

How Mental Healthcare Professionals Navigate Telehealth: Extensions of Communication Privacy Management and Electronic Propinquity Theories

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Remote mental healthcare has become a new normal, yet there is limited research on how mental healthcare professionals create safe, secure virtual environments for patients while in separate physical locations. Computer-mediated communication theories are well-suited for exploring, and even improving, this critical endeavor. We do this by elaborating communication privacy management (CPM) theory to recognize the boundary coordination involved in contemporary videoconferencing, as exemplified in telehealth interactions. Furthermore, we expand the theory of electronic propinquity (TEP) to appreciate the role of medium-related digital skills in shaping online propinquity. Interviews with 20 mental healthcare professionals reveal that boundary coordination in telemental healthcare takes place in both the shared virtual space and separate physical spaces. Moreover, boundaries are more fluid, or elastic, than CPM allows. We also find that participants generally felt very close to their clients over telehealth, although the digital skills of clients sometimes disrupted care. In addition to these theoretical findings, this research yields practical insights into privacy boundary coordination strategies for telehealth for mental healthcare providers.

Introduction

For decades, healthcare visionaries discussed telehealth as a solution to expand access to mental health services by making it more affordable and convenient (Perle & Nierenberg, 2013). Although telemental health services had been steadily expanding in recent years (Doarn, 2018), they were forced to accelerate abruptly due to the COVID-19 pandemic and, given permanent changes in remote work, are likely here to stay (Hochman, 2021; Schwietzer, 2022; Wallis, 2022). This shifting healthcare delivery norm is coupled with lingering stress, loneliness, and grief caused by the pandemic, which has led to an influx of new clients seeking help (Zhou et al., 2020) and led to what some have deemed a “second pandemic” of mental health issues (Aitken, 2021; Parker-Pope et al., 2021). As a result, many more people than ever now meet with their therapists and other mental healthcare professionals from their own homes. This novel therapeutic environment poses a new set of communication-related challenges, including the ability to ensure patient privacy and create a sense of patient-provider closeness. But it also provides new opportunities for theory development. In this research, we therefore investi-

gate how mental health providers have adjusted their communication practices to 21st century norms to create a private and intimate telehealth environment that encompasses shared virtual and separate physical spaces between provider and client.

To address this overarching question, we employ two communication theories: communication privacy management theory (CPM; Petronio, 2002) and the theory of electronic propinquity (TEP; Korzenny, 1978). First, we use CPM to understand how patients and providers find ways to preserve their privacy while communicating primarily via videoconference from personal or public settings. This was especially important given previous work showing that mental health-care workers, while accustomed to ensuring privacy within their physical spaces, may be less likely to consider the privacy and security of their virtual spaces (Venville et al., 2021). We elaborate on this finding by identifying privacy boundary coordination strategies that mental health professionals and their patients have adapted in this new telehealth environment, both in now separate physical spaces and shared virtual space. We also introduce the concept of boundary elasticity, a more positive counterpart to the original concept of boundary turbulence, to explain how people negotiate privacy boundaries in situations where self-disclosure of more innocuous personal information (e.g., one's hobbies or the interior of one's household) is unanticipated but not distressing. Next, we use TEP to explore the roles of bandwidth and channel choice in shaping providers' perceptions of closeness to their patients despite geographic distance, and we look into the ways patients' medium-related digital skills might relate to electronic propinquity in an era that often requires high levels of technical competence. These findings have theoretical and translational implications for optimizing healthcare delivery and protecting both parties in a variety of sensitive remote communication settings.

Privacy, Disclosure, and Therapeutic Presence in (Tele)Mental Healthcare

Mental health professionals must adhere to strict professional guidelines concerning their patients' or clients' *privacy*, which Altman defines as "selective control of access to the self" (1975, p. 24). These guidelines include legal codes established by the Health Insurance Portability and Accountability Act (HIPAA) as well as the ethical principles set by the American Psychological Association (APA). At the same time, providers are in a brave new world of mental health care delivery that complicates these professional obligations. Indeed, one study of mental health clinicians in the U.S. found that one-fifth to one-half reported using un-secure methods of electronic patient communication, depending on the medium (Elhai & Hall, 2015), and a study by Venville et al. (2021) found that Australian mental healthcare providers at one organization were much more sensitive to their clients' perceptions of safety and privacy in their *physical* spaces during the fall of 2020 than their *virtual* ones. This may have been because their clients rarely brought up cybersecurity concerns, instead entrusting their providers to manage privacy risks, and thus creating a potential blind spot (Venville et al., 2021).

Meanwhile, according to Priebe and McCabe (2008), the most critical component of successful therapeutic relationships and communication is *engagement*: both parties must connect with one another and continue to interact. Going a step further, Marchand (2015) argues that *shared presence*, a sense of a shared space cre-

ated through mutual attentiveness and mindfulness, is at the core of therapeutic relationships and enables the provider to feel compassion. Geller and Porges (2014) argue that therapeutic presence produces feelings of safety at a neurophysiological level for both mental healthcare providers and recipients, and this perception of safety helps the latter to open up and become vulnerable. Furthermore, Vandenberghe et al. (2019) define *therapeutic closeness* as, “being well positioned to touch (to affect) the other person and at the same time feeling within easy reach of that other” (p. 218). They argue that therapeutic closeness strengthens the effects that the therapist and client have on one another. In remote therapy, novel challenges arise in establishing therapeutic presence and closeness (as well as the therapeutic relationship more generally). These include the lack of nonverbal cues, technical difficulties, and otherwise suboptimal physical environments (Geller, 2020), although the specific obstacles providers face will vary depending on the communication channel employed. Given these challenges, questions remain about the extent to which clinicians are able to foster a sense of closeness in telehealth and the factors that predict success. Fortunately, a variety of theories have long existed within computer-mediated communication (CMC) to explore many of these same phenomena that may prove useful as the experience of connecting across space and time has permanently shifted attitudes and use of video conferencing in professional settings following the COVID-19 pandemic.

Balancing Privacy & Disclosure

Communication privacy management theory, or CPM (Petronio, 2002), has appeared in numerous studies looking at communication between healthcare providers and recipients (e.g., Lewis et al., 2011; Petronio et al., 2013; Pietkiewicz1 & Włodarczyk, 2015) and the disclosure of personal health information online (Jin, 2012). The theory expands upon the dialectic tension between openness and closedness in relationships (Altman et al., 1981) and elaborates upon Altman’s boundary metaphor distinguishing public and private information, or information that is shared between relational partners and that which is held only by one party. CPM posits that all parties are jointly tasked with controlling the information that is exchanged, and they must collectively manage the boundary around this information through the process of boundary coordination (Petronio, 2002). We focus on inclusive boundary coordination, which specifies a power imbalance between the two parties involved (Petronio, 2002), given that, in therapeutic relationships, the therapist has control over the client’s personal information but not the reverse.

According to CPM, privacy rules are determined not only by core criteria such as one’s culture, but also by catalyst criteria, or unstable contextual factors within the social and physical environment (Petronio & Durham, 2015). Both the social and physical context of the patient-provider relationship have changed considerably in the last few years. Rather than operating in a shared physical space, telehealth participants navigate a shared virtual environment while remaining in separate physical environments. In these hybrid spaces, digital technology may orient one’s attention towards or away from the physical space (McArthur, 2016). This can complicate communication and create novel privacy challenges; for example, third parties occupying one’s physical space may indirectly impact inter-

actions in virtual space. Thus, certain topics are at times off-limits in telemental health contexts, such as grievances about one's roommate, children, or partner who may be within earshot. Mental health professionals who lead therapy groups might have additional challenges to manage, such as outsiders overhearing intimate disclosures made by group members. In short, the new world of remote therapy poses an opportunity to revisit and press the robustness of CPM with the following research question:

RQ1: How are the boundary coordination strategies outlined by CPM used by mental healthcare providers given the catalyst criteria created by remote therapy?

Faced with these new challenges, people may experience boundary turbulence, or a loss of control over their personal information, despite the best efforts of both parties (Petronio, 2002). In addition to boundary turbulence due to intentional privacy rule violations, CPM posits that boundary turbulence can also result from mistakes such as errors in judgment or timing miscalculations (Petronio, 2002). Thus, although mental healthcare professionals have an obligation to protect clients' privacy according to their code of professional ethics and the law (American Psychological Association, 2017; HIPAA, 1996), there may be moments where they accidentally cede control of clients' personal information. These accidents may be especially likely to occur in the unstable and uncertain context of telehealth where, for example, unwanted others could suddenly enter a client's space without the therapist's awareness and overhear sensitive information. To explore this possibility, we propose the following research question:

RQ2: Despite their efforts at boundary coordination, what are providers' experience of boundary turbulence in telemental healthcare contexts?

Feeling Close from a Distance

Another aim of this research is to understand how mental health professionals navigate the tension between connectedness and physical separation in remote therapy. One theory within the computer-mediated communication literature that can guide this tension is electronic propinquity or TEP (Korzenny, 1978), insofar as it explains how people can have intimate, satisfying, and productive interactions across space and time. Electronic propinquity describes the sense of closeness or presence that people may perceive when communicating with a partner who is physically separated from them (Korzenny, 1978). This sense of closeness emerges through the interplay of individual, technological, and contextual factors (Korzenny, 1978). To-date, electronic propinquity theory has been used to describe perceptions of closeness in computer-mediated contexts between group members (Korzenny & Bauer, 1981; Walther & Bazarova, 2008) as well as family members and close friends (Kluck et al., 2021). According to TEP, a turbulent environment is the catalyst necessary for people to utilize new forms of communication technology in the first place (Korzenny, 1978). In keeping with this, the pandemic very much created turbulence and altered the conditions and expectations of the therapeutic environment since then (Whaibeh et al., 2020).

The extent to which mental healthcare providers and clients perceive a sense of electronic propinquity may depend on a range of factors, including channel bandwidth, freedom of channel choice, and digital skills. Some early comput-

er-mediated communication scholars argued that face-to-face communication is *objectively* highest in bandwidth, followed by video conferencing, and then by audio-only (e.g., Ryan, 1975). In contrast, Korzenny (1978) argues that it is *perceived* bandwidth of a channel that increases propinquity. TEP further argues that people may experience greater propinquity when they perceive fewer available channels of communication at their disposal (Korzenny, 1978). More specifically, people should find a lower bandwidth channel less satisfactory when they believe a higher bandwidth channel is available compared to when higher bandwidth channels are unavailable (Korzenny, 1978). Many people perceived fewer choices between channels throughout the pandemic—especially during the early months—because it was deemed unsafe or socially unacceptable to interact in most face-to-face contexts. Thus, although face-to-face interaction was technically possible, people might have perceived greater propinquity over videoconference during this time because face-to-face interaction was generally unavailable to them. In this study, we explore whether mental healthcare providers’ perceptions of bandwidth and channel choice affect perceived propinquity.

TEP also proposes that having better communication skills is associated with more propinquity. Moreover, according to Walther and Bazarova (2008), people’s perceptions of the communication skills of their interlocutors moderate the effects of bandwidth on electronic propinquity. The theory conceptualizes communication skills as one’s communicative competence in a given medium; this definition encompasses more general social skills as well as medium-specific skills (Korzenny, 1978; Korzenny & Bauer, 1981). However, experimental tests of TEP have measured more general social skills (e.g., social sensitivity, emotional control, expressivity; Korzenny & Bauer, 1981; Walther & Bazarova, 2008) while neglecting medium-related digital skills, which may exert an independent effect on electronic propinquity. Medium-related digital skills refer to the ability to operate and navigate hardware, software, the internet, and other applications (van Deursen & van Dijk, 2010). To achieve a sense of propinquity in their telehealth interactions, patients and providers might require the medium-related skills to access and utilize technologies for videoconferencing, scheduling appointments, making electronic payments, or accessing medical records, for example. Therefore, in our last research question, we broaden propinquity theory to consider the effects of medium-related digital skills. Because it is challenging to reliably assess one’s own communication skills (Korzenny, 1978), we focus only on how providers’ experiences of electronic propinquity were shaped by their perceptions of their telehealth clients’ digital skills.

RQ3: How do issues of bandwidth, channel choice, and digital skills affect mental healthcare providers’ perceptions of electronic propinquity while practicing remotely?

Method

To address the research questions presented above, we conducted an IRB-approved study involving semi-structured interviews via Zoom teleconference with twenty mental healthcare providers who had treated clients remotely during the pandemic. Data was collected from May to August of 2021. Most participants had been working remotely from their homes for at least a year, although a few partic-

ipants had begun a new common hybrid work approach, seeing some patients in person and some remotely.

Participants

Mental health professionals were recruited using a combination of purposive sampling and snowball sampling. Several local mental health organizations near Santa Barbara, California were contacted via email and invited to participate in the study. Clinicians in other parts of California were also contacted directly through the American Psychological Association website, as were a handful of mental health organizations in New York City.

The final sample included 20 therapists from a diverse range of personal and professional backgrounds (see Table 1). While some had a private practice, others worked for group practices, health clinics, telehealth platforms, elementary schools, and the department of Veteran's Affairs (VA). Eight of the twenty professionals interviewed reported experience with telehealth prior to the pandemic. Although the sample skews heavily female, this reflects the demographics of therapists in the US (Zippia, 2022).

Procedure and Interview Protocol

Mental health professionals were invited to participate in an interview study about their experience practicing remotely during the pandemic. After providing their informed consent to partake in the study, participants were provided a link to a private Zoom video conference. As an introduction, participants were asked questions about their general professional experience (e.g., *How long have you been in your profession?*) and their overall experience conducting therapy virtually (e.g., *What was the transition like to virtual or remote therapy?*). To address the first two research questions, participants were asked about the strategies they used to manage privacy boundaries with clients while remote (e.g., *Do you and your client use any strategies to ensure that the conversations you have remotely remain confidential?*) and the privacy challenges they had encountered with telemental health (e.g., *Have you or any of your patients experienced any privacy violations or privacy-related challenges during your virtual therapy sessions? How did you resolve these issues?*). To address the third research question, we asked participants about their perceptions of electronic propinquity (e.g., *How close do you feel to your virtual therapy patients?*) and their clients' media-related digital skills (e.g., *Generally speaking, how would you rate your patients' ability to use technology to communicate with you?*). We inferred bandwidth and channel choice perceptions from participants' responses to questions about their use of technology for telehealth and how telehealth compared to in-person therapy (e.g., *What media/platform(s) do you prefer to use with your patients, and why? How often do you experience technology issues during your sessions? In what ways are your virtual interactions similar or different to those you had in person?*). We looked for mentions of the ability or inability to communicate certain information over particular channels as evidence of bandwidth, and we looked for beliefs about the availability or unavailability of particular channels as evidence of channel choice. Interviews lasted between 30-45 minutes, and participants received a \$20 gift card upon completion.

Table 1.
Descriptive Information on Research Participants

#	Title	State(s) practicing	Professional setting	Specialty	Experience (Years)	Prior telehealth experience	Gender
1	Clinical social worker	CA	Group practice	College students, domestic abuse survivors	20	No	F
2	Psychotherapist	CA	Group practice	Indian/Southeast Asians	1	Yes	F
3	Psychotherapist	NY, CT	Group practice, Telehealth platform	Affective disorders, CBT	10	No	F
4	Somatic psychologist	CA	Group practice	Blind community, graduate students	Not reported	Yes	F
5	School-based therapist	CA	Elementary school	Students in pre-K through grade 6	2	No	F
6	Clinical social worker	CA	Hospital/clinic, Private practice	Emergency rooms patients, couples	25	No	F
7	Psychotherapist	CA	Group practice	Families & couples, anxiety, trauma	Not reported	No	F
8	Clinical social worker	CA	Private practice, Hospital/clinic	Adults & teens, families, Medicare/Medicaid recipients	3	Yes	F
9	Clinical social worker	CA	Group practice	Spanish speakers, court-mandated therapy, CBT, anxiety, depression	3 or 4	No	M
10	Clinical social worker	CA	VA	Homeless veterans	35	No	F
11	School-based therapist	CA	Elementary school	Students in kindergarten through grade 6	5 or 6	No	F
12	Clinical social worker	CA	Hospital/clinic	Medi-Cal & Medicare recipients, Native Americans	4	No	F
13	Meditation coach	CA	Group practice	Meditation, chronic pain, depression, addiction, insomnia	4	Yes	M
14	Psychotherapist	NY	Group practice	CBT, mood disorders, depression, anxiety, OCD, eating disorders	1.5	No	F
15	Marriage & family therapist	CA	Private practice	Relationships, grief/loss, anxiety	7	Yes	F
16	Marriage & family therapist	CA	Private practice, Hospital/clinic	Adults, couples	2	No	F
17	Clinical social worker	CA	Hospital/clinic, Telehealth platform	PTSD, bipolar depression, anxiety, welfare to work program participants	5 or 6	Yes	F
18	Clinical psychologist	CA	Private practice	Adults, teens, anxiety, autism	5	Yes	F
19	Clinical psychologist	CA	VA, Private practice	Older adults	2	No	F
20	Psychoanalyst	CA	Private practice	Trauma, gender diversity	8	Yes	F

Data Analysis

Audio files from the interviews were transcribed using Temi, a commercial transcription service that uses artificial intelligence to produce highly accurate transcripts. The first author conducted a reflexive thematic analysis following the procedure outlined by Braun and Clarke (2006) using Atlas.ti. Because this thematic analysis was theoretically driven rather than inductive, initial codes were derived that addressed specific research questions and largely reflected the concepts outlined by TEP and CPM (Braun & Clarke, 2006). After the initial review, codes were organized into thematic categories; for example, codes such as *distractions*, *presence of others*, and *turning on/off camera* were integrated under the theme of participants *requesting modifications* of their clients' therapeutic settings. A final summary review of the analysis was conducted to ensure that themes were cohesive and exhaustive of the data provided.

Results

Communication Privacy Management

The first research question asked about the boundary coordination strategies that mental healthcare providers engage in while practicing remotely as a result of the catalyst criteria created by the pandemic. Mental health professionals reported using a variety of strategies to help clients maintain control of their personal information (see Table 2), many of which reflect the unique privacy challenges that accompany the use of an audio-visual communication channel; specifically, this involved securing the privacy of both partners' physical environments as well as their shared virtual environment.

Table 2.

Privacy Boundary Coordination Strategies Used by Telemental Healthcare Providers

	Strategy	Examples
Strategies for Shared, Virtual Space	Selecting secure platforms	Using HIPAA-compliant videoconferencing software, encrypted messaging services
	Providing security warnings	Reminding client that a back-up platform/channel (e.g., phone, non-HIPAA-compliant platform) is less secure, providing a privacy disclaimer at the bottom of emails
	Establishing rules & agreements	Providing an informed consent form for telehealth, establishing a shared set of rules and expectations for group members to follow
Strategies for Independent, Physical Spaces	Selecting & modifying their setting	Finding a quiet and secluded location (e.g., their bedroom or car), putting in headphones, changing one's background (physical or virtual)
	Inquiring about one's setting	Asking client whether anyone is around and if they are somewhere they can talk, asking for address in case of emergency
	Requesting setting modifications	Asking client to move to another location, switch to another platform/channel, turn their camera on/off or reposition, reschedule
	Monitoring and adapting	Avoiding certain topics or pausing when other people may be around, remaining vigilant throughout conversation

Boundary Coordination Strategies for Shared, Virtual Space

First, with respect to the shared virtual environment, participants who had the opportunity to select a telehealth platform were usually careful to choose one that was deemed secure (i.e., HIPAA-compliant). In fact, about half of participants explicitly referenced HIPAA guidelines when describing the media channels or platforms they used. Participants also described carefully choosing secure platforms for communicating between sessions, such as encrypted email or messaging platforms. Furthermore, participants mentioned using a couple of strategies to alert their clients to potential privacy and security risks and to encourage them to comply with telehealth best practices. One such strategy was the insertion of security warnings into their communication with clients. For example, a couple of participants reported that when technology-related issues forced them to switch channels (e.g., switching from HIPAA-compliant Zoom to FaceTime or phone), they would warn clients that these channels might be less secure. Another participant included a disclaimer at the bottom of emails to remind patients that their messages may not be completely private.

Additionally, participants reported establishing rules and agreements to set privacy boundaries and expectations with their clients. Eight of the interviewees stated that they had obtained informed consent from their clients concerning the risks associated with telehealth. Some had created these policies from scratch, whereas others had adapted them from sources such as the APA. One participant who conducts a therapy group explained that she reviews policies with group members:

So that's a pretty formal list that we have written up that outlines group members' expectations that they're expected to uphold...And then obviously one of the main things we stress is the importance of confidentiality...keep the identities of other members completely private, and also make sure that they're in a space that is suitable for group.

In this case, a group rather than a dyad was responsible for boundary coordination.

Boundary Coordination Strategies for Separate, Physical Spaces

In addition to curating their virtual settings, mental health professionals carefully selected and modified their physical settings as well. This involved creating a quiet, comfortable, and professional environment appropriate for telehealth. A couple of participants who shared their space with others used headphones or white noise machines to ensure that co-present others could not overhear what their clients were saying.

Nearly all participants in this study reported that their clients also made efforts to ensure physical privacy, selecting secluded locations such as their bedrooms, offices, cars, or even walk-in closers from which to join their therapy sessions. However, mental healthcare workers did not always find their clients in a suitable environment or were uncertain about it. In these circumstances, they reported using a few different strategies to ensure client privacy and comfort appropriate for a mental healthcare setting. About half of participants reported making explicit inquiries into clients' settings. This commonly involved asking people for

their location in case of emergency, asking if they were comfortable, or confirming that no one else was present. Several participants reported requesting that clients modify their settings if they were not suitable, such as asking them to remove distractions or go to a quieter space. This strategy sometimes involved making technical changes, such as turning on one's camera or altering the camera angle to get a better look at someone's face, or occasionally switching to another platform or rescheduling if they were experiencing technical difficulties or other disruptions. Moreover, participants generally stressed the need to remain vigilant by continuing to monitor clients' settings throughout a session and adapting as needed. For instance, one provider mentioned avoiding sensitive topics when she was unsure where a client was or who else was around, and another mentioned pausing when other people appeared in the background. According to participants, clients used this strategy too, communicating cautiously when other people were nearby—one even reported using a code-word to indicate when the client's abusive partner was around and might overhear them.

A summary of the privacy boundary coordination strategies described above can be found in Table 2. In short, mental healthcare professionals reported using a variety of strategies to preserve privacy in their physical and virtual environments.

Boundary Turbulence

The second research question asked about the extent to which boundary turbulence, or the loss of control over personal information (Petronio, 2002), occurs in telemental healthcare. It is important to note that these professionals are trained to respect privacy rules and carefully handle sensitive information. Overall, participants felt that their privacy management strategies had been largely effective in maintaining their clients' privacy boundaries. Nevertheless, closer examination of the data indicates that on occasion, some participants did encounter boundary turbulence.

First, several participants mentioned that practicing remotely offered a unique vantage point into their clients' personal lives. In addition to getting a peek into clients' homes, a couple of mental health practitioners discovered an opportunity to learn more about clients' household members, hobbies, and interests. At the same time, some clients were also given a glimpse into the personal lives of their therapists. Although mental health professionals were careful not to allow family members to intrude into their physical spaces, some would find themselves revealing personal information as their pets or musical instruments made it into frame, for example, or if they appeared in an unfamiliar location while they were traveling. These generally benign, unintentional self-disclosures between mental healthcare providers and receivers did not reveal personal information that was sensitive enough to constitute boundary turbulence. Yet they certainly reframed traditional patient-provider privacy boundaries in mental healthcare settings. We propose the term *boundary elasticity* to describe such unanticipated yet harmless renegotiation of privacy boundaries. Boundary elasticity may be a useful addition to CPM in an era in which remote work has dramatically collapsed personal and private settings; we elaborate on this contribution further in the discussion.

Finally, we note that the primary circumstance in which more serious boundary turbulence did occur was in the presence of unwanted others. This was often

an issue for parents whose children were around and children whose parents were around. Mental health professionals found that the presence of children was often distracting for parents and might force them to reschedule. Roommates, spouses, or other family members could also threaten privacy in the context of telehealth. In the most serious cases, four participants reported having clients that were living with their abusive partners. One interviewee said that her client could not disclose the situation to her until the abuser had left the house. However, another participant who treated a victim of domestic abuse noted that she was not sure whether her client would have been able to access therapy at all if she had to travel outside of her house. Finally, some participants worried that the ability to find a private location was a greater challenge for more disadvantaged individuals or those of lower socioeconomic status, which would present additional barriers to treating marginalized communities. Nevertheless, a social worker whose clientele were welfare recipients reported that with patience and flexibility, she had been able to continue treating patients despite the skepticism of her colleagues. In sum, it appears that despite the largely uncontrollable circumstances, boundary turbulence in telemental health arose rarely, and unintentional information disclosure was usually not unpleasant when it did occur.

Electronic Proximity

The third research question asked about the factors (i.e., bandwidth, choices between channels, digital skills) that affect mental healthcare providers' perceptions of electronic proximity while practicing remotely, where bandwidth and channel choice are established TEP factors, and analysis of digital skills is a possible extension of the theory. Before reviewing each of these in greater detail, it is worth noting that every participant reported using some type of videoconferencing platform to treat clients remotely, but there was considerable variation in the perceptions of electronic proximity that occurred with their clients. To better understand the factors that might shape these reactions, we review mental healthcare providers' perceptions of channel bandwidth, choices between channels, and their clients' digital skills as each played a role in shaping client-provider electronic proximity. We also distinguish when and how TEP predictions manifested differently during periods of required distancing and afterward when remote care was somewhat optional.

Bandwidth

The data revealed support for the TEP prediction that greater perceived bandwidth is associated with greater electronic proximity when comparing perceptions of alternate telehealth channels. Most videoconferencing platforms offer a choice between audiovisual and audio-only communication. However, most participants said that they expected clients to have their cameras on, and if they were off, they would request that they turn them on for safety reasons (i.e., to know where clients are if they pose a risk to themselves or others). Moreover, one participant mentioned that she asks clients to show their true surroundings rather than use a virtual background to presumably maximize channel bandwidth. Thus, therapists generally seemed to perceive the highest bandwidth when using audiovisual channels without virtual backgrounds, and they felt closest to telehealth

clients in these settings, supporting TEP.

When comparing perceptions of telehealth to in-person care prior to the pandemic, the data revealed mixed support for the TEP prediction that in-person interactions should yield greater propinquity due to the fact that they provide greater perceived bandwidth. A few interviewees mentioned that it took them longer to feel close to their telehealth clients and that it was difficult to perform certain therapeutic techniques without physical touch. As one participant explained, “It’s still not the same as being in someone’s presence because there’s energy that, that is there when you’re in a room with a person that...you’re missing out on when you’re on the Zoom.” Such experiences align with TEP: when people feel that virtual interactions lack certain information present during in-person interactions, they perceive a lower degree of closeness. Many other participants, however, reported no differences in closeness between their virtual and face-to-face encounters. In these cases, therapists either did not perceive lower bandwidth over telehealth or, counter to TEP, they did not experience lower propinquity despite perceiving lower bandwidth over telehealth. The account of one participant, who noted the lack of physical touch in both in-person therapy and telehealth, reflects the former possibility: “We’re sitting far away anyways. So, and then all the work that I need to get done is getting done anyways and we do it through speaking. So holding space is again done through the heart...So I don’t know if there’s a big difference.”

The data did not support the bandwidth prediction of TEP once some practitioners had begun seeing clients in person again following the initial COVID-19 lockdown. For example, one participant who had begun transitioning back to in-person meetings described the experience as awkward, which we interpret as evidence of low propinquity. Another participant described deciphering clients’ nonverbals while wearing face masks as frustrating and exhausting, which made it difficult to connect with the client. In sum, our data revealed mixed support for the TEP prediction that communicating with greater bandwidth is associated with greater propinquity. Although this appeared to be true across different digital platforms, there was some evidence that face-to-face communication was not always the optimum means of creating a sense of closeness between mental healthcare providers and recipients.

Channel Choice

The data revealed support for TEP in that having more choices between channels was often associated with less propinquity—especially for those using lower-bandwidth options. Despite usually feeling closer to clients using channels perceived as higher in bandwidth (i.e., audiovisual versus audio-only), 16 of the 20 participants in the study reported using the phone or another audio-only channel if an audiovisual channel was unavailable (e.g., when a client’s surroundings were too chaotic, someone’s internet connection was weak, or other technology-related issues interfered with videoconferencing). Participants reported finding lower-bandwidth channels adequate in these instances. Furthermore, one mental healthcare provider employed by a telehealth platform used text messaging as a primary form of communication with some clients who were using the platform on a trial-basis. As predicted by TEP, she noted that it was challenging to feel close to clients who would forego a higher bandwidth option for a lower (albeit, free)

one. These findings are consistent with the TEP prediction that channels perceived as having lower bandwidth are associated with less propinquity, especially when higher-bandwidth channels are available.

Another experience reported by one clinician provided additional, yet somewhat unconventional support for the channel choice proposition of TEP. One mental healthcare provider, who has been blind since birth, said that she prefers to have cameras off during her sessions. She perceives less propinquity when her clients have their cameras on than she would if their cameras were off because, in the former case, a higher bandwidth channel is available to her clients but not to her. Her experience is comparable to the conceptualization and operationalization of channel choice in the experiment by Walther and Bazarova (2008) as the number of media channels present in an interaction, regardless of whether they are available to each participant (i.e., mixed-media versus single media groups). As our participant put it,

I'm used to people seeing me and not seeing them and...there being an imbalance there, but with the camera, there was more kind of self-consciousness that came into it with like, what's the angle? What are they seeing? You know, what are they not seeing?...Cause we don't have that visual feedback to know what others are getting at all.

This provider also felt that she was perhaps better equipped to treat clients by phone compared to most others in her profession because she was used to picking up on the nuances in people's voices. In doing so, her refined communication skills compensate for the effects of lower channel bandwidth on perceived propinquity as TEP predicts. This example also points to the role of individual differences, such as differences in physical ability, when it comes to perceptions of electronic propinquity.

Issues of channel choice became more complicated once COVID-19 vaccinations were well underway and some practitioners began seeing clients in person again. The uncertain and fickle nature of the pandemic and slow return to normalcy appear to have made it difficult to gauge which alternative modalities were available, appropriate, and safe for mental health treatment. These challenging circumstances may have led people to experience greater propinquity using lower-bandwidth options for therapy appointments despite the availability of higher-bandwidth channels. These findings suggest that perhaps there is an upper limit to the amount of turbulence in an environment for TEP to apply. Somewhat surprisingly, when asked whether they planned to continue practicing remotely after the pandemic was over and it was safe to practice in person again, four said that had no plans to go back to practicing in person, 12 said that they would offer both remote and in-person options, two said that they would have defer to organizational policies but preferred remote care, and two did not provide a clear response to the question. In short, unlike what Venville et al. (2021) found in their study, some mental health professionals may choose to communicate using lower-bandwidth channels even when higher-bandwidth channels are available and safe to use. For some participants, the choice to continue offering telehealth involved propinquity: either they did not perceive in-person meetings as higher in bandwidth when they resumed seeing clients in person, or, in contradiction to TEP, lower bandwidth over telehealth was not associated with less propinquity. However,

three-quarters of participants mentioned greater convenience and easier access to therapy as advantages of telehealth, indicating that this factor was perhaps more important than propinquity in their decision to continue with telehealth.

Digital Skills

Finally, the last portion of RQ3 explored how telehealth patients' medium-related digital skills may shape providers' experiences of electronic propinquity. Indeed, some participants did feel that the digital skills of their patients impacted propinquity. In these cases, age seemed to be a primary predictor of skills, which is consistent with research on digital equity (Hunsaker & Hargittai, 2018). For example, medium-related digital skills seemed to be an issue for the two participants who worked for the VA, where many clients are older adults. One described how the experience of helping clients navigate the VA-supplied iPads and videoconferencing software, "made me realize how much we take for granted about literally teaching them. Like when we say, oh, you know, swipe left and they're like, what does that even mean? I'm like, literally press your finger and then move it to the, like, move it from right to left." The other participant who worked for the VA, a clinical social worker, echoed a similar sentiment with respect to her older clients. Forced to spend time teaching clients to operate the hardware and software necessary for telehealth, these participants had less time to devote to connecting with them and were less able to transcend their physical separation. Thus, clients' digital skills did seem to influence their telehealth providers' ability to feel close to them in some cases. This finding is a novel addition to existing TEP research operationalizing communication skills as more general social skills (Korzenny & Bauer, 1981; Walther & Bazarova, 2008). Our findings suggest that social skills may be less relevant to perceptions of electronic propinquity when medium-related digital skills are lacking.

Discussion

Insights from interviews with mental health professionals who treated clients remotely during the COVID-19 pandemic reveal the strategic and nuanced ways in which they adapted their communication practices to their physical and virtual spaces simultaneously. It provides novel theoretical implications for both communication privacy management theory (CPM) and the theory of electronic propinquity (TEP), and it informs best practices in increasingly common telemental healthcare settings.

First, findings illustrated several strategies to co-manage privacy given the catalyst criteria introduced by the pandemic (RQ1), which include selecting secure platforms, modifying one's setting, and monitoring and adapting as needed. This finding helps fill a gap in CPM research by examining privacy management strategies used in a videoconference setting, where interlocutors must cultivate a sense of privacy in their separate physical environments as well as their shared virtual environment. Second, this study identified some of the rare situations in which boundary turbulence occurred in the context of telemental health (RQ2). Moreover, this study demonstrates that losing control of privacy boundaries is not always a negative experience as the term boundary turbulence might insinuate—in many cases, mental health professionals and their clients enjoyed the un-

planned glimpses into one another's personal lives while meeting remotely. To better capture this nuance, we have proposed the novel term *boundary elasticity* to describe the serendipitous stretching of relational privacy boundaries. Future research might use this concept to understand how unintentional self-disclosure might help create intimacy and strengthen other types of relationships.

We also explored the factors that shape propinquity, or a sense of closeness between patient and provider (RQ3). Our data provide mixed support for the propositions of the theory of electronic propinquity and add insights to expand this theory in the future. As predicted by TEP, when mental health professionals stopped seeing clients in person due to the pandemic, greater perceived bandwidth and fewer choices between channels were generally associated with greater feelings of closeness to their telehealth clients. These findings seem to contradict those from recent studies by Hall et al. (2021) and Kluck et al. (2021) that communicating with family and friends via an audiovisual channel during the pandemic was associated with feeling less connected to others compared to communicating via a text-only channel. Future research is needed to identify factors (e.g., the nature of the relationship between interlocutors, Zoom fatigue, seeing oneself on screen) that modify the relationships specified in TEP.

Not all our data supported TEP unequivocally, however. Some participants said that they felt closer to their clients before the pandemic and transition to telehealth, whereas others felt equally close to their clients when treating them in person versus remotely. Moreover, when in-person therapy once again became an option, many participants and their clients were hesitant to return to meeting face-to-face given that they were uncertain about its safety and had grown accustomed to meeting remotely. Therefore, under certain precarious circumstances, the importance of propinquity may pale relative to other factors (e.g., convenience, safety risks), and the superiority of higher bandwidth channels predicted by TEP may no longer hold. Interestingly, all participants in this study said that they planned to continue offering remote therapy in some capacity after the pandemic was over and they could return to practicing in person. Thus, it is possible that with enough experience, people may begin to feel sufficiently close when using lower-bandwidth communication channels. Additionally, there may be factors that are more important than closeness when it comes to delivering mental health treatment, such as comfort or convenience.

Finally, in an expansion of TEP, participants reported feeling less close to clients with lower levels of medium-related digital skills. This finding demonstrates that in addition to more traditional communication skills (i.e., social skills), digital skills might also be a factor that affects perceptions of electronic propinquity. As well as considering the role of communication skills in perceptions of propinquity, this research suggests that physical ability is another factor should perhaps be incorporated into mechanistic understandings of propinquity. As demonstrated by the experiences of a blind participant, when communication partners differ in their physical abilities, they might feel closest when using a media that equalizes the amount of audio-visual information that both partners receive. Given these findings, future TEP research could incorporate measures of one's digital skills and physical ability to use technology in addition to measures of social skills.

Implications for Practitioners

These findings challenge conventional ideas about the delivery of mental health treatment. Namely, this study demonstrates that privacy issues are largely preventable. Moreover, many mental healthcare providers report feeling very close to their clients, and nearly all participants planned to continue practicing virtually or using a hybrid format after the pandemic was over. Thus, with enough telehealth experience, mental health professionals can overcome the challenges associated with delivering care remotely. At the same time, one cannot ignore the fact that not everyone seeking mental health treatment has the same access to and ability to use digital technology. Roughly one in four Americans lack home broadband access, and 15% are smartphone dependent (Perrin, 2021). Furthermore, those of lower socioeconomic status experience more challenges maintaining access to digital technology, which can disrupt their access to healthcare (Gonzales et al., 2016). In addition, it is necessary for all communicators to develop their digital skillsets if they wish to manage their digital privacy effectively and achieve a high degree of electronic propinquity. Individuals can take the initiative to hone their digital skills on their own, but employers and public-serving institutions should expand their efforts to promote digital literacy and improve people's digital skills. Finally, it is important to recognize that based on these findings, telemental health may not be the best option for everyone, and in-person treatment is better suited to certain types of people, such those with limited experience with technology and those who are unable to secure a private physical space.

Limitations & Future Directions

Finally, it is important to acknowledge the limitations of this research. First, this study was conducted with a small, non-representative sample of mental health practitioners, and therefore the results of this study are not generalizable. Most participants resided in California, identified as female, and primarily used videoconferencing to meet with their clients rather than other media. Participants' ethnicity was not recorded in this study, although several participated noted that they worked with minority groups or marginalized populations, or that their own ethnic identity helped them connect with clients. This study is further limited in that it only interviewed mental healthcare providers, not recipients. Although many participants reported feeling very close to their telemental health clients, it is unknown whether their clients shared this sentiment. Future work should examine the factors that affect perceptions of propinquity among telehealth clients.

Another limitation to our study was that we did not ask participants directly about their perceptions of the bandwidth of various telehealth channels. Therefore, we cannot conclude with certainty whether differences in propinquity were associated with differences in perceived bandwidth.

A final limitation to note is that this research is predicated on the assumption that mental healthcare providers and recipients must perceive a high degree of closeness to conduct their work effectively and for recipients to engage in sufficient self-disclosure. However, this is not necessarily the case in all therapeutic relationships. For example, Daly and Mallinckrodt (2009) argue that a greater therapeutic distance is sometimes necessary to treat clients with certain types of attachment styles, and in other cases clients themselves prefer greater distance in

the therapeutic setting. As telemental health delivery becomes a more permanent fixture in the healthcare landscape, continued research will be needed to optimize comfort and care in the client-provider encounter.

Conclusion

The results of this study contribute to CPM theory by highlighting the ways that mental healthcare providers and recipients may use computer-mediated communication, particularly videoconferencing which has proliferated since the pandemic, to generate serendipitous self-disclosure while finding ways to create a safe virtual and physical space to share personal information. Furthermore, this study expands TEP by considering the roles of digital skills and physical ability, and it adds to mounting evidence that higher bandwidth channels are not always perceived as superior during unique and complex circumstances such as the pandemic. In short, it is but one study that can help bring CMC theory up to speed amidst a rapid revolution in everyday communication practices. In doing so, we have underscored ways that those theories hold, and ways in which they may need to be extended to better capture constantly evolving communication phenomena.

The pandemic has been coming to an end, but telemental health services will likely continue for those patients and providers who prefer it (Duncan et al., 2020). This research challenges outdated notions that close therapeutic relationships, and relationships more generally, cannot develop from a distance and foster intimate self-disclosure in the face of privacy challenges. Indeed, navigating tensions and contradictions is an inherent part of all relationships, not just those discussed in this study. Our aim has been to identify theoretical evolutions, but also highlight some best practices that might be useful to mental healthcare providers going forward, along with policy makers and other stakeholders that are continuing to establish norms and standards in this space.

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