing. This could increase audit cost by increasing planned audit hours, but also could potentially increase audit quality. Sam remembers during the morning meeting the engagement partner's emphasis on the audit client being low-risk and his concern about audit costs, but without any prior experience Sam worries the information may not be relevant.

**Please slide the bar to rate on a scale from -5 (Highly negative) to 5 (Highly positive).**

Highly Negative Somewhat Neutral Somewhat Positive Highly  
 negative negative positive positive  
 -5 -4 -3 -2 -1 0 1 2 3 4 5

What effect do you think Sam suggesting additional procedures would have on his image and reputation with the audit team? ()	
--	--

**Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).**

No Low Somewhat Moderate Somewhat High Extreme  
 effort effort low effort effort high effort effort  
 0 1 2 3 4 5 6 7

What degree of effort, including attention, time, and physical exertion, do you think Sam would need to put in to perform additional procedures? ()	
---	--

**Please slide the bar to rate on a scale from 0 (None) to 7 (A substantial amount).**

None A moderate A substantial  
 amount amount  
 0 1 2 3 4 5 6 7

How much reasoning and strategy do you think Sam would need to put in to performing additional procedures? ()	
---	--

End of Block: Cost Evaluation - Scenario 1

Start of Block: Cost Evaluation - Scenario 2

Case Scenario:

Part of Sam's tasks for the day include designing the substantive procedures to test inventory. No other detailed instructions were provided. The workpaper is prepopulated with the procedures that were performed last year. Sam recently learned about a new data analytics bot that can expedite testing while maintaining audit effectiveness. Implementing the data analytics bot would likely benefit the team in future years, but it would take time to figure out how to use the tool right now. Sam also worries about doing the work incorrectly and causing further inefficiencies. Sam knows the audit partner is worried about costs, and considers following last year's procedures.

Please slide the bar to rate on a scale from -5 (Highly negative) to 5 (Highly positive).

Highly Negative Somewhat Neutral Somewhat Positive High positive  
negative negative positive positive  
-5 -4 -3 -2 -1 0 1 2 3 4 5

What effect do you think Sam suggesting this alternative procedure would have on his image and reputation with the audit team? ()



Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).

No Low Somewhat Moderate Somewhat High Extreme  
effort effort low effort effort high effort effort effort  
0 1 2 3 4 5 6 7

What degree of effort, including, attention, time, and physical exertion, do you think Sam would need to put in to perform the analytics work? ()



Please slide the bar to rate on a scale from 0 (None) to 7 (A substantial amount).

None A moderate A substantial  
amount amount  
0 1 2 3 4 5 6 7

How much reasoning and strategy do you think Sam would need to put in to perform the analytics work? ()



End of Block: Cost Evaluation - Scenario 2



Start of Block: Cost Evaluation - Scenario 3

Case Scenario:

Sam is waiting on the client for some additional requested documents and does not have any other work in the inventory area that he can complete today. He has accomplished a lot of work and is tired. Some of his team members are still working, and some are not. In the morning meeting, staff were asked to provide a status update to their supervisors to ensure they stay on schedule, and so work can be reallocated based on each team member's workload. It is getting close to the end of the work day, but Sam can see that his direct supervisor, Chris, is still online and working. Sam wonders whether he should send a status update now to his direct supervisor, Chris, to indicate he can be allocated additional work, but also considers logging off and sending a status update in the morning.

Please slide the bar to rate on a scale from -5 (Highly negative) to 5 (Highly positive).

Highly Negative Somewhat Negative Neutral Somewhat Positive Highly Positive  
 negative negative positive positive  
 -5 -4 -3 -2 -1 0 1 2 3 4 5

What effect do you think Sam providing a status update at the end of the day will have on his image and reputation with the audit team? ( )	
---	--


Please slide the bar to rate on a scale from 0 (No effort) to 7 (Extreme effort).

No effort Low effort Somewhat low effort Moderate effort Somewhat high effort High effort Extreme effort  
 0 1 2 3 4 5 6 7

What degree of effort, including attention, time, and physical exertion, do you think Sam would need to put in after providing the status update? ( )	
---	--

Please slide the bar to rate on a scale from 0 (None) to 7 (A substantial amount).

None A moderate amount A substantial amount  
 0 1 1 2 3 4 4 5 6 6 7

How much reasoning and strategy do you think Sam would need to put in after providing the status update? ()	
---	--

End of Block: Cost Evaluation - Scenario 3

Start of Block: Demographics/Background

**Follow-up Questions**


Please respond to the following questions.

During this case, was Sam working in the same location as his supervisor, or was he working remotely (not in the same physical location as his supervisor)?

- They were working in the same location. (1)
- Sam was working remotely, in a different physical location. (2)

Please slide the bar to rate on a scale from 0 (Not at all confident) to 7 (Extremely confident).

	Not at all	Somewhat	Neutral	Somewhat	Extremely			
	confident	not		confident	confident			
		confident						
	0	1	2	3	4	5	6	7

Based on the description you received of Sam at the start of the case, how confident do you think Sam is about his new role as an auditor? ()	
---	--

Page Break

To what extent do you agree with the following statements about yourself:

	Strongly disagree 1 (1)	Disagree 2 (2)	Neutral 3 (3)	Agree 4 (4)	Strongly agree 5 (5)
I will be able to achieve most of the goals that I have set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When facing difficult tasks, I am certain that I will accomplish them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I think that I can obtain outcomes that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe I can succeed at most any endeavor to which I set my mind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will be able to successfully overcome many challenges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can perform effectively on many different tasks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to other people, I can do most tasks very well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when things are tough, I can perform quite well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Demographics and Background Questions:

Are you currently taking or have you taken a Financial Statement Auditing course?

Yes (6)

No (7)

---

Please indicate your Undergraduate GPA:

Less than 2.1 (1)

2.1 - 2.5 (2)

2.6 - 3.0 (3)

3.1 - 3.5 (6)

3.6 - 4.0 (7)

---

When are you completing this study?

During my regularly scheduled class time. (3)

Outside of scheduled class time. (4)

---

Have you completed an internship with a public accounting firm?

Yes (1)

No (2)

---

If so, which areas have you completed internships? Select all that apply.

Audit (1)

Tax (2)

Other (3) \_\_\_\_\_

Not applicable (4)

---

How would you characterize the firm you interned at?

Big 4 (EY, PWC, KPMG, Deloitte) (1)

Other large firm (e.g., Grant Thornton, BDO) (2)

National (e.g., DHG) (3)

Regional (e.g., Keiter) (4)

Local (e.g., Well Coleman) (5)

Not applicable (6)

---

Are you over the age of 18?

Yes (1)

No (2)

---



Please indicate your gender:

- Woman (1)
  - Non-binary (2)
  - Man (3)
  - Prefer not to say (4)
- 

Is English your first language?

- Yes (1)
- No (2)

**End of Block: Demographics/Background**

---

**Start of Block: Alternative Assignment**

Please download the attached file to complete an alternative assignment. Your work should be submitted to your audit professor.

[Alternative assignment](#)

**End of Block: Alternative Assignment**

---

## **APPENDIX E**

### **Professional Identity Pilot Testing**

I conducted two pilot studies where I manipulated professional identity (PI) rather than psychological ownership. In Pilot 1, I manipulated PI consistent with experiment 1 in Bauer (2015)'s first experiment where participants in the heightened condition created a mind map for the central topic "values, attributes, and qualities of the accounting profession", and those in the not heightened condition created a mind map for the central topic "importance of leisure time". This design choice was to prime an identity of professionalism for those in the PI heightened condition, and an identity in a completely unrelated topic (i.e., leisure time) for those in the not heightened condition. Thirty-four graduate audit students from one U.S.-based university completed the experiment. The manipulation check measured how closely participants felt they identified with the accounting profession. Specifically, participants were asked to select one of seven images of Venn diagrams with two circles (one representing the participant and one representing the profession) of varying degrees of closeness (Aron, Aron and Smollan 1992; Tropp and Wright 2001; Bauer 2015). The difference between the means for the two groups was not significant (heightened = 4.25 and not heightened = 4.44,  $t_{32} = 0.45$ , one-tailed equivalent  $p = 0.329$ ). Given that the sample size was relatively small from a power perspective, I also examined the means to determine whether they trended in a direction consistent with the prediction that participants in the PI heightened condition would feel more closely aligned with the profession. Unfortunately, the means trended in the direction opposing the prediction, indicating an unsuccessful manipulation.

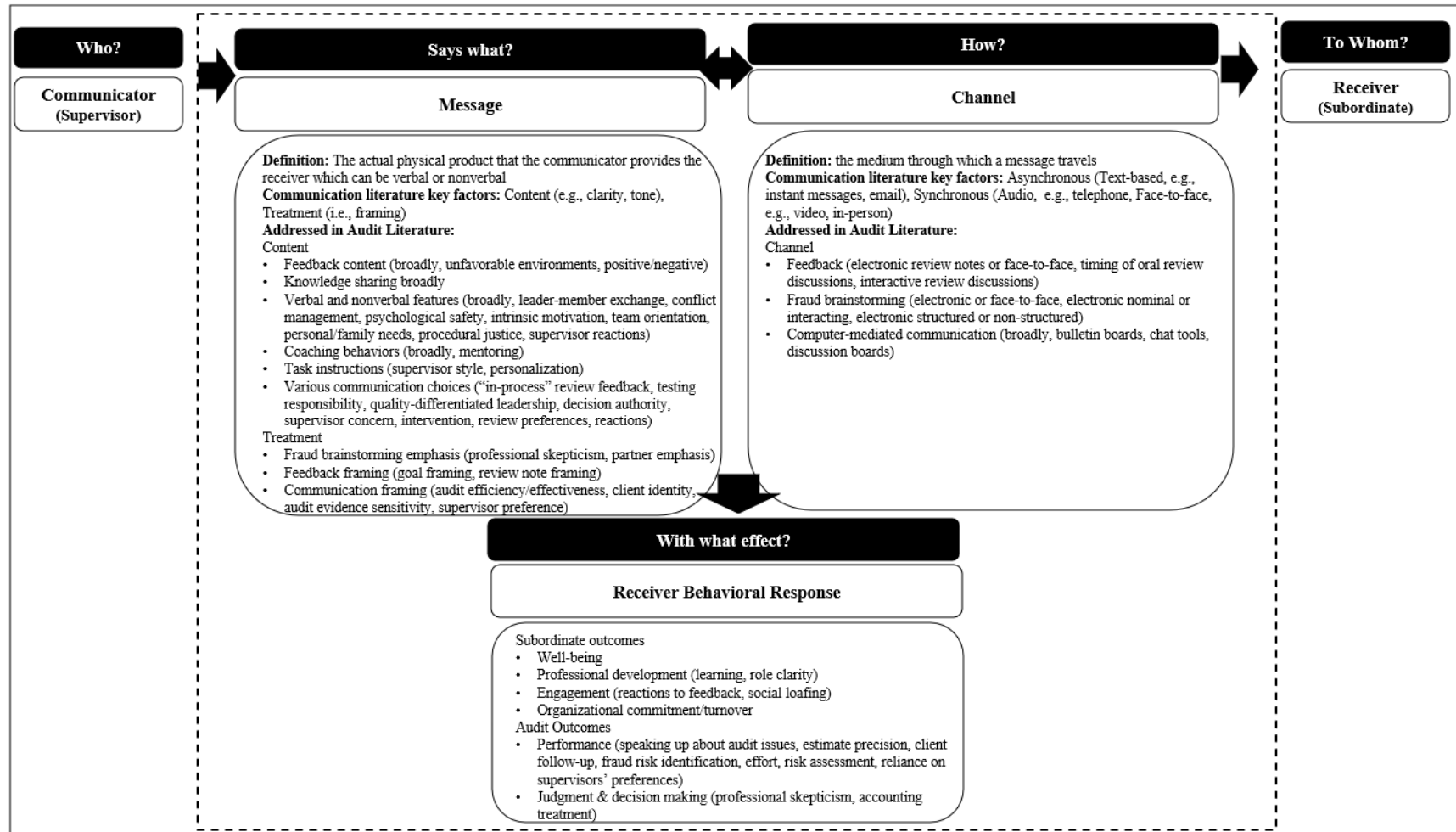
In Pilot 2, I manipulated PI consistent with the second experiment in Bauer (2015) where participants in the heightened condition read a fictitious magazine article excerpt about the "values, attributes, and qualities important to the accounting profession". Those in the not heightened

condition read a fictitious magazine excerpt about “air and space tourism”. This design choice was to prime an identity of professionalism for those in the PI heightened condition, and an identity in a completely unrelated topic (i.e., air and space) for those in the not heightened condition. Sixty-three undergraduate audit students from one U.S.-based university completed the experiment. The manipulation check measured how closely participants felt they identified with the accounting profession. Specifically, participants were asked to select one of seven images of Venn diagrams with two circles (one representing the participant and one representing the profession) of varying degrees of closeness (Aron, Aron and Smollan 1992; Tropp and Wright 2001; Bauer 2015). The difference between the means for the two groups was not significant (heightened = 4.34 and not heightened = 4.77,  $t_{61} = 0.33$ , one-tailed equivalent  $p = 0.370$ ). Though the manipulation check in both pilots were unsuccessful, I examined the effect of PI on speaking up about audit issues. Untabled results indicate that PI did not motivate novice auditors’ willingness to speak up about audit issues in either study.

Collectively, these results are consistent with survey results in Bailey et al. (2022) that suggest novice auditors experience difficulty socializing to professional norms due to increases in remote work. My results suggest that PI may be difficult to induce in populations that have not yet been socialized into the accounting profession which is a critical area that could impair audit quality. Future research should investigate ways to strengthen novice auditors’ professional identity to improve audit quality.

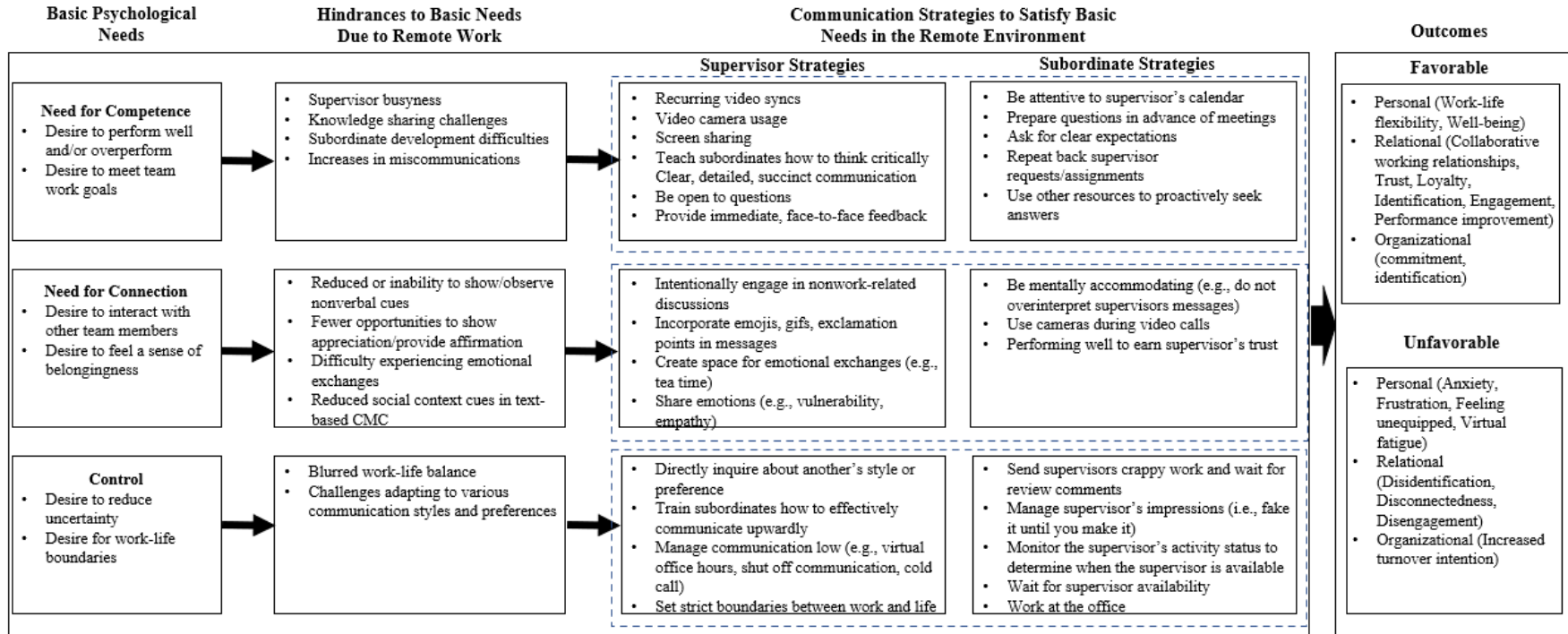


**FIGURE 1.1**  
**Supervisor-Subordinate Communication in the Audit Environment**



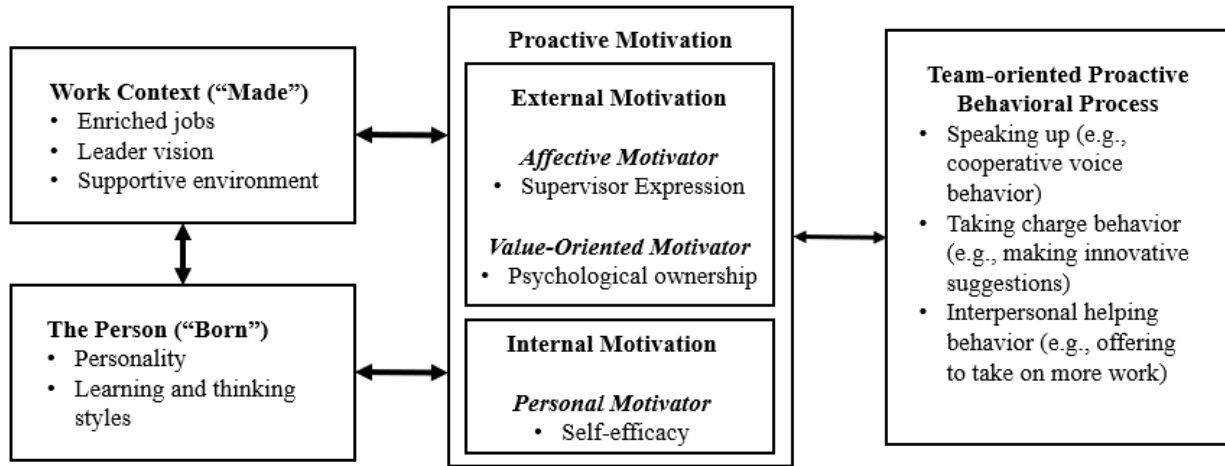
**Note:** Leveraging early communication literature, this figure depicts a framework to examine supervisor-subordinate communication in the audit environment and emphasizes the audit outcomes of these communication factors on subordinates (Mcquail and Windah 2013).

**FIGURE 3.1**  
**Summary of Analysis and Outcomes**



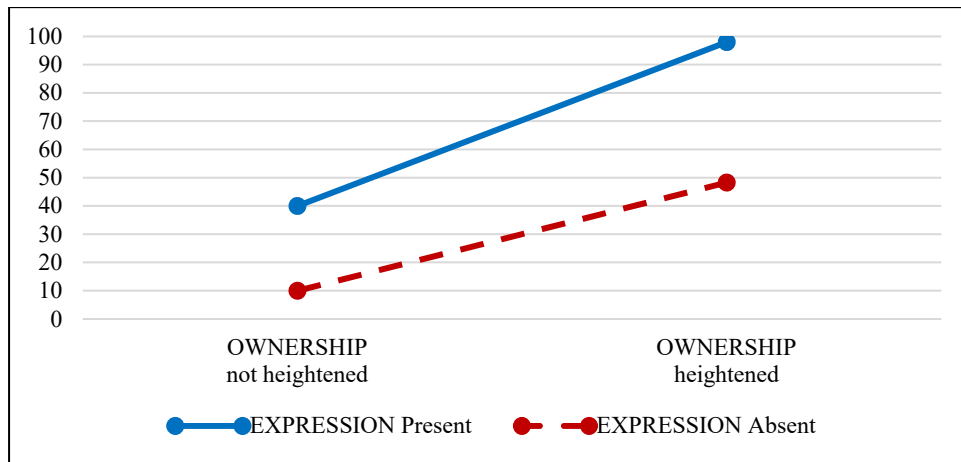
**Note:** This figure illustrates key findings of my analysis including hindrances to basic needs, communications strategies, and outcomes.

**FIGURE 4.1**  
**Model of Team-Oriented Proactive Motivational Process and Antecedents**



**Note:** This figure, adapted from Parker and Wang (2015), depicts the motivational process, including the contextual antecedents, for individuals to pursue team-oriented proactive behaviors.

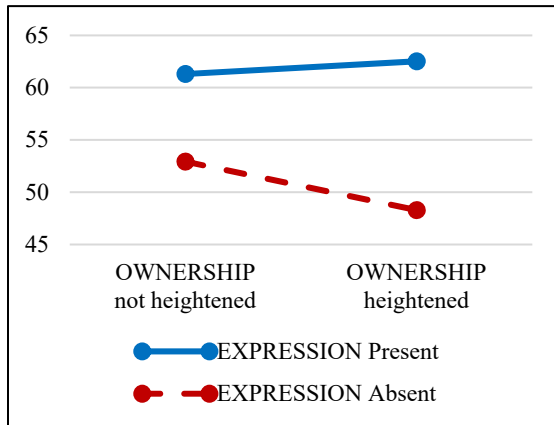
**FIGURE 4.2**  
**Graphical Prediction of Novice Auditors' Team-oriented Proactivity**



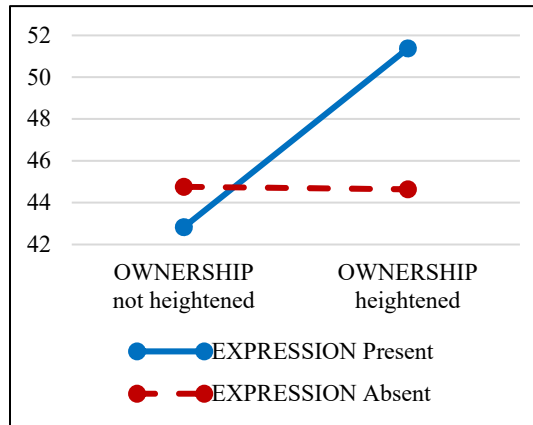
**Note:** The figure above illustrates the predicted effects in H3 of supervisor expression and psychological ownership on novice auditors' team-oriented proactivity. Specifically, I predict that when working remotely, the presence of supervisor expression and heightened psychological ownership will interact to yield a greater likelihood of team-oriented proactivity than when either is present alone or neither is present.

**FIGURE 4.3**  
**Graphical Representations of Novice Auditors' Proactive Behaviors**

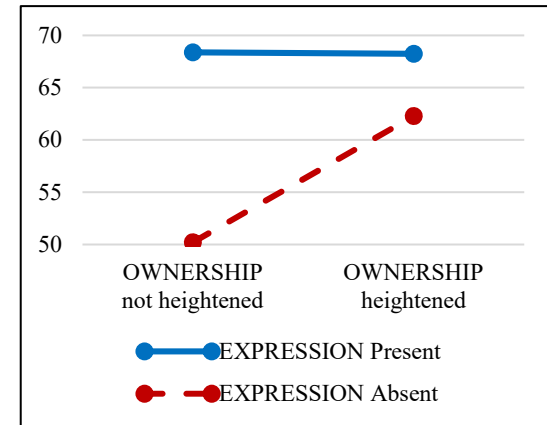
**Panel A: VOICE**



**Panel B: TAKINGCHARGE**

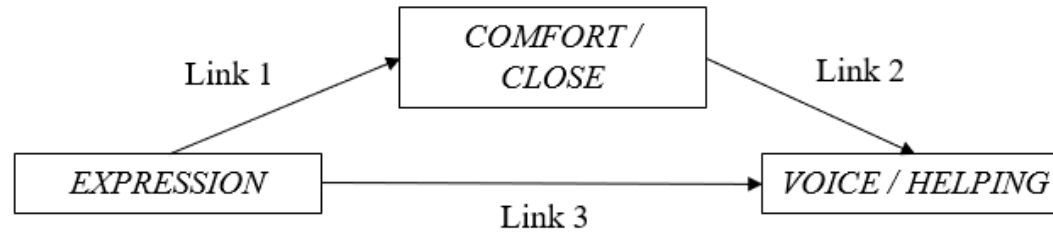


**Panel C: HELPING**



**Note:** The figures above illustrate the effects of supervisor expression (*EXPRESSION*) and psychological ownership (*OWNERSHIP*) on various novice auditors' proactivity behaviors, including speaking up (*VOICE*), taking charge (*TAKINGCHARGE*), and interpersonal helping (*HELPING*). In the *EXPRESSION* present condition, participants view an email from Sam's supervisor that contains emojis, capitalization, and exclamation points. In the *EXPRESSION* absent condition, these expressive features are not included in the email. In the *OWNERSHIP* heightened condition, the participant is told that Sam is responsible for the inventory process area. In the *OWNERSHIP* not heightened condition, the participant is told that Sam's supervisor is responsible for the inventory process area. Panel A illustrates the effect of each independent variable on *VOICE* which is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would be willing to speak up about a potential audit issue. Panel B illustrates the effect of each independent variable on proactive *TAKINGCHARGE* which is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would suggest a data analytics bot as an alternative approach to testing. Panel C illustrates the effect of each independent variable on proactive *HELPING* which is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would provide a status update at the end of the day.

**FIGURE 4.4**  
**Expression and Team-Oriented Proactivity Mediation Model**



	<i>COMFORT</i>		<i>CLOSE</i>	
	<i>VOICE</i>	<i>HELPING</i>	<i>VOICE</i>	<i>HELPING</i>
<b>Link 1</b>	$\beta = 1.015, t = 3.91, p < 0.001$	$\beta = 1.015, t = 3.91, p < 0.001$	$\beta = 0.584, t = 3.23, p < 0.001$	$\beta = 0.584, t = 3.23, p < 0.001$
<b>Link 2</b>	$\beta = 4.776, t = 3.74, p < 0.001$	$\beta = 4.666, t = 3.34, p < 0.001$	$\beta = 2.906, t = 1.51, p = 0.067$	$\beta = 4.470, t = 2.17, p = 0.016$
<b>Link 3</b>	$\beta = 6.416, t = 1.71, p = 0.045$	$\beta = 7.436, t = 1.81, p = 0.036$	$\beta = 9.568, t = 2.48, p = 0.007$	$\beta = 9.561, t = 2.31, p = 0.023$
<b>Indirect effect</b>	$\beta = 4.85, 90\% \text{ CI } (2.235, 7.738)$	$\beta = 4.73, 90\% \text{ CI } (1.881, 8.049)$	$\beta = 1.70, 90\% \text{ CI } (-0.410, 3.989)$	$\beta = 2.61, 90\% \text{ CI } (0.636, 5.052)$

**Note:** The above diagram presents my results for examining how supervisor expression relates to subordinates' proactive voice and helping behaviors, and how comfortability or professional closeness with one's supervisor mediates this relationship. I conduct mediation analyses that models a direct relationship between *EXPRESSION* and *VOICE* and *HELPING*, with *COMFORT* mediating this relationship. I also find *CLOSE* mediates the relationship between *EXPRESSION* and *HELPING* but not *VOICE*. I conduct this analysis using SPSS Hayes PROCESS v4.2 Model 4, and employ the bias-corrected bootstrapping procedures with 10,000 iterations (Preacher and Hayes 2008). All *p*-values reported on a one-tailed basis.

**TABLE 1.1**  
**Research Agenda Summary**

<b>Panel A: The message</b>
<b>RQ1.</b> What strategies can supervisors implement to improve subordinates' professional development, knowledge sharing, and relationship development? What are specific downstream consequences to audit quality of poor communication relationships between audit supervisors and subordinates?
<b>RQ2.</b> How does supervisors' treatment of words affect subordinate behaviors? What additional framing mechanisms are effective in the audit context? How does framing impact subordinate auditors' judgment and decision-making and ability to create a social bond?
<b>RQ3.</b> What alternate or additional communication strategies can supervisors implement to improve subordinates' professional development, knowledge sharing, and relationship building when working apart? How have supervisors' communication practices evolved to accommodate flexible work arrangements? How do supervisors communicate emotions to facilitate relationship building and create social bonds when working separately?
<b>RQ4.</b> Does the effectiveness of message framing vary by work structure (i.e., fully remote, hybrid)? In what ways can framing be used to improve audit quality? Do subordinates' comprehension, interpretation, and internalization of word choice vary by work structure (i.e., fully remote, hybrid), does this have downstream effects on behaviors?
<b>Panel B: The channel</b>
<b>RQ1.</b> How do supervisors' CMC choices vary with audit context (e.g., task instructions, performance feedback, project management)? What CMC choices do supervisors and subordinates prefer and/or perceive are most appropriate/effective in various contexts?
<b>RQ2.</b> How effective are supervisors at recognizing their own communication abilities? How often do subordinates misunderstand their supervisors' messages and/or misinterpret their feelings about a message? To what extent can miscommunications be attributed to using CMC when working apart? What effect do miscommunications/misunderstandings have on audit quality? How do supervisors perceive miscommunications affect their relationship with their subordinates? Does the frequency of miscommunication vary by the type of CMC used?
<b>RQ3.</b> How can supervisors effectively supervise the audit when interacting using CMC? In what ways can supervisors hold their subordinates accountable when interacting using CMC? Which types of CMC (e.g., video-conferencing, email, instant messaging) are most appropriate in specific situations (e.g., distributing task instructions, providing feedback) to improve audit quality?
<b>RQ4.</b> How does a supervisor's CMC choice influence the subordinates' socialization process with the team and the firm? How do a supervisor's CMC-related choices (e.g., interacting on Zoom with their cameras on or off) affect their ability to build a relationship with a subordinate and in turn affect subordinate behaviors? To what extent does the effectiveness of these strategies vary across alternative modes of CMC? How do these strategies affect subordinate auditors' behaviors (e.g., proactivity, professional skepticism) in a remote work environment?
<b>RQ5.</b> How do supervisors' CMC choices influence subordinates' subsequent communication choices? How do workload, pressure, fatigue, and busyness influence a supervisor's CMC choice? How do these factors influence a supervisor's communication effectiveness?
<b>RQ6.</b> How do demographic characteristics, like age, job tenure, and culture, affect an audit supervisor's CMC choice? What demographic, environmental, organizational, and team-related factors might mitigate the adverse effects of the supervisor's CMC choices?
<b>RQ7.</b> How do personality characteristics, like self-confidence, self-efficacy, extraversion, and introversion impact supervisors' communication choices? What generational characteristics influence auditors' usage of alternative modes of CMC and perception of communication strategies (e.g., emojis)?

**Note:** The table above provides proposed research questions consistent with the research agenda discussion about the message and the channel.

**TABLE 2.1**  
**Participant Information**

<b>Participant ID</b>	<b>Matched Pair</b>	<b>Years of Experience</b>	<b>Firm Type</b>	<b>Gender</b>
<i><b>Subordinates</b></i>				
Sub-1		1	Big-4	F
Sub-2	Sup-1	1.5	National	F
Sub-3		2	Local	F
Sub-4		1	Local	F
Sub-5	Sup-8	1	Big-4	F
Sub-6	Sup-7	1	Big-4	M
Sub-7	Sup-5	2	Big-4	F
Sub-8	Sup-5	2.5	Big-4	M
Sub-9		1.5	Big-4	F
Sub-10		2.5	Local	M
Sub-11		2	National	M
Sub-12		2	National	F
Sub-13		1	Regional	F
Sub-14		1	Regional	M
Sub-15		3	Big-4	M
<i><b>Supervisors</b></i>				
Sup-1	Sub-2	3	National	F
Sup-2		4	National	F
Sup-3	Sup-4	2	Big-4	M
Sup-4	Sup-3	7	Big-4	F
Sup-5	Sub-7, Sub-8	4	Big-4	F
Sup-6		5	Regional	F
Sup-7	Sub-6	4	Big-4	F
Sup-8	Sub-5	3	Big-4	M
Sup-9		4	Big-4	M
Sup-10		4	Big-4	F
Sup-11		4	National	M
Sup-12		7	Big-4	F
Sup-13		3	Local	F
Sup-14		7	Local	M
Sup-15		10	Big-4	F
Sup-16		11	Big-4	F
Sup-17		2.75	Big-4	F

**Note:** This table presents information about the supervisor and subordinate interview participants, including the related supervisor or subordinate matched with another supervisor subordinate participant, years of experience, firm type, and gender.



**TABLE 2.2**  
**Frequency of Type and Use of Computer-Mediated Communication**

		<u># of Participants that Describe Each Medium</u>										
		<u>Favorable</u>			<u>Unfavorable</u>			<u>Neutral</u>				
	Type of CMC		Supervisors (n=17)	Subordinates (n=15)	Total (n=32)	Supervisors (n=17)	Subordinates (n=15)	Total (n=32)	Supervisors (n=17)	Subordinates (n=15)	Total (n=32)	
<b>Rich</b> ↓ <b>Lean</b>	Virtual Audit Room	Percent	29.4%	13.3%	21.9%	29.4%	13.3%	21.9%	11.8%	13.3%	12.5%	
		Count	5	2	7	5	2	7	2	2	4	
	Video Conferencing	Percent	41.2%	40.0%	40.6%	35.3%	26.7%	31.3%	0.0%	26.7%	9.4%	
		Count	7	6	13	6	4	10	0	4	3	
	Instant Messaging	Percent	41.2%	53.3%	43.8%	11.8%	13.3%	12.5%	35.3%	26.7%	31.3%	
		Count	7	8	14	2	2	4	6	4	10	
	Email	Percent	0.0%	13.3%	6.3%	17.6%	20%	18.8%	17.6%	40%	28.1%	
		Count	0	2	2	3	3	6	3	6	9	
		Other (e.g., calendars, discussion boards)	Percent	29.4%	20.0%	25.0%	5.9%	0.0%	3.1%	17.6%	6.7%	12.5%
			Count	5	3	8	1	0	1	3	1	4

**Note:** During interviews, some participants explicitly address the benefits and/or failures of specific computer-mediated communication mediums. This table provides the counts for how those participants view these mediums. Each perspective (favorable, unfavorable, and neutral) is subdivided into supervisor versus subordinate perspectives. Examples of favorable perspectives include knowledge sharing improvements for virtual audit rooms, ability to discuss complex subject matter for video conferencing, ability to send quick messages with emojis for IM, ability to easily find important messages for email. Examples of unfavorable perspectives include annoyances, frustrations, and virtual fatigue associated with video-based platforms, and miscommunications associated with text-based mediums like email and instant messaging. Neutral responses include discussions about the medium’s functionality generally excluding personal preferences. The counts are not mutually exclusive as in some instances an interviewee spoke generally about a type of CMC and also spoke favorably or unfavorably about the same CMC.

**TABLE 4.1**  
**Participant Demographics**

	<b>N</b>	<b>Percent</b>
<b>Undergraduate GPA</b>		
2.6 - 3.0	7	6%
3.1 - 3.5	48	42%
3.6 - 4.0	60	52%
Total	115	100%
<b>Completed an internship with a public accounting firm</b>		
Yes	92	80%
No	23	20%
Total	115	100%
<b>Area of internship experience</b>		
Audit	68	74%
Tax	22	24%
Other (e.g., corporate accounting, governmental)	2	2%
Total	92	100%
<b>Internship firm type</b>		
Big 4	47	50%
Other large firm	20	21%
National	10	11%
Regional	11	12%
Local	6	6%
Total	94	100%
<b>Gender</b>		
Woman	60	52%
Man	54	47%
Prefer not to say	1	1%
Total	115	100%

**TABLE 4.2**  
**Team-oriented Proactive Behavior Scenarios**

<b>Behavior Type</b>	<b>Construct Definition</b>	<b>Examples</b>	<b>Experimental Scenario</b>
Speaking up (i.e., voice)	Cooperatively speaking up behavior motivated by concern for others rather than oneself (Wang et al. 2012a)	<ul style="list-style-type: none"> <li>• Expressing solutions to problems with the cooperative motive of benefiting the work group and organization</li> <li>• Communicating opinions about work issues even if others disagree</li> <li>• Speaking up with ideas for new projects that might benefit the work group (Wang et al. 2012b)</li> </ul>	Scenario #1: During Sam's initial review of the inventory workpapers, he comes across some potentially important information that did not seem to be considered in the initial risk assessment. If this is the case, the audit team may need to change its approach to inventory testing. This could increase audit cost by increasing planned audit hours, but also could potentially increase audit quality. Sam remembers during the morning meeting the engagement partner's emphasis on the audit client being low-risk and his concern about audit costs, but without any prior experience Sam worries the information may not be relevant.
Taking charge	Making innovative improvements to how work is executed within the context of a respective work unit (Li et al. 2013)	<ul style="list-style-type: none"> <li>• Bringing about improved procedures for the work unit or department (Morrison and Phelps 1999)</li> </ul>	Scenario #2: Part of Sam's tasks for the day include designing the substantive procedures to test inventory. No other detailed instructions were provided. The workpaper is prepopulated with the procedures that were performed last year. Sam recently learned about a new data analytics bot that can expedite testing while maintaining audit effectiveness. Implementing the data analytics bot would likely benefit the team in future years, but it would take time to figure out how to use the tool right now. Sam also worries about doing the work incorrectly and causing further inefficiencies. Sam knows the audit partner is worried about costs, and considers following last year's procedures.
Interpersonal helping	Behaviors that promote another's benefits and maintaining high-quality relationships at work (Huang et al. 2015)	<ul style="list-style-type: none"> <li>• Sharing knowledge with colleagues</li> <li>• Taking over colleagues' tasks when needed even though s/he is not obligated to (Belschak and Den Hartog 2010)</li> </ul>	Scenario #3: Sam is waiting on the client for some additional requested documents and does not have any other work in the inventory area that he can complete today. He has accomplished a lot of work and is tired. Some of his team members are still working, and some are not. In the morning meeting, staff were asked to provide a status update to their supervisors to ensure they stay on schedule, and so work can be reallocated based on each team member's workload. It is getting close to the end of the work day, but Sam can see that his direct supervisor, Chris, is still online and working. Sam wonders whether he should send a status update now to his direct supervisor, Chris, to indicate he can be allocated additional work, but also considers logging off and sending a status update in the morning.

**Note:** The scenarios presented in the table above were used to measure each team-oriented proactive behavior examined in this study, including *VOICE*, *TAKINGCHARGE*, and *HELPING*. *VOICE* is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would be willing to speak up about a potential audit issue. *TAKINGCHARGE* is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would suggest a data analytics bot as an alternative approach to testing. *HELPING* is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would provide a status update at the end of the day.

**TABLE 4.3**  
**Effects of *EXPRESSION* and *OWNERSHIP* on *VOICE* (Scenario 1)**

**Panel A: Descriptive statistics. Mean, (St. Dev.), *N***

<i>OWNERSHIP</i>	<i>EXPRESSION</i>		
	<i>Present</i>	<i>Absent</i>	<i>Total</i>
<b>Not heightened</b>	61.31 (19.66) 29	52.93 (20.25) 29	57.12 (20.23) 58
	62.52 (19.22) 29	48.29 (21.07) 28	55.53 (21.22) 57
<b>Total</b>	61.91 (19.28) 58	50.65 (20.61) 57	

**Panel B: ANOVA**

<b>Source</b>	<b>Df</b>	<b>MS</b>	<b>F</b>	<b><i>p</i></b>
<i>EXPRESSION</i>	1	3673.76	9.136	0.002
<i>OWNERSHIP</i>	1	84.96	0.211	0.324
<i>EXPRESSION</i> *				
<i>OWNERSHIP</i>	1	246.10	0.612	0.218
Error	111	402.12		

R Squared = 0.082 (Adjusted R Squared = 0.057)

Model F=3.30, one-tailed *p*=0.012

**Panel C: Simple Effects Tests Comparisons**

	<b><u>df</u></b>	<b><u>F-Stat</u></b>	<b><u>p-value</u></b>
Effect of <i>OWNERSHIP</i> given Supervisor Expression Present	1	0.05	0.410
Effect of <i>OWNERSHIP</i> given Supervisor Expression Absent	1	0.76	0.192
Effect of <i>EXPRESSION</i> given Ownership Heightened	1	7.18	0.004
Effect of <i>EXPRESSION</i> given Ownership Not Heightened	1	2.53	0.057

**Note:** This table presents the effects of *EXPRESSION* and *OWNERSHIP* on *VOICE*. Descriptive statistics are presented in Panel A and the results of the ANOVA in Panel B. Panel C presents the simple effects test comparisons for *EXPRESSION* and *OWNERSHIP*. One-tailed equivalent *p*-values are reported for results consistent with directional expectations. In the *EXPRESSION* present condition, participants view an email from Sam's supervisor that contains emojis, capitalization, and exclamation points. In the *EXPRESSION* absent condition, these expressive features are not included in the email. In the *OWNERSHIP* present condition, the participant is told that Sam is responsible for the inventory process area. In the *OWNERSHIP* absent condition, the participant is told that Sam's supervisor is responsible for the inventory process area. *VOICE* is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would be willing to speak up about a potential audit issue.

**TABLE 4.4**  
**Effects of *EXPRESSION* and *OWNERSHIP* on *TAKINGCHARGE* (Scenario 2)**

**Panel A: Descriptive statistics. Mean, (St. Dev.), *N***

	<i>OWNERSHIP</i>		<i>EXPRESSION</i>	
	<i>Present</i>	<i>Absent</i>	<i>Present</i>	<i>Absent</i>
<i>Not heightened</i>	42.83 (20.43) 29	44.76 (16.91) 29	43.79 (18.61) 58	
	51.38 (21.32) 29	44.64 (15.07) 28	48.07 (18.67) 57	
<i>Total</i>	47.10 (21.14) 58	44.70 (15.89) 57		

**Panel B: ANOVA**

Source	Df	MS	F	<i>p</i>
<i>EXPRESSION</i>	1	165.94	0.478	0.246
<i>OWNERSHIP</i>	1	511.38	1.473	0.114
<i>EXPRESSION</i> *				
<i>OWNERSHIP</i>	1	539.84	1.555	0.108
Error	111	347.21		

R Squared = 0.031 (Adjusted R Squared = 0.005)

Model F=1.78, one-tailed *p*=0.161

**Panel C: Simple Effects Tests Comparisons**

	<b>df</b>	<b>F-Stat</b>	<b>p-value</b>
Effect of <i>OWNERSHIP</i> given Supervisor Expression Present	1	3.05	0.042
Effect of <i>OWNERSHIP</i> given Supervisor Expression Absent	1	0.00	0.491
Effect of <i>EXPRESSION</i> given Ownership Heightened	1	1.86	0.088
Effect of <i>EXPRESSION</i> given Ownership Not Heightened	1	0.16	0.347

**Note:** This table presents the effects of *EXPRESSION* and *OWNERSHIP* on *TAKINGCHARGE*. Descriptive statistics are presented in Panel A and the results of the ANOVA in Panel B. Panel C presents the simple effects test comparisons for *EXPRESSION* and *OWNERSHIP*. One-tailed equivalent *p*-values are reported for results consistent with directional expectations. In the *EXPRESSION* present condition, participants view an email from Sam's supervisor that contains emojis, capitalization, and exclamation points. In the *EXPRESSION* absent condition, these expressive features are not included in the email. In the *OWNERSHIP* present condition, the participant is told that Sam is responsible for the inventory process area. In the *OWNERSHIP* absent condition, the participant is told that Sam's supervisor is responsible for the inventory process area. *TAKINGCHARGE* is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would suggest a bot for testing.

**TABLE 4.5**  
Effects of *EXPRESSION* and *OWNERSHIP* on *HELPING* (Scenario 3)

**Panel A: Descriptive statistics. Mean, (St. Dev.), *N***

		<i>OWNERSHIP</i>		<i>EXPRESSION</i>
		<i>Present</i>	<i>Absent</i>	<i>Total</i>
<i>Not heightened</i>		68.38 (22.24) 29	50.21 (24.34) 29	59.29 (24.86) 58
	<i>Heightened</i>	68.24 (16.45) 29	62.29 (21.48) 28	65.32 (19.15) 57
<i>Total</i>		68.31 (19.39) 58	56.14 (23.58) 57	

**Panel B: ANOVA**

Source	Df	MS	F	<i>p</i>
<i>EXPRESSION</i>	1	4183.34	9.199	0.002
<i>OWNERSHIP</i>	1	1024.59	2.253	0.068
<i>EXPRESSION</i> *				
<i>OWNERSHIP</i>	1	1072.48	2.358	0.064
Error	111	454.76		

R Squared = 0.112 (Adjusted R Squared = 0.088)

Model F=4.65, one-tailed *p*=0.002

**Panel C: Simple Effects Tests Comparisons**

	<u>df</u>	<u>F-Stat</u>	<u>p-value</u>
Effect of <i>OWNERSHIP</i> given Supervisor Expression Present	1	0.00	0.490
Effect of <i>OWNERSHIP</i> given Supervisor Expression Absent	1	4.57	0.017
Effect of <i>EXPRESSION</i> given Ownership Heightened	1	1.11	0.147
Effect of <i>EXPRESSION</i> given Ownership Not Heightened	1	10.53	<0.001

**Note:** This table presents the effects of *EXPRESSION* and *OWNERSHIP* on *HELPING*. Descriptive statistics are presented in Panel A and the results of the ANOVA in Panel B. Panel C presents the simple effects test comparisons for *EXPRESSION* and *OWNERSHIP*. One-tailed equivalent *p*-values are reported for results consistent with directional expectations. In the *EXPRESSION* present condition, participants view an email from Sam's supervisor that contains emojis, capitalization, and exclamation points. In the *EXPRESSION* absent condition, these expressive features are not included in the email. In the *OWNERSHIP* present condition, the participant is told that Sam is responsible for the inventory process area. In the *OWNERSHIP* absent condition, the participant is told that Sam's supervisor is responsible for the inventory process area. *HELPING* is measured on a 101-point scale from 0 (*Not at all willing*) to 100 (*Very willing*) as the likelihood that Sam would provide a status update at the end of the day.