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# Fraud Brainstorming Sessions and Interviews in a Remote World: Initial Evidence

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I would say [the shift to remote fraud interviews during the pandemic] definitely reduced our, I guess, confidence…just being able to get face-to-face with people. You're able to pick up on body language. You can tell if they feel comfortable or uncomfortable answering questions. I would say [the shift to remote] reduced our confidence a little bit just because we're either on the phone or on one of these video conferences [Quote from an auditor interviewee].

But I also had some instances where the client basically refused to turn on their camera. They either just flat out said they weren't going to, or they made up an excuse that they couldn't figure it out, or their computer doesn't allow it or something. And that really hurts the interview, that really hurts the interviewing process. Because as an auditor, if you're not able to see their body language...you just don't really know if they're telling you the truth or if there's something that they're holding back from you. It's really hard to tell that. That I think made the interview less effective if that was the case [Quote from an auditor interviewee].[1]

## Introduction

Prior to the COVID-19 pandemic and related shift to remote work in March 2020, auditors typically engaged face-to-face with each other and client personnel to consider fraud risks and to gather evidence during the audit (Dennis and Johnstone, 2016). These face-to-face interactions allowed auditors to assess a wide range of verbal and non-verbal fraud-related cues, build rapport with client personnel, and to easily ask follow-up questions.

Despite auditors' efforts to appropriately address fraud risks, detection of fraud remains a challenge for the auditing profession. The Association of Certified Fraud Examiners (ACFE, 2022) finds that external auditors discover relatively few occupational frauds, and the large accounting firms continue to face litigation when they fail to detect material fraud (e.g., the PwC and the Colonial Bank litigation).

This study provides initial evidence of how the sudden transition to remote work in March 2020 has affected auditors' fraud risk assessment processes. Specifically, we explore how auditors performing required fraud brainstorming sessions and fraud-related interviews perceive the virtual process in comparison to pre-pandemic processes. Our primary focus is any changes in the perceived efficiency or effectiveness of these processes. We develop a number of research findings on these issues and others. The two initial quotes suggest a concern with the effectiveness of remote fraud-related interviews, especially with regard to evaluating non-verbal cues online. We find additional evidence of this concern in other interviews.

Interviews with 19 auditors from primarily local/regional accounting firms reveal that the remote environment is not significantly impacting auditors' fraud brainstorming sessions. However, auditors perceive remote fraud-related interview sessions to be less effective than, but as efficient as, face-to-face interviews. Auditors' inability to read non-verbal cues in the remote environment is hampering remote fraud-related interviews. Despite the recent challenges with fraud-related interviews, the interviewees typically believe that their ability to fully identify and consider all significant fraud risks and to maintain overall audit quality is not impaired. Rather, audit efficiency has declined as firms adjusted to remote work. Beyond the insights into auditors' fraud-related procedures, the interviews also suggest that the remote environment is enhancing auditors' personal flexibility but impairing the training of newer auditors. We encourage future research to complement our initial evidence.

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[1] Some quotes have been lightly edited for readability and we present quotes where they best fit in the article.

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**Background**

### Fraud-Related Auditing Standards

The Public Company Accounting Oversight Board's (PCAOB, 2010) AS 2110 and the Auditing Standards Board's AU-C Section 240 (AICPA, 2021) contain the current fraud-related auditing standards for public and private company audits, respectively. Both standards build on Statement on Auditing Standards (SAS) No. 99 (AICPA, 2002). SAS No. 99 increased the awareness of and focus on fraud occurring in companies (Casabona and Grego, 2003) and requires an audit firm to have a brainstorming session to assess fraud risks within the client company (Beasley and Jenkins, 2003). In these sessions, the audit team must employ professional skepticism and think of possible fraud risks within the company.

Auditors also must perform fraud-related interviews with client personnel to enhance their understanding of the company's fraud risks and what controls are implemented to reduce the risks (Leinicke, Ostroski, Rexroad, Baker, and Beckman, 2005). These interviews can lead to additional audit procedures (Casabona and Grego, 2003). Overall, these fraud procedures are designed to provide a thorough assessment of fraud risk within a company and have become a key part of an auditor's typical procedures. These requirements can play an important role in auditors uncovering fraudulent activities within a company, although prior research finds that many auditors struggle with fraud detection (e.g., Asare, Wright, and Zimbelman, 2015; Kleinman, Strickland, and Anandarajan, 2020).

### The Shift to Remote Work

In March 2020, auditors unexpectedly, and very suddenly, shifted to remote work in response to the COVID-19 pandemic. As a result, many procedures, including fraud-related work, shifted to being done remotely. In this study, we examine auditors' perceptions of how the shift to remote work in March 2020 and the further adaptation of a remote/hybrid work environment affected the effectiveness and efficiency of fraud brainstorming sessions and fraud-related client interviews (see Bauer, Humphreys, and Trotman, 2022). We also examine some broader issues related to the switch to remote work.

### Research on Fraud Brainstorming

Many studies have examined the fraud brainstorming process, with a frequent focus on aspects of the way the brainstorming session is conducted and/or the nature of the parties involved (e.g., Carpenter, 2007; Lynch, Murthy, and Engle, 2009; Trotman, Simnett, and Khalifa, 2009; Brazel, Carpenter, and Jenkins, 2010; Hammersley, Bamber, and Carpenter, 2010; Chen, Trotman, and Zhou, 2015; Dennis and Johnstone, 2016, 2018; Gissel and Johnstone, 2017; McAllister, Blay, and Kadous, 2021). Of particular relevance to our study is research suggesting that electronic fraud brainstorming can produce a greater number of relevant fraud risk factors than face-to-face brainstorming (Lynch et al., 2009). This finding might suggest some potential for improved brainstorming procedures in the remote work era.

Bauer et al. (2022, 11) specifically describe the need for research on the effects of the COVID-19 pandemic on fraud brainstorming processes: "…auditors usually brainstorm face-to-face interactively (Dennis and Johnstone, 2016). With the constraints of social distancing during the pandemic, face-to-face brainstorming has not been feasible and audit firms have begun to conduct fraud brainstorming in virtual formats…Changes to how fraud brainstorming meetings are conducted in the pandemic environment are likely to continue in the post-pandemic environment and suggest the need to address additional questions." We seek to begin to answer this call for research by examining auditors' perceptions of the fraud brainstorming process pre-pandemic versus in the world of remote work.

### Research on Fraud-Related Interviews

Research on auditors' fraud-related interviews includes studies that examine the effect of auditor inquiries on client personnel's intent to report fraud (e.g., Kaplan, Pope, and Samuels, 2011; Lauck, Perreault, Rakestraw, and Wainberg, 2020) and how inquiry affects auditors' skepticism (Lee and Welker, 2007; Brasel, Hatfield, Nickell, and Parsons, 2019). A key feature of auditors' fraud inquiries is the direct interaction with client personnel, which allows auditors to consider both verbal and non-verbal responses to questions (see discussion in Lee and Welcker, 2007). Prior research (e.g., deTurck, Harszlak, Boghorn, and Texter, 1990) emphasizes the importance of non-verbal cues in detecting deception. Further, Bennett and Hatfield (2018) find evidence that auditors engaged in face-to-face interaction with the client ask more content (substantive) questions and pose more follow-up questions than those using computer-mediated communication. The authors also find that auditor skepticism increases when non-verbal indicators of deception are observed.

Interestingly, however, Durkin, Jollineau, and Lyon (2021) find evidence that email interaction with clients can offer advantages over video interaction, as auditors are more distracted by richer environments like video. The authors state (p. 3), "These results support our hypothesis that auditors are less critical of the client's explanation when received via rich communication media, such as video or face-to-face." Face-to-face communication is the richest environment, followed by video communication.

With the rapid shift to remote work, and thus online fraud-related interviews, we examine whether auditors perceive any changes in the effectiveness or efficiency of fraud-related interviews in the remote work environment compared to the face-to-face approach typically used pre-pandemic. Prior research suggests the importance of assessing non-verbal cues, but richer communication settings can distract auditors.

## Method

We interviewed employees from the senior level to the partner level of public accounting firms in a large Southeastern city. We worked through professional contacts to gain access to the firms and auditors. The research project was approved by the University's IRB.

One coauthor conducted the 19 interviews from November 2021 to February 2022. We conducted 18 of the interviews remotely (interviews ranged from 13 to 38 minutes), and we audio recorded these interviews. The other interview was done by providing the questions to the interviewee through email, at the interviewee's request. The interviewee answered the questions over email, and we had an in-person meeting to clarify some responses.

Once the data were collected, the 18 audio recordings were professionally transcribed and captured in Word files, and the responses from the other interview were included in the master data set. One coauthor analyzed the interviewees' responses question-by-question for patterns and findings that were found consistently across interviews, any contrary findings or responses, and quotes for the study. The other coauthor provided general oversight and direction of the coding process and reviewed key aspects of the coding and quote selection, including adding additional quotes to the article.

### Interviewees

The 19 interviewees are from seven different accounting firms of varying sizes. These include five local / regional firms (16 interviewees), one national firm (one interviewee), and one Big Four accounting firm (two interviewees). The interviewees' titles are senior / senior associate (n = 3), supervisor / manager (n = 7), senior manager / director n = 4), and partner / principal (n = 5). Fifteen interviewees are male. Seven interviewees are 30 years old or less, nine interviewees are over 30 to 50 years old, and three are over 50. The interviewees have experience in many industries, including Real Estate, Manufacturing and Distribution, Construction, Financial Services, Healthcare, Retail and Service, Health and Life Sciences, Technology, and others. The firms interviewed primarily serve non-public audit clients.

The interviewees typically were on a hybrid schedule at the time of interviews. Some were in the office two or three days a week, while others rarely came to the office.

## Findings

In the sections below, we present the primary findings related to (a) fraud brainstorming sessions, (b) fraud-related interviews, and (c) other issues. Our goal is to present the prevailing perceptions of the auditors we interviewed.

### Fraud Brainstorming Findings

This section presents the fraud brainstorming findings. The interviewees typically indicate that prior to COVID-19, fraud brainstorming sessions were done face-to-face, and now they primarily are being held virtually. Thus, there has been a significant shift in the way that the interviewees participate in fraud brainstorming sessions.

Fraud Brainstorming Finding 1 (see Panel A of Table 1) is that most interviewees (13 of 19) do not believe the effectiveness of fraud brainstorming sessions has changed at all from the pre-pandemic period to the pandemic period. The median difference between ratings of effectiveness of fraud brainstorming session before versus after the remote shift is 0 (i.e., the median of the effectiveness rating now less the effectiveness rating pre-pandemic equals 0). One interviewee stated:

> Maybe just a little bit less discussion, but I feel like...the purpose of the meeting was fulfilled both before and during COVID-19 times.

There are some contrary beliefs. A few interviewees believe the remote shift actually increased the effectiveness of the fraud brainstorming sessions. A few also think the remote shift largely decreased the effectiveness of fraud brainstorming sessions. One interviewee described the initial challenge of running a fraud brainstorming session online and getting participation from the audit team:

> I do find it a little tougher to get full engagement participation…of every team member [when online]. Again, we have gotten better at it. I'm pretty good at just calling on people, but the intent of a brainstorming session is just that. It's open, brainstorm. What do you think? And it's not about the partner dictating what the partner's thoughts are. It's about, "Hey team, talk to me." I would say again, early days of using the video technology, a little tougher to get people to participate, a little tougher if we have a little bit of a rule on things like that, where we expect people to be on camera so that I can look and I can watch. I can look if somebody looks like they want to say something, and I can encourage them to say it. At first, that was tough. We've gotten better at that. Whereas if you're in a room, I can just look at somebody.

Interestingly, one interview indicated that the fraud risk factors considered during the pandemic include those directly related to COVID-19:

> So, we probably add a discussion point or two around, 'Hey, be sure we're considering and getting an understanding of how COVID-19 has impacted our client'.

Another interviewee shared a similar perspective about a growing list of risks to consider:

> So, you had these new ways that companies might be doing things, because they are now remote as well. And so, that caused us to need to think a little harder about…things that in the past we would've said, "There's no risk of fraud here, or minimal risk." We had to re-challenge ourselves to think about what could there be, what could happen now that the controller isn't in the office anymore. Are there things that could go differently? And so, I would say that changed, and I would say it was an enhancement to the discussion as opposed to a takeaway.

A third interviewee discussed the breadth of fraud risk considerations in the pandemic period:

> But I think the biggest change that we've done, just with our brainstorming and procedures, is really looked at client's operations and understood the roles; and now people are at home, so what does that look like? Whoever was writing checks before, are they taking the check stock home and just having checks sitting around, how does that process work? But that's more...It's fraud risk and fraud brainstorming, but it's also more of just processes and general controls of the company. So we've expanded our understanding of what that is, which I think directly relates to fraud, but it's a change that we've done over the past two years.

**Table 1: Numerical Assessments of Fraud Procedures: Effectiveness and Efficiency**

**Panel A: Fraud Brainstorming Effectiveness:** *On a scale of 1-10, with 10 = very effective and 1 = not effective, how **effective** do you think the fraud brainstorming process was (a) prior to COVID-19, and (b) after the remote shift?*

| Response Differences | -2, -1, -1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 3 |
|---|---|
| Median | 0 |
| Average | 0.0526 |

**Panel B: Fraud Brainstorming Efficiency:** *On a scale of 1-10, with 10 = very efficient and 1 = not efficient, how **efficient** do you think the fraud brainstorming process was (a) prior to COVID-19, and (b) after the remote shift?*

| Response Differences | -2, -2, -2, -2, -2, -1, -1, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1.5, 2, 2 |
|---|---|
| Median | 0 |
| Average | -0.2368 |

**Panel C: Fraud-Related Interview Effectiveness:** *On a scale of 1-10, with 10 = very effective and 1 = not effective, how **effective** do you think the fraud-related interview process was (a) prior to COVID-19, and (b) after the remote shift?*

| Response Differences | -4, -3, -3, -3, -2, -2, -2, -1.5, -1.5, -1, -1, -1, -1, 0, 0, 0, 0, 0, 1 |
|---|---|

| Median | -1* |
|---|---|
| Average | -1.3158* |

**Panel D: Fraud-Related Interview Efficiency:** *On a scale of 1-10, with 10 = very efficient and 1 = not efficient, how* **efficient** *do you think the fraud-related interview process was (a) prior to COVID-19, and (b) after the remote shift?*

| Response Differences | –4, -4, -2, -2, -1.5, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1.5, 2.5, 3 |
|---|---|
| Median | 0 |
| Average | -0.1842 |

**Note:** Response Differences reflect each interviewee's rating of the item after the shift to remote work minus the same rating pre-pandemic (i.e., rating after remote shift less rating prior to COVID-19). Negative values indicate a *decrease* in effectiveness or efficiency.

* Median and mean are significantly different from 0 ($p < 0.01$).

Fraud Brainstorming Finding 2 (see Panel B of Table 1) is that there are mixed perspectives on the impact of the pandemic on the efficiency of fraud brainstorming sessions. Of the 19 interviewees, seven interviewees believe efficiency remained unchanged, seven interviewees believe efficiency decreased, and five interviewees believe efficiency increased. The median difference in the efficiency ratings now versus pre-pandemic is 0. Some people may be more efficient in a virtual meeting. One interviewee stated:

So if anything, it's like you move from topic to topic a little more quickly.

Others may be less efficient with this remote shift. One interviewee stated:

I think sometimes on these virtual calls, people can get distracted and they're not paying attention.

Fraud Brainstorming Finding 3 is that most interviewees are confident that their audit team is fully identifying and considering all significant fraud risks through their fraud brainstorming sessions. One way or another, the interviewees ensure that the fraud brainstorming sessions are thorough enough to consider all significant fraud risks. One interviewee stated:

Fully. Fully confident. I think if there was fraud, we would've caught it.

However, another interviewee believes that this shift to remote work may pose issues down the road. The interviewee stated:

Yeah. I don't feel like it has affected us negatively. Time will tell, as we all know. These things don't pop up the year of. They pop up 10 years later, five years later.

The longer-term effects of remote work may be a fruitful topic for future research.

Overall, fraud brainstorming sessions have been handled much differently during the pandemic than they were before. Despite this shift to remote sessions, there is little evidence of any impact on the effectiveness or efficiency of these sessions. Further, most interviewees seem quite comfortable with their ability to fully identify and consider all significant fraud risks through their fraud brainstorming sessions.

### *Fraud-Related Interview Findings*

This section presents the fraud interview findings. Prior to COVID-19, fraud interviews were primarily done face-to-face with clients, and now they often are being held virtually. The way that these interviews are conducted has changed dramatically.

Fraud Interview Finding 1 (see Panel C of Table 1) is that most interviewees (13 of 19) believe the effectiveness of fraud-related interviews has decreased during the pandemic. Five interviewees believe that effectiveness is unchanged, and one believes that effectiveness has increased. Both the median and the mean in Panel C of Table 1 are significantly less than 0, indicating a significant decrease in perceived effectiveness from the pre-pandemic period to now.

The concern over remote interview effectiveness seems to largely relate to not being able to read non-verbal cues and clients sometimes not having the camera on. Non-verbal cues can help auditors to uncover fraud, or at least dive deeper if the client seems uncomfortable with a certain question. When these non-verbal cues are difficult or impossible for an auditor to read, important signals could be missed. One interviewee stated:

> Also, when you're doing it virtually it's hard...I won't say a big part, but I mean, one of the things of doing it in person, one of the advantages is being able to see their body language and read that...when we've done this virtually, we've asked our clients to turn their cameras on if they can. Certainly, some don't want to, or even then, sometimes all you can see is their face.

Another interviewee stated:

> And if a client got on video, then that's good. It's not as good as being in person, but it's good because you can still see their face. You can still see their body language and have a more meaningful conversation.

Two others explained the importance of being on video:

> So that's probably something we could have done a little bit better, maybe make sure that the client understood the importance of it being a video call and not just an "I can't see you" kind of call.

> You really can't see if they have any, I don't know, physical "tells" of saying a lie or something like that.

Clearly, there is significant concern about the effectiveness of remote fraud interviews, largely due to the difficulty of assessing non-verbal cues.

Further, one interviewee described the difficulty of building trust and comfort with clients online, and the resulting negative impact on fraud reporting through client personnel:

> I know [my clients]. We work together. I trust them, and I'm comfortable with them. It is tougher to build that over Teams and Zoom. And I would say that by itself, probably has been detrimental to what I'll call the global identification of fraud. Not necessarily through just what the auditors do, but just the whole ecosystem of, we do our audit work, and if we run into a fraud, we bring it up. But just the fact that sometimes we get frauds that are found by a company personnel get reported to us, and we become the conduit of through which a fraud's discovered. I do think that avenue probably got some boulders put in front of it during COVID-19, because there's just not that opportunity.

Another interviewee indicated that spontaneous fraud questioning has suffered in the remote environment:

> Not every time we sit down with a client, do we ask specific fraud questions necessarily. We're always on the alert…So, I do think that got hampered.

Fraud Interview Finding 2 (see Panel D of Table 1) is that there is little consensus about the impact of remote interviewing on the efficiency of the interviews. Five of the interviewees believe that efficiency has decreased, eight of the interviewees believe efficiency remains unchanged, and six of the interviewees believe efficiency has increased. The median difference in the efficiency ratings now versus pre-pandemic is 0. In pointing to increased efficiency, one interviewee stated:

> I think if you're on a video you're more conscious of the time and getting through what needs to be done.

Another interviewee pointed to meeting scheduling as more efficient now:

> I would say that it was probably a little bit less efficient before COVID-19 just because trying to make time to meet with somebody face-to-face and ignoring all other responsibilities to do that is not as easy for most client personnel.

Fraud Interview Finding 3 is that the majority of the interviewees are confident that their audit team is fully identifying and considering all significant fraud risks through the fraud-related interviews. Despite the concerns above regarding effectiveness, most interviewees are confident that they ensure the fraud interviews are thorough enough to consider all significant fraud risks. One interviewee stated:

> I'm still fairly confident in that I think even though it changed in how we were doing the inquiries and the questions; I think we still got all the risks that were out there.

By contrast, some interviewees do have concerns about fraud-related interviews and whether they are fully identifying and considering all significant fraud risks. One interviewee stated:

> I hate to say it, but I think the process [is] not very valuable. I'm not confident at all that the fraud interview would uncover fraud – ever. But, if I were ever in court facing a plaintiff's attorney and I was asked '_____, did you even ask them about fraud?' I darn sure want to be able to say 'Yes, I asked, but they lied to me.'

Overall, many audit professionals are struggling to perform effective fraud interviews virtually. Reading non-verbal cues in imperative in these meetings, and video calls are not the best platform for assessing non-verbal cues. Anything less than a video call makes reading these non-verbal cues impossible to read.

### *Other Findings*

Based on other aspects of the interviews, we also developed some additional findings, which we discuss in this section.

Other Finding 1 is that the technology systems needed for remote audit work did not appear to catch these firms off guard. Many firms already had their key technology platforms in place, and the most commonly cited are Teams and Zoom. What COVID-19 did was make many firms use these resources more than before. One interviewee stated:

> Honestly, pre-COVID-19, we had the same IT systems in place. We just probably weren't using [them] as much.

Further, prior to COVID-19, auditors typically worked in their clients' offices, which presents similar challenges as working from home when trying to communicate with colleagues. One interviewee stated:

> Well, I think we had already a lot of the systems in place. Just given the nature of being an auditor, we're not really in the office most of the time. We're actually at different locations.

Prior experience working at client locations seems to have made the shift to working from home easier for some auditors.

Other Finding 2 is that most interviewees indicate that overall audit quality has not changed due to the pandemic, and a couple suggest that quality has increased.[2] One interviewee stated:

> If anything, there was such focus on communication and constantly bringing stuff up that [audit quality] might have even improved a little bit.

Also, there were many new audit and fraud risks that could occur due to COVID-19, further heightening attention to audit details. One interviewee stated:

> We made sure to ask the questions of, "Did any of these controls change as a result of COVID-19 and moving to the remote setting?"

Another interviewee pointed to the general strategy of being conservative and careful as a COVID-19-era auditor in order to maintain audit quality:

> …I think, with the onset of COVID-19 and the concern of the impact that a remote environment would have, I think we all conservatively approached this problem with angst or anxiety about how it would impact our audit. And I think, by virtue of that, we were probably more conservative in how we approached these things, to try to be overcompensating in order to make sure that we got full coverage on the things we needed to, in terms of having that face time and having those conversations and having more people involved. And, by virtue of that, I think we've created a more robust process than we had before…I think we, in an effort to try to make sure that there wasn't an audit failure, probably went above and beyond what we would've done in the past, just to make sure that we were accomplishing what we needed to do.

Other Finding 3 is that, while audit quality appears to have held steady, many interviewees indicate that working in the remote environment has created inefficiencies in the audit process. One interviewee said:

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[2] See Eulerich, Wagener, and Wood (2022) (no change in perceived internal audit quality) and Gong, Ho, Jin, and Kanagaretnam (2022) (reduced external audit quality) for examples of an emerging line of research on COVID-19 and audit quality.

I don't think there's been a big dramatic drop off in the quality of the work. Again, I think the biggest thing you see is the inefficiency of the work has increased a lot, just because of the back and forth, and the non-together training aspect of things.

One of the key impediments to audit efficiency that some interviewees note is that earlier in COVID-19, there were challenges encouraging engagement on video calls. People also often get distracted or off topic. One interviewee stated:

Oh, I just got distracted because something just popped up on my computer. So, people get distracted. And I also think that sometimes people don't want to speak up on video calls because the timing is harder. You don't want to interject and interrupt.

Other Finding 4 is that some interviewees suggest that a key benefit of remote or hybrid work is personal flexibility, and some raise concerns about the difficulty of training newer auditors in a remote environment. One interviewee stated:

I think we're starting to realize that technology can definitely make our lives easier. I think there's a lot of good that's coming out of it.

Another said:

We've come full circle and end up this whole process with a little bit more flexibility than we had in the beginning. Because we proved that it could work.

Regarding training of newer auditors, one interviewee stated:

I think it's also had an impact on training. People sitting in a room, hearing conversations, has a huge impact on the development of our team members. There's a lot of that's been missed. There's a lot of just when you're sitting in a cube land together, you're sitting in a conference room together and you just happen to hear conversations going on or whatever's happened, or just the ability to talk about stuff with your neighbor or your staff sitting next to your senior manager. I think long-term, there's going to be a skill set, a development gap that we have to work extra hard at, to make up. So, I think, that's broad to the entire audit profession, but it's going to flow through to everything.

Another interviewee stated:

I do feel like they miss out on the social aspect and that the team comradery that's built being in the conference room together or going out to lunch together.

A third discussed the experience level of people doing fraud interviews and how younger staff can learn more easily in a face-to-face setting:

…we make sure that an intern is not the one asking the fraud questions because, again, they don't know as much as people who have been here, not as experienced. So what we've done is that we have the fraud inquiries be done at the senior manager or even principal level…If I was at a client, I would say to the intern, "Hey, come with me, sit in this conversation with me and watch how this goes." And it was easy because we're both at the client together. It's easy to do that. So, I think that that was a very effective process for us. Post-COVID-19…I think we're losing out on a training aspect with our staff, because sometimes we can invite them and it's easy, but you've got to get that on the calendar, you've got to make sure they're available…So I think that the training aspect has dwindled in that area.

Finally, one interviewee discussed the remote environment as being tough on new hires:

…a lot of times, it's not as efficient, when if you don't have your audit team sitting right there. I would say from a new hire perspective, it's probably been a lot tougher on a lot of our new hires, just because when I…have a question, I'm just going to turn over and ask it to you instead. Now there's like, well, I got to send them a chat or send them an email or something like that to get them on the phone. It's been a two-edged sword, I would guess. Then, I think a lot of that has been difficult on some of our younger people, and it's pushing them out a little bit quicker. We lost quite a few staff last year. I think a lot of that's just the result of the current work environment. We work, I would say, a lot more efficiently as a team when we're together. I feel like you can put in a lot more hours if you're not out at the client.

Overall, there is evidence that auditors have begun to adapt to the remote environment. They are working to ensure that their audit work is not being negatively affected by the remote shift, and some even believe that they are enhancing the quality of audit work. Some employees are enjoying their flexibility, but there also is some concern that the remote environment has decreased the effectiveness of staff training and development.

**Discussion and Conclusion**

The COVID-19 pandemic has significantly affected auditors and their day-to-day work. In particular, the sudden shift to remote work has changed the way auditors perform key fraud-related responsibilities (see Table 2 for a summary of the findings). Based on interviews of 19 auditors, the most significant effect of remote work relates to the decreased effectiveness of fraud-related interviews, which logically can affect fraud-related audit procedures (Casabona and Grego 2003). Many audit professionals do not feel entirely confident that the fraud interview process is as effective when done remotely, even when done over a video call. One potential suggestion is for firms to require a minimum of a video call for fraud interviews (with the camera on), and to strongly encouraging face-to-face interviews if possible. Another possible suggestion is to train employees on how to read "virtual non-verbal cues". There may be new non-verbal cues that could be identified over video calls, building on one interviewee's comments about evaluating non-verbal cues on video and using two people in an interview:

> We know how to do non-verbal and break some of that down live, but you still have to do that over video. So, we had to make sure we got ourselves educated on reminding ourselves to maybe have a second person, make sure you have two people interviewed and have one person just watch. The other person do the questions, things like that…And that non-verbal is the toughest part. It takes experience and training and things of that nature, but that became a lot tougher post-COVID-19, and having to go to video interviews versus live.

Additional research on these issues is encouraged.

**Table 2: Summary of Interview Findings**

**Panel A: Fraud Brainstorming**

**Finding 1:** Most interviewees do not believe the *effectiveness* of fraud brainstorming sessions has changed at all from the pre-pandemic period to the pandemic period.

**Finding 2:** There are very mixed perspectives on the impact of the pandemic on the *efficiency* of fraud brainstorming sessions.

**Finding 3:** Most interviewees are confident that their audit team is fully identifying and considering all significant fraud risks through their fraud brainstorming sessions.

**Panel B: Fraud-Related Interviews**

**Finding 1:** Most interviewees believe the *effectiveness* of fraud-related interviews has decreased during the pandemic.

**Finding 2:** There is little consensus about the impact of remote interviewing on the *efficiency* of the interviews.

**Finding 3:** The majority of the interviewees are confident that their audit team is fully identifying and considering all significant fraud risks through the fraud-related interviews.

**Panel C: Other**

**Finding 1:** The technology systems needed for remote audit work did not appear to catch these firms off guard. Many firms already had their key technology platforms in place, and the most commonly cited are Teams and Zoom.

**Finding 2:** Most interviewees indicate that overall audit quality has not changed due to the pandemic, and a couple suggest that quality has increased.

**Finding 3:** Many interviewees indicate that working in the remote environment has created inefficiencies in the audit process.

**Finding 4:** Some interviewees suggest that a key benefit of remote or hybrid work is personal flexibility, and some raise concerns about the difficulty of training newer auditors in a remote environment.

**Note:** This table summarizes the prevailing perceptions of the auditors we interviewed. We encourage additional research into these issues to complement our initial evidence.

Despite concerns about the effectiveness of fraud-related interviews during the pandemic, the interviewees typically believe that their ability to fully identify and consider all significant fraud risks and to maintain overall audit quality is not impaired. Rather, audit efficiency apparently has declined as firms adjusted to remote work. We encourage research to more fully examine any changes in fraud detection and audit quality during the pandemic.

Beyond the insights into auditors' fraud-related procedures, the interviews also suggest that the remote environment is enhancing auditors' personal flexibility but impairing the training of newer auditors. These two issues also warrant additional research.

This study has some important limitations. First, the sample is convenience-based, largely local and regional firm focused, and from one metropolitan area. We encourage additional research exploring the perceptions of other groups. Second, we focus on auditors' perceptions of the effectiveness and efficiency of fraud-related audit tasks. We encourage additional research examining non-perception data to complement the views of auditors. Finally, our study addresses auditors' perceptions as of late 2021 and early 2022, less than two years after the March 2020 pandemic arrived. We encourage additional research to examine longer-terms impacts of the pandemic on fraud-related and other auditing issues.

We close with a final interviewee perspective that speaks to the difficulty that auditors face in detecting fraud:

I think the process is as effective as it has always been. The fact is some people struggle with lying. I get all sweaty and nervous when I tell my dentist that I floss every day. However, people who have the guts to commit real fraud also have the ability to lie to your face, staring you straight in the eyes. Now, probably a trained FBI agent could detect the lie. But an auditor has a different skillset. The FBI agent doesn't need to know how to analyze a contract with a customer to determine whether the client has properly applied ASC 606. The auditor doesn't need to know how to kick down a door and arrest a perp. I truly believe that the best you can hope for is that the interviewee is honest about fraud allegations that they have heard or about actual instances of fraud that have occurred in the past year. But, they won't come clean about their own fraud.

Clearly, the COVID-19 pandemic has altered auditors' approach to their fraud-related responsibilities. We encourage additional research into the issues raised in this article.

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**Appendix: Interview Questions**

**Opening Questions:**

1. Please describe the impact of COVID-19 on how your firm conducts its day-to-day work, including any temporary or ongoing shift to remote work.

2. What technology tools has your firm employed to facilitate remote work?

3. Overall, how would you assess the quality of audit work performed remotely in comparison to traditional face-to-face audit work?

**Fraud Brainstorming Sessions:**

1. Please describe how fraud brainstorming sessions for the audit team were conducted prior to COVID-19.

2. How has your fraud brainstorming process changed as a result of working remotely in 2020/2021?

3. Do you believe that the fraud brainstorming process used during 2020/2021 is as effective and efficient as the process used before COVID-19? Explain.

4. On a scale of 1-10, with 10 = very effective and 1 = not effective, how **effective** do you think the fraud brainstorming process was (a) prior to COVID-19, and (b) after the remote shift?

5. On a scale of 1-10, with 10 = very efficient and 1 = not efficient, how **efficient** do you think the fraud brainstorming process was (a) prior to COVID-19, and (b) after the remote shift?

6. How confident are you that the fraud brainstorming process used in 2020/2021 results in the audit team fully identifying and considering all significant fraud risks?

7. Are there any specific instances you have noted that show any problems or advantages of working remotely through the fraud brainstorming process?

**Fraud-Related Interviews:**

1. Please describe how fraud-related interviews of client personnel were conducted prior to COVID-19.

2. How has your fraud-related interview process changed as a result of working remotely in 2020/2021?

3. Do you believe that the fraud-related interview process used during 2020/2021 is as effective and efficient as the process used before COVID-19? Explain.

4. On a scale of 1–10, with 10 = very effective and 1 = not effective, how **effective** do you think the fraud-related interview process was (a) prior to COVID-19, and (b) after the remote shift?

5. On a scale of 1–10, with 10 = very efficient and 1 = not efficient, how **efficient** do you think the fraud-related interview process was (a) prior to COVID-19, and (b) after the remote shift?

6. How confident are you that the fraud-related interview process used in 2020/2021 results in the audit team fully identifying and considering all significant fraud risks?

7. Does the remote environment affect your ability in any way to read non-verbal cues of client personnel that you would use to detect fraud or other audit risks?

8. Are there any specific instances you have noted that show any problems or advantages of conducting the fraud-related interview process remotely?

**Conclusion:**

1. Do you have any other comments about (a) the effects of COVID-19 on audit processes, or (b) the conduct of fraud brainstorming sessions or fraud-related interviews?