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TECHNOLOGY USE IN COUNSELLING PRACTICE: AN ACTOR NETWORK THEORY REPORT

BY

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The undersigned certify that they have read the thesis entitled

**TECHNOLOGY USE IN COUNSELLING PRACTICE:
AN ACTOR-NETWORK THEORY REPORT**

Submitted by

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In partial fulfillment of the requirements for the degree of

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Dedication

To my husband Tsunaki, for everything.

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Thank you to my participants for all of your fascinating contributions. Without you there would be no report and no reason to write it.

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Abstract

The purpose of this actor-network theory report on technology use in counselling practice is to present a snapshot of how telecommunications technology is being used in counselling now and to present opportunities for counsellor responses to technology that could benefit clients, counsellors, and counselling practice. Voices of actors in the network were collected from interviews with counselling professionals, documents from organizational actors, and traces of technological actors present throughout the network. Technology use was presented as an integrated, routine, and often invisible component of contemporary counselling practice. Themes of responsibility, trust, and the unreliability of technology were prominent; these areas can be addressed intentionally and proactively to develop technology use in counseling practice.

Keywords: technology, counselling practice, actor-network theory

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Chapter 1. Introduction

> SOCRATES: . . . But when they came to letters, This, said Theuth, will make the Egyptians wiser and give them better memories; it is a specific both for the memory and for the wit. Thamus replied: O most ingenious Theuth, the parent or inventor of an art is not always the best judge of the utility or inutility of his own inventions to the users of them. And in this instance, you who are the father of letters, from a paternal love of your own children have been led to attribute to them a quality which they cannot have; for this discovery of yours will create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves. The specific which you have discovered is an aid not to memory, but to reminiscence, and you give your disciples not truth, but only the semblance of truth; they will be hearers of many things and will have learned nothing; they will appear to be omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality.
>
> PHAEDRUS: Yes, Socrates, you can easily invent tales of Egypt, or of any other country. (Plato, 1999, locations 1395-1402)

Study Significance and Purpose

There is a recognized need for more accessible, more affordable mental health care in Canada (Mental Health Commission of Canada [MHCC], 2017; Rojubally et al., 2013). In 2012, 1.6 million Canadians who responded to Statistics Canada's Canadian Community Health Survey reported that their mental health care needs were unmet or only partially met in the previous year (Sunderland & Findlay, 2013). The most reported unmet need was for counselling services: 36% of respondents answered that their counselling needs were unmet or partially met. Barriers to accessing mental health care include availability of resources, particularly in rural areas, wait times, and costs (MHCC, n.d., 2017). MHCC (n.d., 2014) endorsed the increased use of telecommunications technology for providing mental health care services as a remedy to the challenges for clients seeking mental health care.

However, controversy surrounds the topic of technology use in counselling literature. Some authors share MHCC's vision of technology facilitating client access to counselling services (Imel, Caperton, Tanana, & Atkins, 2017) and creating new and meaningful ways of working in mental health care (Andersson, 2018; Imel et al., 2017), while others are concerned about negative impacts on the counselling relationship and the therapeutic process (Russel, 2018; Vincent, Barnett, Killpack, Sehgal, & Swinden, 2017). Relatively little is known about how its use impacts counsellors and clients and whether increased use of technology in mental health care can live up to the hopes of MHCC (Stricker, 2018; Wozney et al., 2017). Yet technology is being used by counsellors (Gleuckauf et al., 2018),

who may be motivated by its convenience, by client demand, by their own preferences, or by government and agency policies (MHCC, 2014; Russel, 2018). If counsellors use technology, it is important that they understand how it affects their work with clients (Harris & Birnbaum, 2015; Lustgarten & Elhai, 2018; Russel, 2018). Understanding technology's impact on counselling practice would allow counsellors to reflect on their technology use and intentionally respond to opportunities and challenges presented by using technology. The purpose of this study is to present a snapshot of how telecommunications technology is being used in counselling now and to uncover opportunities for counsellor responses to technology that could benefit clients, counsellors, and counselling practice.

Starting Points

My experience with telecommunications technology use in counselling.

This study had three starting points. The first was a paper I wrote during the last term of my counselling practicum. I completed my practicum at two sites: One was the single-session walk-in counselling program of a county government office and the second was from my practicum supervisor's tiny private practice office. My practicum supervisor was rarely able to provide space for me to see clients, so she suggested that I take the opportunity to learn about video counselling, which she used extensively in her practice. For the final paper of my practicum course, I was meant to write about the counselling models I used. However, I believed that the technologies I used, both video counselling and the single-session walk-in model, shaped my practice more than the theories that informed the counselling work I was doing, so wrote about that instead. I became curious about the impact

of technology on the work of other counsellors, and my technology-loving thesis supervisor suggested that I work with that question for my thesis.

Concerns about new technologies are not themselves new. The second starting point was a discussion I had with my thesis supervisor about the controversy surrounding technology use. I was reminded of Socrates' caution against writing in Plato's *Phaedrus*, quoted above. In the work, Socrates expressed the opinion that relying on the technology of writing would dull people's memories and their critical thinking abilities. Those who used the technology of letters could lean on the words of others or on thoughts of the past and thus lose the ability to think in the moment (Plato, 1999). Much of what is written about the use of new technologies in counselling practice is opinions about what the effects of technology on counselling, both positive and negative, might be: Like Socrates, "you can easily invent tales of Egypt, or of any other country" (Plato, 1999, location 1402). The effects of writing on human thought are arguably quite different from what Plato anticipated; it seemed likely to me that the predicted outcomes of technology use in counselling might be different from its effects in practice. I was interested in what I could learn about the future by investigating the effects of technology on counsellors and clients now. One of the first forms of my research question was: How is technology use impacting counselling practice?

Technology and methodology. Finally, my thesis supervisor also suggested that I find a methodology for my research that fit with a study of new technologies. As an undergraduate student, I had read about actor-network theory (ANT), which was developed for sociological studies of science and technology.

Revisiting ANT, I realized that it fit with what I wanted to do. I wanted to do qualitative research around technology use because I was interested in looking at people's experiences with technology and because relatively few qualitative studies existed in counselling technology literature (Darvell, Kavanagh, & Connolly, 2015). ANT is a descriptive methodology (Latour, 2005) and I was interested in looking at what is happening now with technology use in counselling. ANT is concerned with the impact of things on people, as well as the impact of people on things, which fit with my perception that the technology I used shaped my counselling practice.

Chapter 2. Theoretical Orientation

Actor-Network Theory

ANT is, despite its name, less a theory than a methodological approach or way of investigating and explaining associations and relationships between things in the world (Latour, 1996b, 2005). The core ontological claim of ANT is that reality is composed of *networks*: systems of associated things that act on and are acted upon by each other (Latour, 1996b, 2005; Law, 1992).

Networks. ANT's networks are distinct from technical networks: Rather than networks composed of similar objects working together in an organized manner, actor-networks are heterogenous and observable through transformations and tensions that run through them (Latour, 1996b; Law, 1992, Star, 2007).

Networks have no boundaries. Elements belonging to a network may be more intensely or more distantly associated, but as they associate with any number of other elements in different kinds of overlapping networks, it is impossible to describe a position outside of the network (Callon, 2007a, 2007b, Latour 1996b, 2005, Star, 2007). Everything is connected more or less directly to every other thing.

Networks are composed of relationships and associations and also of *work*. The flow of connection and transformation through a network produces meaning and action for its members. Without the circulation of work through a network, ideas and behaviours shift and associations between elements fall away (De Laet & Mol, 2007; Latour, 2005; Law, 1992).

Actors. An *actor* is any element of a network that acts upon other elements. Actors can be human or nonhuman. For example, individuals, groups, animals, objects, rules, and ideas can all affect the thought, meaning, and/or behaviour of others that associate with them (Latour, 2005; Nimmo, 2011, Star, 2007). Human actors are not given priority or preference in actor network theory; they and nonhuman actors impact their networks in the same ways. According to actor-network researchers, this is a controversial position (Jackson, 2015; Latour, 2005; Sayes, 2014). Nonhuman actors and actors share *agency* in the sense that they affect associated others (Law, 1992); this should not be confused with will or cognition, neither of which nonhuman actors require in order to enact their agency on the network (Sayes, 2014). Actors generally behave as *mediators*, changing action or information that they associate with rather than as *intermediaries* that passively receive and pass on effects of a network (Latour, 2005, 2007). This transformation enacts the agency of nonhuman actors. The underlying theory here is similar to McLuhan's (1964) "The Medium is the Message": actors carry cultural meaning as part of their existence which they pass on in all of their interactions. Actors can be more or less prominent in a network, but they are rarely neutral. When actors are introduced to a network, they will produce changes throughout the network, so this is particularly significant to studies of new technologies.

Research Paradigm

Actor-network researchers take a constructivist position, which is distinct from social constructivism (Latour, 2005). Reality is composed of networks: the

associations, relationships, and work among actors construct meaning and behaviour (Latour, 1996b, 2005; Law, 1992). Latour (2005) argued that social constructivism required the addition of a force named “the social” that was external to participants, objects, or groups who were studied and that was attributed greater agency than research participants. Not only is the external social unnecessary to explain network construction, but it ignores the agency of both nonhuman and human actors.

ANT was designed for research in sociological studies of science and technology in part to recognize the agency and awareness of people working in those fields. Scientists do real work, they are not unaware of the choices they make, and they are not puppets of the social (Callon & Latour, 1992; Latour, 1993).

ANT also allows for the reintroduction of nonhuman agency (Callon, 2007; Nimmo, 2011). Nonhumans exist as more than collections of externally imposed meanings and have real effects in the world: the movement of work through a network does not end at any given object of study. This will have implications that will only grow, given the influx of AI, big data, and machine learning, leading to semi-autonomous and autonomous (non-human) agents in health care.

ANT rejects the modern/postmodern dichotomy. Actor-networks are constructed, consistent with postmodern theory, and they are also real, a position associated with modernism (Latour, 1993, 2005). Latour (2004) emphasized that stating that things were constructed did not mean that they were any less important or that their effects were any less significant. He recommended that researchers

turn their attention from matters of fact to matters of concern: What is important to people? What are they doing? What impacts people's lives?

Why Use Actor-Network Theory?

ANT was originally designed for science and technology studies (Callon & Latour, 1992; Latour, 1993, 2005), which was my initial reason for looking into the methodology. It seemed like an appropriate fit for a report concerning technology use in counselling. As I read, I discovered further aspects that suggested ANT would be a good match.

Latour (2005) recommended times of controversy, when actors are in conflict and networks are rapidly changing, as the best points to investigate networks (see also Law, 2007; Venturini, 2010). When networks are stable, their effects become habitual, creating what Latour (2005) described as a black box. Work continues to flow through the networks, but when they are unchallenged and accepted as business as usual, it becomes difficult to identify actors' effects or to uncover actors' voices.

Currently, technology use in counselling is a controversial topic. In the literature, narratives of usefulness, convenience, and client needs and preferences (Imel et al., 2017; MHCC, 2014) are competing with narratives of ethical and legal concerns and the disconnection believed to be inherent in technology use (Harris & Birnbaum, 2015; Lustgarten & Elhai, 2018; Russel, 2018). Counselling and psychology professional bodies and regulatory bodies are also engaged in the controversy and their positions on internet technology use are still under development (Rojubally et al., 2013).

Moreover, much of the existing literature concerning technology use in counselling consists of either articles outlining what could or should be done, or surveys of what is currently being done, with little connection between the two. As ANT focuses on relationships and associations among actors, including texts, an actor-network report provides an opportunity to uncover connections and observe how research and practice impact each other.

Latour (2005) reframed the effects of networks on individuals as opportunities. Although people cannot avoid being impacted by the networks they belong to, being aware of how they are affected allows for reflection and the ability to respond intentionally to the opportunities networks present (Latour 2005, Moser & Law, 2007). Reflection and intentionality are valued by counselling psychologists and have been cited as components of competent counselling practice (Haverkamp, Robertson, Cairns, & Bedi, 2011; Wampold, 2014). Actor-network research in counselling psychology could contribute to counsellors' ability to reflect and act intentionally by describing opportunities presented by the networks they belong to.

ANT is a personal fit for me as a researcher. I am uncomfortable with the modern/postmodern dichotomy and I understand the world in terms of complex systems. I believe that people, things, and events have an objective reality and real effects on the world and that the ways that people understand their worlds result from meanings they inherit from the cultures (or networks) they belong to. I believe that looking at both (or all) sides of the ontology story is necessary to be an

ethical researcher and an ethical counsellor. This methodology fits with my values and beliefs.

Research Questions

Using ANT prompted me to shift the way I thought about my research question. Originally I wanted to know how technology use in counselling practice impacted counsellors and clients, but ANT directed me to think more broadly and less unidirectionally. There are more actors closely related to counsellors, clients and technology in the network, including regulatory bodies and government policies, and any actor has the potential to impact or change any other actor. Therefore, a more appropriate research question was: How is technology integrated with counselling practice?

To understand the specifics of what is happening around technology use in practice, there are several relevant subquestions:

1. What kinds of technology are counsellors using in their practice?
2. What are the barriers to technology use?
3. What are the benefits of using technology in counselling?
4. What opportunities exist now for intentional responses to technology in counselling?

I organized my review of the literature around preliminary answers to these questions, used them as the foundation for the questions I asked participants, and used them to structure the description of my findings. The last question is particularly important: knowing what opportunities are available can suggest possibilities for positive action by counselling professionals and for organizations

concerned with counselling and-mental health and can suggest directions for future research.

Definitions of Key Terms

- *Technology***:** Although telecommunications technologies are the main focus of this report (and the terms are used interchangeably unless otherwise noted), technology has a much broader meaning. Technology is applied scientific knowledge and thus includes not only the telephone and computer tools used by counsellors, but also counselling models, diagnostic systems and tools, and talk therapy itself (Frances, 2013; Health Quality Ontario, 2017).
- *Telecommunications technology***:** Technology related to telephones and to the internet. In the context of this report, offline computer technologies will be considered with this category because of their related effects and the relative rarity of their segregation from the internet. For example, electronic case notes may be stored only on a local hard drive, but they are much more likely to be transferred digitally at some time to another user (a supervisor or a client) or location (a server or another computer).
- *Counselling practice***:** All of the activity performed by counsellors as part of their work, including sessions with clients, out-of-session communications, scheduling, note-taking, and record-keeping,

Chapter 3. Literature Review

What Kinds of Technology Are Counsellors Using in Their Practice?

Current literature concerning telecommunications technology use in counselling tends to focus on new, interactive technologies, including video, text (SMS), smartphone, and web-based interventions.

Counselling using videoconferencing software resembles traditional face-to-face counselling (Harris & Birnbaum, 2015; Russel, 2018; Vincent et al., 2017). Clients and counsellors meet over a video platform and speak to one another, much as they might meet in an office. Skype appears to be the most commonly used software in videoconference counselling described in the literature (Elhai & Frueh, 2016; Imel et al., 2017; Russel, 2018), although there is no existing research concerning software use patterns among counsellors. Newer videoconferencing platforms designed for health interventions are advertised as providing more stable connections and more client privacy than Skype (Elhai & Frueh, 2016); further research is needed to determine whether these claims are true and whether counsellors are adopting these platforms.

Web and smartphone interventions take a number of forms, most of which are text-based. Counsellors and clients communicate over email, web-based chat clients, smartphone apps, or smartphone text messages (Harris & Birnbaum, 2015; Imel et al., 2017; Vincent et al., 2017). Text communication may be synchronous or asynchronous, depending on the service, the platform used, and the availability of counsellors and clients (Harris & Birnbaum, 2015).

Crisis lines, especially those serving children and youth, were early adopters of text-based counselling services. Kids Help Phone, a Canadian crisis service for youth, started offering asynchronous web-based counselling in 2002 and in 2018 provides live web chat and text services 24/7 (Kids Help Phone, n.d., 2014). Its Australian equivalent, Kids Helpline, started providing text-based services even earlier, in 1999 (Kids Helpline, 2018). Crisis Services Canada's national lifeline received 7,900 contacts by chat or text in six months of operation before it ran out of funding and was forced to close these services (Jackson, 2018). Text-based interventions are becoming more common in professional counselling and are targeted at wider populations (Imel et al., 2017).

Internet self-help interventions are also frequently discussed in the literature. These are similar to traditional self-help interventions; they primarily rely on self-directed study, although many interventions take the form of guided self-help with some counsellor involvement (Borgueta, Purvis, & Newman, 2018; Cujipers, 2018). Internet self-help researchers report that internet self-help interventions produce similar outcomes to traditional face-to-face therapy (Andersson, 2018).

Other technologies in daily use are underemphasized in much of the literature concerning technology in counselling, especially email and electronic record-keeping. Little research exists on the effects of these technologies in counselling, but both impact practice.

Email changes the way counsellors interact with clients (Russel, 2018; Vincent et al., 2017). Counsellors report finding it difficult to maintain boundaries when they are contactable by clients at any time (Lustgarten & Elhai, 2018;

Vincent et al., 2017). Russel (2018) highlighted Winnicott's statement that therapists differ from others in their clients' lives by their reliability. If clients begin to experience their therapists as no more reliable than others that they communicate with by email because therapists respond when and if it is convenient, it could negatively affect the therapeutic relationship. An email therapist may be a less reliable and less responsive presence. On the other hand, if therapists are expected to respond to client emails 24 hours a day, maintaining reasonable boundaries and client expectations becomes impossible. (Vincent et al., 2017).

Electronic record keeping is standard practice at many agencies and counsellors must take measures to maintain client privacy (Elhai & Frueh, 2016; Stricker, 2018). Even people who feel anxious about online privacy rarely take adequate steps to ensure their data is secure (Elhai & Hall, 2016). Email and web encryption and even adequate password creation are underused. Proper disposal of computers that have been used for storing client files requires more than deleting data. Counsellors need to use special software to render files irretrievable, or, as Elhai and Freuh (2016) suggested, drive a nail through the hard drive of the computer that will be thrown away.

Older technologies are also underemphasized in counselling technology literature. The telephone is still used extensively in counselling practice (Glueckauf et al., 2018). Whether or not they use digital formats, the process of making videos of counsellors in training is a technological aspect of the profession

that remains standard practice despite concerns about its potential impact on the counselling relationship (Gossman & Miller, 2012)

Counsellors' perceptions of their technology use. Taking a broader look at the technologies available, it is likely that virtually all mental health practitioners are using some form of telecommunications technology in their practice. However, in a recent American survey, only 43% of responding professional psychologists (*N*=164) said they used telecommunications technology in their weekly work with clients (Glueckauf et al., 2018). Younger practitioners were more likely to report using technology with clients, as were male respondents (Glueckauf et al., 2018). Fifty-one percent of the participants responded that they would like to use telecommunications technology to deliver 10% to 100% of their services in the future (Glueckauf et al., 2018). As data collection took place between January 2013 to December 2016, it is possible that actual current rates of use are higher than cited in Gleuckauf et al.'s report.

Gleuckauf et al. (2018) noted that previous studies found highest rates of technology use in what they described as nonclinical uses of technology, including "word processing" (p. 206). Sixty-three percent of respondents reported using a landline telephone to provide counselling in the past year and 51% reported using a mobile phone (Glueckauf et al., 2018). Seventy-four percent responded that they believed the telephone to be useful for online counselling. Familiar technologies are being framed here as both more useful than the less familiar internet interventions and as less significant. Respondents described the telephone as useful because they have experience using it and the issues of privacy and data

security raised by keeping electronic case notes can be minimized by describing them as word processing. The medium Gleuckauf et al.'s (2018) respondents described as being most useful next to the telephone was videoconferencing. Videoconferencing can also be seen as a relatively familiar form, as it closely resembles face-to-face therapy.

There is a discrepancy between how counsellors view their technology use and their behaviour that can be explained by Latour's (2005) black box. As network practices become stable, their effects are less apparent. Familiar technologies impact counsellor practice, but counsellors become less aware of their effects. This tendency is important to this report, and will be discussed in later chapters, but also in understanding the existing literature. Counsellor self-reports of technology use may not accurately reflect what counsellors are doing in practice when they are using familiar technologies.

Interaction with counselling and psychology technologies. Technology in its broader meaning also refers to counselling models and constructs in psychology (Frances, 2013; Health Quality Ontario, 2017) The counselling models and interventions counsellors choose to use impacts the work they do with clients, as do the telecommunications technologies they adopt. Telecommunications technologies and counselling models are also impacting each other.

In 1966, ELIZA, an early chatbot, was modeled after Rogerian psychotherapy, both because the Rogerian style was perceived as a standard psychological model at the time and because the reflective statements used in

Rogerian therapy fit the capabilities of 1960s computer technology (Weizenbaum, 1966).

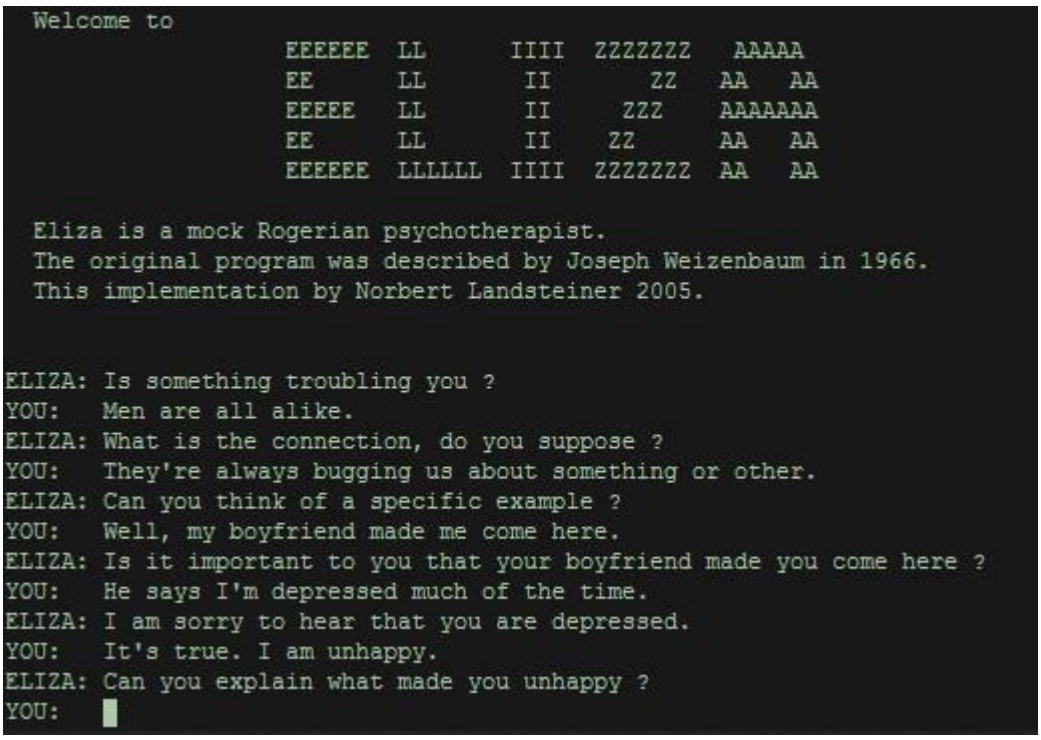

Figure 1. An excerpt from a recreation of a chat with the original ELIZA. ("A conversation with Eliza", n.d).

Most contemporary internet interventions are based on cognitive-behavioural models (Andersson, 2018). Several meta-analyses of studies of effectiveness of internet-based interventions found that cognitive behavioural therapy (CBT) interventions had significantly greater effectiveness than interventions based on other counselling models (Stallard, Croker, & Denne, 2018). The authors suggested that the compatibility of CBT with text-based interventions elevate the effectiveness of internet therapies. Cognitive-behavioural models are predicted to be used more in the future alongside computer-based counselling interventions, while the popularity of psychodynamic models

continues to decline (Norcross, Pfund, & Prochaska, 2013). CBT and the dominant use of text as the primary internet medium reinforce each others' use in internet counselling interventions. Counsellors who work from a different theoretical framework may find less research and technological support in the future without deliberate intervention.

What Are the Barriers to Technology Use?

Competence and confidence. Most counsellors are not trained in technology use and many are uncomfortable using it (Barnett, 2018; Campbell & Norcross, 2018; Glasheen, Campbell, & Slochet, 2015; Glueckauf et al, 2018; Lustgarten & Elhai, 2018; Russel, 2018; Vincent et al., 2017).

The literature recommended training for counsellors, particularly in working with text-based technologies that provide less context than face-to face interactions, in the use of the technology itself, and in order to assist clients in technology use (Borgueta et al., 2018; Campbell & Norcross, 2018; Lustgarten & Elhai, 2018). Price and Gros' (2014) study of telecommunications technology use for treatment of depression and post-traumatic stress disorder in veterans reported that therapists who were well trained in the technology were able to quickly address technical problems that arose for their clients. The authors suggested this ability supported client and counsellor rapport and improved the treatment experience.

Technological challenges. Internet technology fails (Borgueta et al., 2018; Elhai & Frueh, 2016; Harris & Birnbaum, 2015). Videoconferencing software in particular is prone to technical challenges as video calls can be difficult to hear,

video imaging may be poor, and calls may drop or not connect at all. This has the potential to damage client-counsellor relationships, especially without adequate counsellors training and preparation of alternate strategies (Lustgarten & Elhai, 2018). Landline telephone technology was designed specifically for voice transmission. As telephone technology has moved away from its focus on clear spoken communication, sound quality and connection consistency have become worse. As a result, people have become less comfortable using the phone and have moved away from using it (Bogost, 2015). Clients who associate communication challenges with counselling experiences may be similarly reluctant to return to counselling.

In the context of synchronous text-based counselling, counsellors may not know if a client has chosen not to respond to a text, if they are merely being slow in responding, if they have technical problems, or if there is another problem that the counsellors should be aware of (Harris & Birnbaum, 2015). This uncertainty could increase risk to clients, especially in a crisis situation.

Concerns about relational aspects of electronic communication.

Counselling spaces. Russel (2018) wrote extensively about the way the physical environment changes for counsellors and clients in video counselling. Her work was based on informal interviews and discussions with psychoanalytic practitioners, students, and clients.

Traditional counselling generally takes place in an intentional space. There is large body of work dedicated to counselling room design (Pearson & Wilson, 2012) which describes the importance of creating a safe, welcoming, supportive

space for counselling practice. Video therapy removes the possibility of creating that space: Even if therapists remain intentional about creating their own spaces, clients come to video therapy in whatever space they choose (Russel, 2018; Vincent et al., 2017). Russel described clients arriving to therapy in bed and also reported that therapists held sessions from hotel rooms. In my own experiences with video therapy, clients showed up in pajamas and one client called me from a veranda at a tropical holiday resort in order to fit in a counselling session to support her in returning to work the next day.

Clients' chosen spaces give therapists access to some of the information about clients that has been traditionally used in social work and nursing home visitation programs (Cole, Kitzman, Olds, & Sidora, 1998): a look into the daily lives of clients that counsellors do not often have the chance to see. Russel (2018) wrote that while this kind of information may give insight into clients' external worlds, it could also detract from focus on the internal world of the client.

Russel (2018) stressed that the potentiality of a shared physical space was integral to the therapeutic process. In a shared space, the therapist has an opportunity to do physical or sexual harm to a client but does not do so; the repeated act of refraining from harm creates safety and trust within the relationship. Moreover, the shared space reminds both therapists and clients of the reality of the other. Russel (2018) reported that her interviewees found it more difficult to distinguish between self and other in video counselling environments because the absence of the other's body produced the illusion that the person they were speaking to was no more real than any other image on a screen. She

described an interaction in which a client had terminated therapy through email during a difficult time and his therapist's belief that the client would not have done so if he had to speak to his therapist face to face. The ease of internet communication removes pressure by removing the other's presence but also removes opportunities to practice relationships and facilitates avoiding difficult conversations (Russel, 2018; Vincent et al., 2017).

On the other hand, Imel et al. (2017) argued that the challenges presented to depressed or anxious clients struggling with motivation or energy by attending face-to face counselling in a therapist's office were barriers to support that could be overcome by the use of internet technologies.

Miscommunications and misunderstandings. A common theme in the critique of internet counselling technologies is the perception of an increased likelihood of misunderstandings and miscommunications due to the reduced context provided in internet communication relative to face-to-face communication (Harris & Birnbaum, 2015; Russel, 2018). Russel (2018) suggested there could be particular risk of misunderstanding clients in moments of intense emotion when counselling was provided using the relatively context-rich medium of video counselling, due to participants' inability to see the entire body of the people they spoke to.

Russel cited Avezier, Trope, and Todorov's (2012) study on the importance of body cues for interpreting facial expressions of intense positive and negative emotions. However, the underlying concept of Avezier et al.'s (2012) work was the importance of context in understanding emotion (see Aviezer,

Bentin, Dudarev, & Hassin, 2011). Avezier et al.'s (2012) participants were more successful when asked to recognize emotion in photographs of people's full bodies in a contextual setting than when asked to recognize emotion in photographs of disembodied faces.

Whatever media a therapist is using, there is likely to be more contextual information present than an unmoving photo of a client's face. In Avezier et al.'s (2011) work that addressed context more broadly, the authors pointed to a study by Widen and Russell (2010) that found young children (4-10-year-olds) attended more to verbal scripts to determine emotion than to facial expression. While context is important for understanding emotion, the loss of one form of context does not necessarily denote a loss in communication, especially when other cues are present. In the case of video counselling verbal descriptions, tone of voice, and physical environment, as discussed above, all support emotional communication between counsellors and clients.

There may also be advantages to less direct communication of emotional states. Online Kids Helpline counsellors interviewed in a qualitative study (Bambling et al., 2008) described their online chat sessions with young clients as less emotionally intense than their counselling experiences using other media. They saw this as an advantage and said it facilitated clients' abilities to communicate about emotionally charged issues and allowed counsellors to respond more deliberately.

Proponents of text-based counselling media have suggested several methods for communicating emotional content in text-based formats, which

necessarily include less context than video or even audio-only telecommunications (Kit, Teo, Tan, & Park, 2017; Ojo. 2012). These include:

- Use of explicitly emotional description. Counsellors can choose to use emotion-focused language in their writing both to express care and empathy and to model the use of emotional language for their clients (Ojo, 2012).
- Emoticons, which are pictures or symbols used to convey emotion in text (Harris & Birnbaum, 2015). They are available for use in most computer-based media and can be typed as the simple symbols used in the early, text-only days of public internet use (tink, 2009). For example, Word 365 automatically converts my :) to 😊.
- Bracketed emotions (Ojo. 2012): for example, I didn't hear from you last week (concerned). Similarly, and more commonly used in general internet communication, asterisks are used to denote action by the author within text (Houston, 2013). For example, *sigh* or *shudder* may be added to text to import emotional meaning to an otherwise neutral expression. Consider, "I have a meeting with my thesis supervisor today," versus, "I have a meeting with my thesis supervisor today. *sob*".

These strategies can support emotional context in formats in which it may be lacking.

It may be more important to confirm with clients the meaning of the words they use in text communication than in face-to-face dialogue. Researchers working with lexical entrainment, the shared word choice often found between people who are communicating, have found that word choice in online interaction does not always serve to enhance communication. Jucks, Becker, and Bromme (2008) tested several hypotheses concerning the purpose of convergent word choices in email by asking medical professionals to communicate with laypeople on medical topics. They concluded that rather than tailoring word choice to their audiences or trying to make themselves understood, the medical professionals used an availability strategy in communication, choosing recently used words regardless of whether the words were introduced by the professional or the layperson and whether the language matched the professionals' perception of their audiences' knowledge on the topic. In most text-based formats, a history of past communications is stored and visible in addition to what is being shared at the moment. The persistence of past conversations can contribute to the continued use of misunderstood, or even poorly chosen, language and make it more challenging for non-experts to replace expert word choice (Jucks & Bromme, 2012). These challenges make it critical for counsellors in text-based environments to choose their own words carefully and to be explicit about determining whether they share understanding with their clients (Mallen, Vogel, & Rochlen, 2005).

Ethical and legal concerns. Use of telecommunications technologies raises ethical questions for counselling practitioners. Significant issues include online anonymity, physical location and jurisdiction, and client confidentiality.

Counselling can be provided online without the need for clients to disclose their identities to counsellors. The potential for anonymity presents both advantages and possible risks (Harris & Birnbaum, 2015). Anonymity may encourage clients to disclose more than they would in traditional counselling (Prescott, Hanley, & Ujhelyi, 2017). Clients who may not access traditional counselling due to fear of stigma may be willing to participate in anonymous online therapy (Borgueta et al., 2018; MHCC, 2013).

However, if counsellors do not know the true identities of their clients, it will be impossible to intervene in situations when they are at risk, or in situations in which they may present a threat to others (Borgueta et al., 2018; Harris & Birnbaum, 2015). Counsellors have a duty to report to the authorities if they are aware of a child or another vulnerable person is at risk, and arguably a duty to intervene if clients are at risk of harming themselves or other adults (Truscott & Crook, 2013). Therefore, appropriate client care usually requires detailed knowledge of clients' identities and, significantly, knowledge of their physical locations. These duties are at the centre of the debate around jurisdictional practice limitations.

Depending on the professional body counsellors are governed by, they may or may be permitted to provide counselling service to clients located outside the province in which the counsellors are registered (Harris & Birnbaum, 2015; Rojubally et al., 2013). In part, this is due to ethical concerns around duty of care. Online counselling across jurisdictional boundaries raises questions about legal and regulatory responsibilities (Rojubally et al., 2013). Apart from intervention

with clients who are at risk, there are also questions of responsibility for client complaints and of training and practice standards that may differ from province to province.

Similar to the discussion of case notes above, the security of client information in online communication is a concern for counsellors using internet technologies to communicate with their clients. Videoconferencing, email, and chat are all potentially vulnerable to data leaks (Campbell & Norcross, 2018; Lustgarten & Elhai, 2018; Elhai & Frueh, 2016). In a survey of school counsellors in Australia conducted by Glasheen, Campbell, and Shochet (2013), only 13% of counsellors responded that they believed it was possible to preserve privacy online, but 50% said they would use online counselling with their students if the option was available. Again, concern about online privacy is not necessarily reflected in people's online behaviour (Elhai & Hall, 2016). Lustgarten and Elhai (2018) encouraged therapists to be aware not only of online threats to client confidentiality, but to be cautious when using technologies with clients who are at risk of violence in their homes. Text evidence produced by internet-based technologies could expose to partners or family members that a client is seeking counselling or the contents of counselling sessions.

What are the benefits of using technology in counselling?

Access and cost. Considerably more has been written about the barriers to technology use in counselling than about benefits. Although MHCC (2014) wrote optimistically about increased access for clients to mental health care and reduced costs of services provision, existing research does not strongly support this

position. The mental health care access that telecommunications technology has the potential to provide is limited by the lack of internet access for marginalized groups who might most benefit from accessible, low-cost mental health care (MHCC, 2014; Orlowski et al., 2016).

Telecommunications technology-based counselling has been proposed as an appropriate fit for some harder to reach populations, including youth and those living in rural areas (Barnett, 2018; MHCC, 2013; Riding-Malon & Werth, 2014). Young people are often considered to be the best candidates for internet and smartphone counselling (Glasheen, Campbell, & Slochet, 2015). Young people are comfortable with technology and may be unwilling or unable to access face-to-face counselling services. However, only 12% of Glueckauf et al.'s (2018) survey respondents reported using telecommunications technology in work with adolescents and only 3% reported using technology in work with children. Counsellors who work with young people lack confidence in technology use (Glasheen et al., 2015). Young people are seeking someone to talk to and may want a face-to-face connection as much as or more than adults (Orlowski et al., 2016). The majority (58.9%) of high school students who responded to an Australian survey on help-seeking preferences (N=231) expressed a preference for face-to-face counselling, while only 16% said they would prefer online counselling (Bradford & Rickwood, 2014).

In a literature review written for MHCC, Wozney et al. (2017) reported that only 6% of 261 studies reviewed mentioned costs. While the studies that addressed the issue of cost reported technological counselling provision costs

equivalent to or less than traditional counselling services, the authors expressed concern that so few studies addressed a topic central to MHCC aims.

Efficiency. Increased speed and ease of service delivery can be facilitated by technology use. Vincent et al. (2017), who wrote a narrative article describing the authors' own experiences using telecommunications technology in their practice, discussed the advantages of using telephones and texting when their clients were in distress or crisis or when last-minute practical arrangements were necessary. The authors saw the ability to rapidly connect with their clients as positive, but expressed concerns that using text and telephone, like using email, facilitated loosening professional boundaries and created expectations that clients could contact their therapists immediately at any time (Vincent et al., 2017).

Online versions of assessment tools can facilitate the administration and scoring of psychological assessments (Barnett, 2018). However, 75% of psychologists who responded to Gleuckauf et al.'s (2018) survey reported that they did not believe they could provide counselling services without an initial face-to-face interview, and the majority did not have confidence in or were unsure about the ability of the average mental health professional to use online screening tools.

Effectiveness and other factors. Research on the effectiveness of the use of internet technologies is limited and its quality is hampered by small sample sizes and short study durations, lack of control groups or consistent comparisons, and nonstandard measures (Stallard et al., 2018; Stricker, 2018; Wozney et al., 2017).

In their meta-analysis of the research that was available, Stallard et al. (2018) found the average effectiveness of internet-based interventions (including studies of video therapy, synchronous and asynchronous text communication, and internet-self help therapies) to be almost equivalent to traditional therapies. Dowling and Rickwood's (2015) study of the impact of text-based online counselling on young people's distress and hope showed very limited effects on outcomes in either area. They suggested that the small changes that were observed may be attributed to the ease of accessing online sessions and online facilitation of access to traditional counselling services.

Stricker (2018) drew a comparison between research on the effectiveness of internet interventions and the Dodo Bird effect – the lack of conclusive support for the effectiveness of any one form of psychotherapy above any other. Stricker framed his comparison negatively, but if it is the case that technology-based counselling performs no worse than other mental health care interventions, considerations of convenience and preference may recommend the use of technology.

Technology use can make counselling more convenient for clients and counsellors (Barnett, 2018; Borguetta et al., 2018; Imel et al., 2017; MHCC, 2014; Russel, 2018), it can provide more options to access counselling and other resources (Dowling & Rickwood, 2015; Imel et al., 2017), and it fits some client and counsellor preferences (Barnett, 2018; Gleuckauf et al., 2018; Imel et al., 2017). These factors may be reason enough to endorse technology use in counselling practice; in any case, they contribute to its widespread use.

Intentionality

According to actor-network theory, times of controversy give researchers more access to investigate actors and networks which at other times may be obscured by unexamined common practices (Latour, 2005).

Telecommunications technology use in counselling dates back to the mid-twentieth century. The first article written about telephone use in therapy was published in 1951 (Manosevitz, 2002; Russel, 2018; Saul, 1951). However, research on telephone counselling use has been limited and practitioners have been reluctant to discuss their use of the telephone in psychotherapy practice (Manosevitz, 2002; Russel, 2018) The first comprehensive collection of articles concerning telephone use in counselling practice was not published until 2000 (Manosevitz, 2002; Russel, 2018). Many of the questions about telecommunications technology use in counselling remain the same today as in a review of telephone use written in 1977: control, anonymity, presence, accessibility, and ethics (Lester, 1977; and see Harris & Birnbaum, 2015; Russel, 2018; Vincent et al., 2017).

Cujipers (2018) described a history of the use of self-help in counselling that parallels that of telephone use in counselling. The addition of internet technologies to self-help interventions has raised questions that have been left unresolved for 50 years: how to intentionally apply the existing research concerning self-help therapies and how to address the ethical issues of client-led interventions.

For almost seventy years, mental health professionals were using telecommunications technology in their work and telephone crisis lines became the standard front line of care for clients at risk of suicide (Campbell & Norcross, 2018; Lester, 1977; Manosevitz, 2002; Mishara et al., 2016). Counsellors commonly refer their clients at risk of suicide to telephone crisis lines for between-session support. Here is another black box: Despite concerns about using telecommunications technology in counselling and hesitation to discuss telephone use, counsellors consistently choose to send their clients who are arguably most at risk to a service which relies on telephone technology.

Controversy concerning the use of internet technologies provides opportunities to examine how counsellors use technology, what they are experiencing in technology use in practice, and to respond intentionally to what is learned.

Chapter 4. Research Methods

My research was guided by actor-network methodology. There is a great deal of diversity in actor-network research (Jackson, 2015; Nimmo, 2011); I endeavoured to make choices that are consistent with the principles of ANT and with the practice suggested by Latour (2005).

Data Collection

I collected three types of data. First, I drew on my own experiences using technology in counselling. In my counselling practicum, I used videoconferencing in my work with clients as well as email, electronic case notes, and database technology. My experiences informed how I thought about the data and what I chose to include in my report; this is true of all researchers whether or not they have participated in their field of study (Latour, 1996b, 2005). I believe that sharing my experiences enhanced my reflexivity, that my transparency added to the validity of my report, and that I had useful information to contribute. However, I am one actor among many in this report. Latour (2005) asked researchers to ensure their actors voices were more prominent and more interesting than the voice of the author; I have endeavoured to add my voice alongside the other actors in the network throughout most of the report.

Second, I conducted semi-structured interviews with counsellors who use technology in their work. This number of interviews is appropriate for a qualitative study; it should be large enough to allow access to the shape of the network and small enough to permit thorough examination (Robinson, 2014). I conducted interviews using videoconferencing software and asked participants to share their

experiences with being interviewed via videoconference. This step was one of the most significant of the study; as technical difficulties that I experienced allowed me to stay with one of my actors – the software – and directly explore several potential impacts it can have on video counselling practice. I recorded the interviews and stored the video files on a local hard drive with backups stored on a cloud server. They were encrypted and password protected.

Third, I read documents including practice guidelines and legislation from regulatory, professional, and governmental bodies that regulate my participants and technical and marketing documents from the technology they used. The use of documents as data supports voices of the nonhuman actors in the network and is a significant feature of actor-network methodology (Latour, 2005; Nimmo, 2011). Actors who are not able to speak for themselves leave traces of their effects in texts (Latour, 2005; Nimmo, 2011). For example, the College of Psychologists of British Columbia (CPBC) produced a document to advise its members about social media use (CPBC, 2016). The document cautions members to avoid posts that are harassing or discriminatory, to avoid commenting on their clients, employers, or colleagues, and to avoid unprofessional behaviour. The existence of this document and no similar documents guiding other forms of public behaviour for British Columbia psychologists reflects the impact, or at least the perception of impact, on professional behaviour by social media technology. The implication is that access to social media by psychologists has the potential to change the way they choose to behave, or that the impact of bad behaviour in a forum that is archived and easily accessed by the public may have serious enough ramifications that special

attention is needed to protect the reputation of the profession. Analysis of related data may clarify which of these scenarios (if either) is the case; here, the document serves as a thread to follow and a trace of the agency of the nonhuman actor, social media technology, in its potential to change the behaviour and/or experiences of the human it associates with.

The second reason to look at documents is that the texts themselves operate as actors within the network (Nimmo, 2011). The CPBC (2016) document is not part of the college's standards of practice; instead it is what is called a Practice Support Checklist, one in a series created by the college as part of its support to members who are experiencing ethical dilemmas in practice. All of these documents should be derived from the *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association [CPA], 2017) and therefore be in line with the ethical standards observed by all Canadian psychologists. However, by creating a document that emphasized perceived dangers of social network use, the college has introduced a new actor into its network: a text that has the power to modify the attitudes and behaviours of anyone who read it, but particularly those (probably members of the College) who are affected by the authority of the body that produced the text. The document is both an enactment of the network, in that it reflects the network and is a response to it, (Nimmo, 2011) and an actor within its network as it behaves as a mediator with its potential to change the other actors it associates with. Both of these aspects of documents are useful guides to ANT researchers in mapping and describing networks.

Sampling Strategies

As networks have no clear beginning, ANT asks its researchers to start *in media res* (Latour, 2005): with what is in front of them and what they have access to and, from there, to follow the actors. I planned to begin with a convenience sample of willing and available counsellors who use technology and, on the principle of following the actors, use a form of snowball sampling to proceed. I asked the participants to recommend other counsellors they have been influenced by with regards to technology use who may be interested in speaking with me. However, I was largely unsuccessful in recruiting by this method because the majority of my participants reported that they had learned about technology independently and rarely spoke to their colleagues about the technology they used. One participant did direct me to a colleague; the other people I interviewed were suggested to me by others in my professional community who I had spoken to about my research but were not participants.

Again, I also followed my actors in document selection. I drew on documents from governments and regulatory bodies that related to my participants, as well as documentation from tools they used.

Ethical Considerations

This research was low risk, as I was speaking with adult professionals about work they are doing. I worked to conduct the research ethically and to protect the safety and privacy of my participants. I completed the *TCPS 2 Tutorial Course on Research Ethics*. I used an informed consent process. I gave participants a consent form explaining the process and the purpose of my research

and encouraged them to ask any questions they had about it. I reminded participants that they may withdraw consent at any time. Participant information was confidential. No identifying information was included in my report. Again, both video files and video transcripts were encrypted and password protected.

Analysis

ANT is a descriptive methodology. Actor-network researchers attempt to describe networks as thoroughly and accurately as possible and to preserve the voices of actors in their reports. Latour (2005) encouraged researchers to let the actors speak: In the report what the actors say should be more prominent and more interesting than the contribution of the researcher.

In my analysis, I identified themes and connections and worked to trace the pattern of the network and described what I saw. The analysis was concurrent with data collection. This allowed me to follow the actors by making appropriate choices about data collection in terms of choosing documents to analyze and asking questions of participants that followed themes of earlier interviews.

Many actor-network reports rely extensively on quotations from participants and from documents (e.g., Hanson, Holligan, & Adams, 2016; Heath, 2007, Latour, 1996a). I adopted this style, as I value emphasizing the voices of actors. I also value the opportunity using participant quotations provides to other researchers to examine and rethink the data I collected.

I am interested in the opportunities counsellors have to respond intentionally to network influences and I have concentrated on those opportunities in analysis and in describing the findings.

I am not an objective observer and cannot speak from a position outside of the network (Latour, 1996b, 2005). I have endeavoured to be as trustworthy as possible by being transparent and by aiming for reflexivity.

Trustworthiness. The primary approaches to research quality in ANT are related to trustworthiness strategies associated with reflexivity. Reflexivity is important in actor network theory (Latour, 1996b, 2005; Sheehan, 2011). As I engage in research I participate as an actor in the network I am researching. I am impacted by my association to the network and my interactions with actors. It is important to reflect on my role in the network and be as transparent as possible. Latour (2005) stated that detailed journaling is critical for actor-network researchers. He wrote that researchers should begin journaling the first time they have a conversation with anyone about their research topic. I kept a detailed journal about my experiences, thoughts, and reflections starting soon after I had that first conversation and continuing until the end of the process.

Researchers make choices about what to include or leave out of what they write (Beard, Scarles, & Tribe, 2016; Latour, 2005). As the research I produce has the potential to change the network it will belong to, it is important that I make choices intentionally and with an awareness of their potential impact.

Limitations

The scope of this project is relatively small. I was not able to map every aspect of the network related to technology use in counselling; instead I was aiming to capture a snapshot of the network that could be built upon by future researchers. One of the principles of ANT is that work and meaning circulate

throughout the network (Latour, 2005; Latour, 1992). Network effects are always passed on (Latour, 2005); therefore, distant nodes of networks show their effects in local connections. While I will not be able to trace every aspect of the network, I believe I have been able to observe significant network effects from examining part of it.

I did not speak with clients for this report, with the exception of a conversation with students who could be in the role of clients. I spoke informally with students at a local school's social innovation lab concerning technology use in mental health support for its students, which I attended during the research of this report. Future research that directly accesses client voices will allow for a more complete picture of the network concerned with technology use in counselling practice.

Another limitation was the relatively narrow demographic group to which my participants belonged, which I discuss further below.

Chapter 5. Findings

Participant Information

I interviewed five counselling professionals for this report. All of them were women in their thirties who resided in the province of Alberta. Each of them had been practicing between two and ten years. Three were Registered Psychologists who belong to the College of Alberta Psychologists (CAP), one was a Registered Provisional Psychologist with the same College, and one was a Canadian Certified Counsellor with the Canadian Counselling and Psychotherapy Association (CCPA). All worked in private practice at the time of interviewing: four as independent practitioners and one as a manager of a small group practice. Two participants also worked part-time at a public counselling clinic and one worked part-time in the public health care system.

In this report, participant quotations will be identified using the identifiers P1 through P5. In other areas I have generally left participants unidentified to maintain a higher degree of confidentiality.

Demographic limitations. A drawback of using a convenience sampling strategy was that my participants belonged to a narrow demographic group – all were young women who worked in private practice. I had hoped to have more diversity among my participants, especially in terms of age, as earlier research indicated that younger people are more likely to report using technology in their work (Glueckauf et al., 2018) and I would have liked to explore whether those self-reports reflected what counsellors are doing in practice.

For example, the site supervisor for my practicum, a woman in her fifties, perceived herself and was perceived by her colleagues as being technophobic and lacking competence in technology use. However, she regularly made use of internet resources and worksheets. used email and text daily in her work, and used digital video systems for monitoring counsellor and client safety at her walk-in clinic and for student training. The supervisor could also be described as an adept user of technology, depending on how one framed the idea of technology. Her perception of her competence could be tied to stereotype threat: the effect of stereotypes about a group to which people belong on individuals' performance and behaviour. Both older adults and women working in counselling report lower rates of technology use than their younger, male colleagues (Glueckauf et al., 2018). This could indicate an intersection between the black boxing of familiar technologies discussed above and cultural narratives concerning women, older adults, and technology users.

Research on stereotype threat has shown impacts of negative stereotypes about technology competence on women (Appel, Kronberger, & Aronson, 2011). This is likely to also be the case for older adults, another group who are perceived as having lower abilities in technology use (Gioaba & Krings, 2017). Women and older adults may be reluctant to participate or have barriers to participation in the use of new technologies and black boxing can render their use of more familiar technologies insignificant, thus reinforcing stereotypes of technological incompetence for those groups.

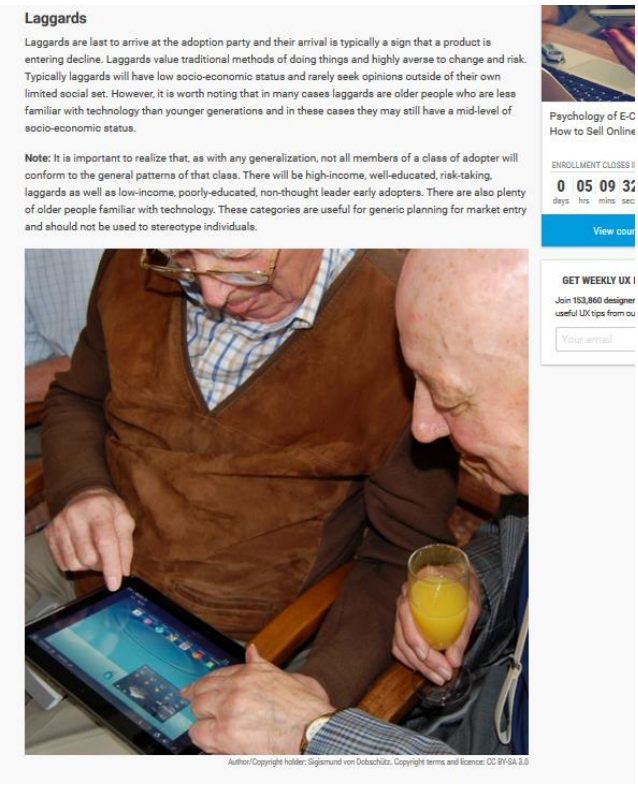

Figure 2. From an online article entitled "Understanding Early Adopters and Customer Adoption Patterns" (Interaction Design Foundation, 2019).

My participants said they identified with technology use in part based on their age and cohort. Several participants spoke about growing up with technology and associated that familiarity with confidence using technology in their practice and an investment in using technology well in the future. In their cases, their identification with youth and being native users of technology appeared to outweigh any stereotype threat associated with their gender. Note that cultural narratives associated with my participants' demographic group membership are circulating in the network, impacting their choices around technology and their attitudes toward technology use and impacted by cultural beliefs about what technology is.

Document Information

I analyzed the most relevant documents produced by the professional and regulatory bodies the participants belonged to and by the companies who developed the tools they used and the provincial and federal legislation that related to technology use in counselling practice for this report. These documents included: CPA's *Canadian Code of Ethics for Psychologists* (2017), CPA's *Draft Ethical Guidelines for Psychologists Providing Psychological Services Via Electronic Media* (2006), CCPA's *Code of Ethics* (2007), CCPA's *Standards of Practice* (2015), CCPA's *Guidelines for Use of Technology in Counselling and Psychotherapy* (2019), CAP's *Standards of Practice* (2019), CAP's "Practice Guideline: Telepsychology Services" (2018), Alberta's *Personal Information Act* (2003), *Freedom of Information and Protection of Privacy Act* (2000), and *Health Information Act* (2000), Canada's *Personal Information Protection and Electronic Documents Act* (2000), and marketing and technical documents concerning Skype, Zoom, FaceTime, doxy.me, Owl Practice and Jane App.

Professional and regulatory bodies. The professional and regulatory bodies that my participants belonged to are prominently represented in this report through the documents they have produced. As actors, they are doing considerable work in the network. The majority of participants brought up the influence of their professional and regulatory bodies on the way they used technology in their work. Moreover, the organizations' impact is not unidirectional: their guidelines reflect and reinforce beliefs and observations about what counselling professionals are already doing in their practice, themes from existing literature and legislation

relating to technology use in counselling, and cultural beliefs about counselling and technology. Professional bodies act as mediators: they take influences from the network and transform them by emphasizing and prioritizing certain aspects of practice, as in the example of CPBC social media policy above. These actors have prominent voices in the network, so I have endeavoured to give them voices alongside my participants in this report.

Organization of this Section

This chapter is structured to parallel the literature review as much as possible, responding to the four subquestions above concerning what technologies my participants used, what were the barriers and benefits to using technology in counselling identified in my analysis, and what opportunities for intentional responses I identified.

What Kinds of Technology are Counsellors Using in Their Practice?

Video counselling. Two of my participants said they regularly used video counselling with clients. One primarily used Skype and worked with children, youth, and families. The other used an American telemedicine platform, doxy.me, and worked with adults. Both said that they were comfortable using the electronic media and that, with a few exceptions discussed in detail in later sections of this report, the work they did online did not differ significantly from the work they did with clients in face-to-face sessions. P2 said, “It feels around the same to me. I started on the Distress Line. I can just zone right in. I take more notes because the pen is right here, so that’s even an added bonus.” One participant also used Zoom teleconferencing software for consulting with other professionals.

There are obvious differences between videoconferencing platforms that could suggest using one over the other. Skype is the most popular and familiar software option and often comes preinstalled with Windows operating systems, so it may be easily accessible to counsellors and clients. Zoom is less familiar but tends to be more reliable and consistent in terms of sound and video quality, which is critical for effective and ethical video counselling, as discussed below. doxy.me is the easiest to use for both counsellors and clients, as it runs in a browser window and does not require software downloads. However, all participants described their choices in terms of security. Considering that all of the platforms have comparable levels of security (HIPAA Journal, 2017, 2018; Turner, 2019), this would be surprising without the corresponding emphasis on security in provincial legislation and in professional practice guidelines. These documents shape the way that counselling professionals understand the technology they use and what counsellors prioritize when they choose software.

Of the participants who did not use video counselling with clients, one had offered videoconferencing services to clients but had yet to have a client express interest, one felt it was not a fit for the way she preferred to practice, and one believed it was not a fit for the approaches she used in therapy, primarily eye movement desensitization and reprocessing (EMDR). She said, “It doesn’t fit very well with the modalities I use. I don’t think it’s really appropriate for trauma work.” This participant identified CBT interventions as a more appropriate fit for video counselling. This is consistent with literature that counselling service delivery using technology is best matched with CBT (Stallard et al., 2018), but not

with one participant's use of video with somatic experiencing, another body-based trauma therapy, and another participant's report that some colleagues regularly use EMDR over video. As discussed above, the simultaneous rise in use of internet-delivered therapies and CBT and their frequent use together (Andersson, 2018) may reinforce an unchallenged belief that CBT is a better fit for interventions using technology than other forms of therapy.

Text and email. None of the participants participated in any text-based web or smartphone interventions; although four of them had previously worked with crisis lines, all had left before text-based crisis support was introduced. One participant said she had heard mostly negative things about text-based crisis support from clients and from colleagues who had participated in the service. She said the delays on both the clients' ends and on the crisis workers', who text with several users at a time, interfered with communication. No participant expressed interest in using text-based interventions in the future.

However, all participants said they connected with their clients through text both on their smartphones and by email. While all of them emphasized that they did not provide services through either medium, all identified email or text as a way clients could connect with them between sessions. They said that text and email were used primarily for scheduling, but that they were also contacted by clients who were in crisis or in need of additional support. Usually they chose to respond briefly by text or email, but they would occasionally follow up with a longer email or text exchange or with a telephone call if they were concerned

about a client's safety. They emphasized the importance of being thoughtful about responding to their clients in these cases. P2 said:

> I'm glad people do email because it's sometimes weeks in between before I see them again. . . . I think it's actually a good thing. It's probably important not to always be responding to people two minutes after they've responded to you. . . . to take time to put together a thoughtful response.

Although the participants did not identify with providing text-based internet services, internet text-based interventions were part of all of their practices. This is another example of Latour's (2005) black box: Email and text technology are so familiar and present for counselling professionals and their clients that they view text interventions as an essential component of face-to-face counselling services rather than as belonging to a separate category of counselling work. None of the participants discussed specific strategies for written communication nor issues with accurate communication via text, which might be predicted from the existing literature. The use of text as a technology was part of a routine behaviour that did not require special attention. Participants treated text as an intermediary rather than as a mediator and the counsellors had no perception that this technology use shaped their communication with clients.

Social media. American psychologist Keely Kolmes (2010) published the social media policy she used under a Creative Commons licence, which allows a piece of intellectual property to be freely shared and changed with appropriate attribution to the material's creator. One participant adapted the document for use

with her own clients. The following excerpt from the original policy is interesting as it reflected one of Kolmes' concerns about using social media with clients.

> Fanning: ***As of 4/14/10, I deleted my Facebook Page after concluding that the potential risks of maintaining such a Page outweigh any potential gains. This section has been retained for those wishing to view the original document.***
>
> I keep a Facebook Page for my professional practice to allow people to share my blog posts and practice updates with other Facebook users. All of the information shared on this page is available on my website.
>
> You are welcome to view my Facebook Page and read or share articles posted there, but I do not accept clients as Fans of this Page. I believe having clients as Facebook Fans creates a greater likelihood of compromised client confidentiality and I feel it is best to be explicit to all who may view my list of Fans to know that they will not find client names on that list. In addition, the American Psychological Association's Ethics Code prohibits my soliciting testimonials from clients. I feel that the term "Fan" comes too close to an implied request for a public endorsement of my practice.
>
> Note that you should be able to subscribe to the page via RSS without becoming a Fan and without creating a visible, public link to my Page. You are more than welcome to do this. (p. 1)

Several of the participants said they used social media as a marketing tool for their practices, with Instagram and Facebook being the most commonly used. P2 said, "People have found me by social media which I was surprised by. . . . I didn't expect that to happen." Two participants specifically mentioned alerting their clients of potential risks to confidentiality that could arise from following them, but no participants were concerned enough to stop using social media.

CCPA (2019) also drew on Kolmes' work in its *Guidelines for Uses of Technology in Counselling and Psychotherapy* but put less emphasis on risks to client confidentiality and more on boundaries, counsellor confidentiality, and professional public presentation of counsellors. At the time of writing neither CPA nor CAP have published guidelines around psychologists' social media use, but, as discussed above, CPBC produced a *Use of Social Media Checklist* for its members that included concerns that psychologists would "carefully consider all of [their] personal postings to ensure they will not bring the profession of psychology into disrepute" (p. 2, CPBC, 2016). Both CCPA and CPBC emphasized the public and representative nature of everything done on social media. P5 described her experience developing a professional online presence:

> As soon as I registered . . . I gave myself a two-month social media scrub. So, I went online and, like, locked down all of my stuff, tried to erase as much of my presence – I still have a Facebook account and clients can search it out if they want to but it's all locked down, they can't really see anything – but it took me probably like a good month. And some of it was stupid stuff, right, like I was 27 when I started on Facebook. . . . there were

> some times when I was out with my girlfriends and we posted things like "Party night! Drink all the wine!" and then we had pictures of all these empty wine bottles. Just silly things like that and then there were things other people had posted on my wall or tagged me in that I wasn't able to remove. . . . I had to contact Facebook, I had to contact SoundCloud, I had to contact YouTube to remove my name off of some things.

Considering that counselling professionals perceive the use of social media to present risks to themselves, their clients and their professions, they could choose not to use these media at all. On the other hand, clients will search for counsellors online (CCPA, 2019) and in the last Statistics Canada survey of internet use in 2013, 67% of Canadians who reported using the internet also reported using social media in the previous year (Statistics Canada, 2013). Particularly for professionals in private practice, whose potential clients are also potential customers, it can be important to have an internet presence in the virtual spaces clients are accessing.

Professional social media accounts typically share articles, pictures, and information related to psychological topics that are relevant to their clients and to the forms of therapy they practice.

Figure 3. Sue Johnson, developer of emotionally focused couples and family therapy, on Twitter (Johnson, 2019).

P2 said she believed her social media posts contributed more to her practice and to her work with clients than being marketing tools: "It can be part of a consciousness raising, like when I'm posting things about fat acceptance and different issues that connect to feminist therapy or healing trauma that people don't otherwise know." There are benefits to counsellors' social media use that may be overshadowed by the emphasis on risk in the professional culture.

Internet self-help and resourcing. Although I identified internet self-help as a common use of technology in counselling practice in my literature review, I did not anticipate how it would manifest in my participants' practices. Instead of using tailored apps or specialized websites, my participants used the more familiar (and thus hard-to-spot) process of recommending resources like articles or YouTube videos to clients and talking about them during session. The participants did not necessarily frame these practices as either technology use or as guided self-help, but when asked they described them as being beneficial to their work with clients. P4 said, "I find a lot of people do really well with having visuals or having

videos. It just helps them process things a little bit more." P5 said that she believed that providing online resources for her clients was beneficial and that the ability the internet provided for her clients to read about and learn about psychology independently could enhance discussions she had with clients in sessions.

> I think it's really good that people have access to more resources. I think it's really good that people can do learning outside of the therapy room. I think there's a lot of benefit that comes from clients going and saying oh, I tried this and I did this and this worked really well. And oh yeah, you sent me to that TED Talk or you sent me to that YouTube video or you sent me to the Centre for Clinical Interventions [a website with clinician and self-help resources maintained by an Australian government agency] and I learned XYZ: Can we talk about this?

P5 also said that almost all of her clients asked her about mental health diagnoses they read about on the internet. She shared a story of a client who had read about adult attention-deficit/hyperactivity disorder on Instagram and became concerned that the diagnosis could apply to her. The client brought her concerns to her next session with P5 and her questions were a starting point for a conversation about the underlying reason for the client's belief: she did not feel her medication was working. P5 said she and her client used their smartphones to research and talk through the diagnostic criteria for adult attention-deficit/hyperactivity and for the client's exiting diagnoses. P5 said this way, her client was able to resolve her concerns and to bring the medication issue back to the client's doctor.

Here, social media is an actor and mediator that transformed psychological diagnostic information and presented it in a simplified, easily accessed form. P5 treated its impact on her work with her client as an opportunity to open a dialogue with her client about the client's concerns: a response that spoke to the technology and engaged with it as part of the discussion. This kind of intentional response has the potential to positively shape the influences of technological actors on clients and on counselling practice.

Practice management and other "word processing" tasks. As my participants were private practitioners, they wanted to talk about practice management software: an important piece of technology for their practices that I had not considered before the interviews. Practice management software is designed for health practitioners to manage booking, intake and consent forms, record keeping, and billing. Most of my participants had strong opinions about practice management software and, unlike other technology topics which they said they rarely discussed with colleagues, they identified practice management as a frequent topic of conversation in their professional communities. One participant said that the practice management software she used was the only piece of technology she had learned about from a colleague and shared: "I tell people about it all the time now." Another participant said people always asked her why she did not choose to use the software.

Part of the reasoning for the participant who chose not to use practice management software was financial: the popular practice management packages cost between $40 and $99 a month for a solo practitioner and she felt her practice

was not yet busy enough to justify the cost. The larger part of her decision was based on her discomfort with online booking, which is one of the core features of practice management software. Other participants said they felt online booking made scheduling easier for them and made them more accessible to their clients. This participant said she felt that using email, text, and telephoning for booking allowed her more flexibility in her schedule and allowed her more personal safety. She said she did not want clients, particularly those she did not know, knowing her location at any given moment by looking at her website. She also said she was conscious of personal safety when she was meeting new clients: "People contact me online and then I go and meet them in an office and I just hope that they don't want to hurt me." The participant attributed her caution to her gender and a history of working in forensic mental health that made her aware of risks to counsellors' personal safety.

Another participant said she chose not to use practice management software because she preferred to keep as much information as possible on hard drives rather than rely on other people's servers. She created her own technological solutions for forms, notes, record-keeping, and billing using Microsoft software, although she used external software for online booking. Safety was also a concern for this participant, but she was more concerned with data safety, tied as it is to client confidentiality, rather than personal safety.

Gleuckauf et al.'s (2018) "word processing" (p. 206) was significant to the participants. The technologies they used for administrative tasks impacted their

accessibility to clients, client confidentiality and their feelings of personal safety: all nonclinical aspects of practice that could have clinical implications.

Telephone. Only one of the participants was regularly using the telephone as part of her work for intake and crisis management in her public health care position. However, all participants had experience with telephone counselling and four had substantial experience working on telephone crisis lines. The participants did not speak about their crisis line experiences at length, but both the participants who currently used video counselling and the one who planned to in the future to some extent associated their comfort using distance technologies for counselling with their experience with telephone counselling.

As with email, counsellors reported using the telephone for between-session communication with clients. As with email, they generally saw telephone use as a component of face-to-face practice unless they were using it for an entire session as a substitute for video counselling in case of technology failures or for a face-to face session when clients were not able to travel to their offices. Perhaps in part because of their experience and comfort with telephone counselling on crisis lines, none of the counsellors reported communication barriers around telephone use, nor did they mention specific strategies they used with clients on the telephone.

What Are the Barriers to Technology Use?

Competence and confidence. Participant reports were not consistent with expectations in the literature around confidence and perceived competence. Despite the lack of formal training available to counselling professionals, the

participants felt confident in their abilities to use technology competently and ethically in their practices. P1 admitted that this may be unusual, “I think I’m pretty savvy with technology. I know a lot of people have a harder time figuring it out.” These participants talked about doing research and trying out new technologies as means of learning. Most of them talked about their learning being solitary, with little discussion with other professionals, although some reported taking advice from technology service providers and one participant said she took substantial guidance from her supervisor.

The participants who used video counselling cited experience as the most important factor in developing both confidence and competence with video delivery. P4 said, “It’s almost like you work out the kinks and you see what works and what doesn’t work and you get better with each client.” Both participants said the importance of experience applied not only to the practice of video counselling, but also to using video with an individual client. One participant described the process as learning the rhythm of the clients and of their sessions together. Again, both also mentioned their experience as telephone crisis line workers as supportive for their current work.

The participants had differing opinions about the need for formal training for counsellors in using technology. P2 said,

> People get confused about technology generally. It seems daunting to look at. It seems like a big, scary piece. People think maybe they need to take a course on it. When I think we can just apply all the ethical things we know about therapy to this way of doing therapy.

She added that, “A class makes people feel secure about it,” and said that training could be simple and focus on common ethical questions. Other participants agreed that training was unnecessary but any training that is developed should focus on ethical issues around technology use in counselling. Two participants said that they believed that ethical training around technology would be important for counsellors going forward and one expressed a wish that her regulatory body would provide expert support on the topic for its members. She said, “Having a place to contact that’s more of an expert, that’s able to give specific answers. Making sure I’m within the guidelines of CAP and making sure I’m following what they’re asking.” Another participant expressed doubt that her regulatory body possessed that kind of expertise: “I think it’s still a fairly new area so I think they’re probably learning as much as we are as we’re going through the motions.”

The participants were confident in their technological competence and did not believe that counsellors needed education in the technical aspects of technology use in counselling practice but saw a potential need for technology-specific ethics training. The impact of professional and regulatory bodies’ priorities is present here alongside counsellors’ previous education experiences – graduate education in counselling required for professional membership generally has a strong focus on ethics - as actors that shape expectations of what should be formally trained.

Miscommunications and misunderstandings. CAP published new practice guidelines around the use of what they call telepsychology in 2018, based in part on draft guidelines for providing psychological services using electronic

media CPA developed in 2006. Both organizations focused on service delivery rather than the wider approach to technology I have presented in much of this report; however, these guidelines extend to the routine communication by means of telephone, text, and email that all of my participants described. CAP provided this definition:

> For the purposes of this College Practice Guideline, telepsychology is defined as the provision of any psychological services within a professional relationship by a regulated member who is geographically distant from the service recipient, or unable to receive in-person services. Modes of service delivery are typically through telephone, email, texting, videoconference, or other electronic media. Telepsychology services may be provided in conjunction with in-person services and/or serve as a stand-alone medium.

Both CAP and CPA emphasized the assumed likelihood of misunderstanding and miscommunication between counsellors and clients arising from communicating using telecommunications technology. From CPA's section on informed consent:

> When obtaining informed consent for electronic provision of services, psychologists include information about the particular nature, risks (including possible insufficiency, misunderstandings due to lack of visual clues, and technology failure), benefits (including appropriateness and advantages *re* distance, convenience, comfort), reasonable alternative service options (e.g., in-person services, local services from an available health service provider of another discipline), and privacy limitations

(including the possibility of interception of communications) of providing services through the particular electronic medium/media to be used.

CAP took a less balanced approach to the consent process and focused solely on risk without reference to potential benefits of technology-based service delivery. The theme of risk is prominent in regulatory bodies' writing on technology use, and as a result was interwoven with my participants' discussions of their use in practice. From CAP's section on informed consent:

> Due to the known risks in telepsychology, psychologists must demonstrate additional thoughtfulness in engaging in the informed consent process with others (especially clients). In addition to the informed consent requirements as outlined in the College's Standards of Practice, psychologists are to provide clients with a document describing additional information associated with telepsychology services. The description will explain known risks in telepsychology that (minimally) addresses the following:
>
> **Therapeutic Limitations and Alternatives to Telepsychology**
>
> - Inform client about the potential for misunderstandings when visual cues are absent and/or limited in communications and the need to seek clarification on the part of all parties when questions of misinterpretations surface.

"Known risks" is a strong descriptor in reference to possible miscommunications and one that has the potential to deter psychologists and clients from using telecommunications technology to provide or receive counselling services. As discussed in Chapter 3, it is the perception of risk that is

the focus of literature concerning technology use is counselling practice rather than evidence that supports that belief. Although some of my participants endorsed this position, those with the most experience in telephone and video counselling did not report difficulties understanding their clients at a distance. P2 said, "I never get the feeling that there's something I'm missing here. Maybe there's other things we are attending to and that's enough in itself even if it's not everything." Even the participants who did not want to participate in video or telephone counselling reported no particular misunderstanding when communicating with their clients by telephone, email or text; neither did any of the existing qualitative research on technology use in counselling contain any such reports. The wording in CCPA's (2018) consent section is the most moderate and possibly the most accurate: "Just as in face-to-face counselling or psychotherapy, miscommunication happens. Let clients know how to handle any miscommunication or misunderstanding they may experience" (p.22).

Technology failure.

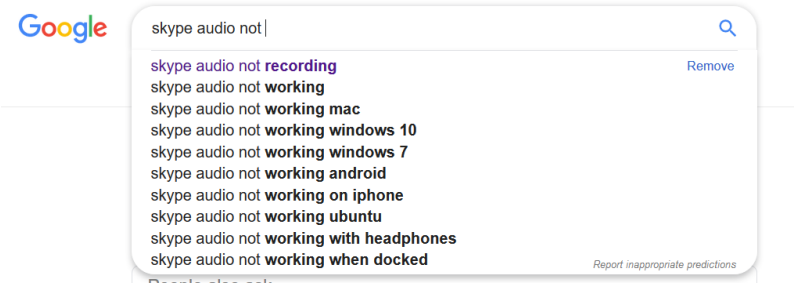

Figure 4. Google autofill suggestions (purple text indicates a previous search) retrieved June, 2019.

The most significant barrier to using technology in counselling practice is the technology itself. I conducted the interviews for this report using

videoconferencing software with the intention of allowing my actors to lead me through their network: I wanted to know what kinds of communication challenges and what kinds of technology challenges would arise during the course of my research. I suggested to my participants that we use Skype, as the software is familiar and accessible to most people, but after my first participant requested to use Zoom instead, I invited the other participants to choose the software they were most comfortable with. The doxy.me user chose her preferred platform, two participants chose Skype, and one requested FaceTime. I asked not to use FaceTime because I was having trouble with my only Apple device. We agreed to use Skype instead.

I did video counselling as part of my counselling practicum and recorded some of the sessions to use in supervision and in seminars. I used Skype for some sessions and recorded them with Windows 10's built-in video capture software. The app is part of the Xbox gaming app but available for use with any software on a Windows 10 computer. I anticipated potential difficulties connecting with participants by video or with maintaining video and audio quality as I had encountered these technical issues during practicum, although no more with Skype than with other videoconferencing platforms. Apart from poor video quality in some of the interviews, the connections and quality were consistent; my technical challenges lay elsewhere.

During one of my interviews, my computer suddenly reset. It was surprising and embarrassing, but as we were not very far into the interview, I was not overly concerned. I apologized to the participant and planned to repair the

damaged video if possible when I started transcription. Consistent with actor-network theory methodology, I was using material from earlier interviews to inform later conversations with participants but due to time constraints, I was relying on notes for early analysis. On another occasion the recording app would not start when I met with my participant. The issue was resolved when I reset the computer, but as it was late in the evening, I again apologized and rescheduled the interview. Although neither of these issues were predictable, I felt that as a technology researcher I should have been able to prevent these issues and that I was damaging my credibility. I will revisit these feelings below, as my experience may point to potential pitfalls for counsellors using technology in their practice.

I finished interviewing and started transcribing my videos. After several hours of experimenting with different software packages, I restored the video damaged when my computer reset but found that the participant's audio was missing. Then, I found that participant audio was missing from large chunks of all of the videos that had been recorded in Skype, to the point that two of the videos were unusable. When I started recording videos using the same software and hardware configuration during my practicum, I had checked and rechecked the video for fear that the recording would not work. I did the same with the first video recorded – with Zoom – for this project before assuring myself that the technology still worked. It did not, at least not when I used Skype. I re-interviewed one of the participants whose audio I lost and relied on notes for the contribution of the other. I regret not using FaceTime with P3, whose words do not appear in this report.

P2 spoke about the challenges presented by unpredictable technology failures occurring during video counselling

> Sometimes it's perfect but then other times for seemingly no reason at all the video or audio gets really choppy and I just don't know what they're saying. And it really sucks because the most important thing about our job is connecting with people and when you can't understand them it really is awful to have to interrupt and get them to repeat it or at least try to get a sense of their message and hopefully try to respond.

Technology failures can be accurately described as known risks of providing counselling services using telecommunications technology. The professional and regulatory bodies addressed technical issues in their practice guidelines (see the above excerpt from CPA's draft guidelines) but the primary technical focus of the documents is privacy and security. This focus is reflected in the following excerpt from one of the participants' client consent forms, but the form also contains an example of the back-up plans both participants who used video counselling told me they used with clients in case of technology failures:

> I may choose to facilitate counselling or consultations sessions via the internet using Skype or other online platforms. By agreeing to choose this option, I understand that:
>
> - Skype is encrypted using standard[s] utilized to protect sensitive information.
> - Any internet-based communication is not 100% guaranteed to be secure/confidential.

- Please use your personal computer with restricted access and take precautions to protect your information.
- Skype and email are never entirely secure. Unless we are both using landlines, privacy of our telephone calls and text messages cannot be protected. Please restrict information to content if possible.
- After each session, please ensure that all computer devices are logged off.
- If Skype does not work, please contact me via telephone or FaceTime if necessary.
- If you are in crisis and we are disconnected, please contact 9-1-1 or contact the distress line at [telephone number].

Individual technology failures are unpredictable – mine occurred in a hardware and software configuration that had worked for eight months without issue – but knowing that technology failure is likely to happen at some point if counselling professionals use telecommunications technology to provide services to clients allows counsellors to create alternative plans and communicate them to their clients. Both participants who used video counselling said they had always found a way to connect with their clients when their standard platforms failed, which sometimes meant using older landline telephone technology.

Even with effective back-up plans in place, issues of concern remain around technology failure. P2 indicated that she did not always immediately end sessions and try another medium when connections were bad, but instead that she might ask clients to repeat what they said and "at least try to get a sense of their

message and hopefully try to respond." I made the same choice with one client who I saw over video during my practicum. During a session in which the client was agitated and in acute distress, my video platform failed and the loss of video and audio quality started to obscure what she was saying. I tried disabling the video, which somewhat improved the sound quality, because I did not want to break the connection with the client at that moment and I found myself trying to get a sense of the client's meaning that would allow me to respond. I believe now that I made the wrong choice. I thought at the time that my presence was the best way to be with the client as a reliable therapist – consistency and reliability being critical to the counselling role (Russel, 2018) – but sacrificed connection and communication and put a strain on the relationship with a client I would see for a limited number of times.

Counselling professionals prioritize connecting with people. Without a clearly formulated plan to do otherwise, psychologists and counsellors are unlikely to terminate a session with a client who is difficult but not impossible to understand. Similarly, they would not walk out of a face-to-face session with a client with whom they are having difficulty communicating. I was uncomfortable with the technical difficulties I experienced during my interviews because they conflicted with my role as a competent technology researcher; decisive responses to technology problems during video sessions may present a conflict with the role of counsellors as unusually reliable people.

Returning to Bogost's (2015) article on the post-landline decline of voice telephone use, poor connection is experienced as unreliability, especially in emotionally heightened situations:

> When you combine the seemingly haphazard reliability of a voice call with the sense of urgency or gravity that would recommend a phone call instead of a Slack DM or an email, the risk of failure amplifies the anxiety of unfamiliarity. Telephone calls now exude untrustworthiness from their very infrastructure. (para. 6)

I used video conferencing for participant interviews to give an opportunity for the technology to have a voice in this report. The failure of a pretested configuration of Skype and Windows recording software spoke loudly: telecommunications technology is not and cannot be reliable. Counsellors who use these technologies for service delivery may not be able to maintain their roles as reliable, connected people if their work is mediated through technologies that they and their clients cannot trust.

Ethics and legal issues.

Anonymity and client verification. Each of the professional bodies' technology-related practice guidelines addressed verifying client identity as an important ethical consideration in counselling delivered by telecommunications technology (CAP, 2018; CCPA, 2019; CPA 2006). The guidelines did not specially ask counselling professionals to avoid working with clients anonymously over online media. One participant acknowledged the potential benefits of anonymous work with clients, as she felt that people may share more or share

differently about themselves when they are not asked to disclose their identities. However, to protect client confidentiality, it is important for counsellors to know that they are working with the same clients consistently, even when they believe they have complete and accurate personal information for clients. CPA's guidelines suggested that, "In situations where it is difficult to verify the identity of the client being served electronically, steps are taken to address impostor concerns (e.g., by use of identity code words or numbers)" (p. 2). CCPA pointed out that people may share their passwords. This could be a concern for clients in unhealthy or abusive relationships, especially when clients and counsellors use the routine between-session text and email contact discussed by participants. Technological actors can facilitate other people in clients' lives accessing client communication with therapists, resulting in confidentiality breaches and in potential risks to clients' safety.

None of my participants mentioned encountering these issues in their practice, which could suggest another instance of professional guidelines reflecting perceived risks in counselling literature. However, my own experience in working with clients affected by domestic violence has been consistent with the literature on this point: Couples or family members may share smartphones and thus texts and email and this is often a concern when clients are trying to privately access support. Whether or not clients are anonymous, client verification is important to preserve client safety and privacy.

Location. Location can be another safety issue. CAP's 2018 guidelines contained a chart emphasizing the importance of CAP members' clients being

located in Alberta unless the member is additionally registered in another jurisdiction.

Psychologist Location	Client Location	Action Required
Alberta	Alberta	No additional regulatory or registration action required through the College of Alberta Psychologists for those who are already registered and practicing within the scope of psychosocial interventions.
Alberta	Outside Alberta (e.g., Ontario)	Contact the appropriate regulatory body in the jurisdiction where client is located (e.g., The College of Psychologists of Ontario) to determine the registration requirements. Also inquire about restrictions on the title "psychologist" and/or practicing within the scope of psychosocial interventions.
Outside Alberta	Alberta	The College of Alberta Psychologists has mandatory registration for all individuals who are practicing within the scope of psychosocial interventions and could be registered as a psychologist. In Alberta, the title of "psychologist" is protected under the *Health Professions Act*. The title can only be used by individuals who are registered with the College of Alberta Psychologists.
Outside Alberta	Outside Alberta	No action required as the College of Alberta Psychologists does not have jurisdiction over individuals who are in other jurisdictions and seeing clients in jurisdictions outside of Alberta.

Figure 5. From CAP's technology practice guidelines (CAP, 2018).

This guideline protects clients in Alberta and in other jurisdictions: clients can be confident that psychologists working in their provinces meet local standards of education and training and that their provinces' regulatory bodies are able to respond to their concerns and complaints. Professional regulation is provincial, thus regulatory bodies like CAP can only be responsible for professionals' work in their provinces.

However, while jurisdiction is significant in regulatory matters, in daily practice, specific physical location can be more important. The literature described the importance of intentional counselling spaces that create safety for clients in counselling (Pearson & Wilson, 2012; Russel, 2018). P2 shared a story of one of her clients finding it challenging to be in her own home during a video counselling

session. P2 said that in this case the client ultimately found being at home beneficial, but initially it was more difficult than a session in P2's office: "At home it was kind of chaotic so it was helpful bringing our therapy back into the real world. It was more challenging to take those tools back but really helpful." Outside elements of a client's life are being brought more closely into the network of therapy by the technology used in counselling. This drawing closer of outside elements may be helpful for clients in some cases or may be a safety concern when clients' relationships or environments present risks. Counselling professionals working with clients in locations outside of their offices may need to be aware of what additional actors may be brought into sessions along with the client by technology use.

Another concern may be knowing the exact location of a client when the client is in crisis. Psychologists and counsellors are expected to intervene if they believe a client is at imminent risk of harming themselves or others (CAP, 2019; CCPA, 2015). Their codes of ethics permit psychologists and counsellors to prioritize safety over confidentiality in these instances in order to share information with others who are in a position to prevent harm. In the case of contacting police or Children's Services knowing a client's identity may be sufficient, but if a counsellor believes a client needs active rescue, the process of dispatching emergency services to a client's location to prevent suicide, knowing exactly where a client is becomes necessary. During one of the video counselling sessions I provided as part of practicum, a client told me about suicidal ideation just after telling me he was contacting me from his parents' home outside of the

city. Fortunately, the client did not intend to act on his suicidal thoughts at that time, but I was aware that if his risk was elevated, I would have been unable to respond quickly. Although one participant told me emergency services may be able to locate people from their IP addresses, I was not tracking my client's, and how that process would work is not covered in any documentation or literature I was able to locate.

Technology can also support suicide prevention. Suicide crisis telephone lines were developed to offer people in crisis immediate connections to support and intervention they may have not otherwise been able to access (Lester, 2012). One participant told me a story in which she was able to assist a client in suicidal crisis using technology. The client had moved away from the participant's city and called the participant late at night with the intention of killing herself. The participant was able to persuade the client to go to the emergency room and stayed with her on the phone, keeping her calm and focused until she connected with hospital staff. Technology gives counselling professionals the ability to extend their presence and support client safety, regardless of their location. The trade-off may be that counsellors' increased reach creates an increased responsibility for managing crises, or that counselling professionals are differently responsible for managing imminent crisis without the support of external agencies.

Security.

> The more excited and confident that you are about the security tools you use, the more your clients will be, too. So, practice. Practice using the

> technologies with your family and friends. Get advice from others who use the technology. Do not be afraid. Be informed. (CCPA, 2019, p.10)

Several of my participants identified security as the primary concern of their regulatory bodies around technology use in counselling practice. This is reasonable considering one of the primary ethical obligations of counselling professionals to preserve clients' privacy (CCPA, 2007; CPA, 2017) and record-keeping is one of the few aspects of professional counselling practice subject to legislation external to regulatory bodies' standards of practice. For counselling professionals practicing in Alberta, there are three provincial acts concerning collection, use, and storage of information that could apply depending on where they are working at the time: the PIPA, which applies to professionals in private practice, FOIP, for those working for public organizations, HIA, which applies to those working for government-funded health care organizations. For psychologists, the CAP *Standards of Practice* supersede parts of all of these acts and CCPA members, who may choose to practice across provincial borders, may need to consider the federal act, PIPEDA. All of the participants were bound by more than one piece of legislation concerning electronic record-keeping; one was subject to any of four depending on which of her workplaces she was in at the time and what she was doing. The perceived focus of professional guidelines on privacy and security reflects the prioritization of these issues by Canadian society at large.

However, this focus may not be the most practical way of addressing ethical issues that arise in counselling practice. P4 offered the opinions that, "At the end of the day whatever we do is secure but there's always the chance it's not

secure no matter how we safeguard it". PIPA reflected this reality of information security: "An organization must protect personal information that is in its custody or under its control by making reasonable security arrangements against such risks as unauthorized access, collection, use, disclosure, copying, modification, disposal or destruction" (PIPA, 2003, section 34). While counselling professionals are asked to take reasonable steps to prevent security breaches, there is also an understanding that no system is perfect. Additionally, there is no evidence that electronic security breaches are common: neither I nor my participants experienced unauthorized access to client information by electronic means, nor were such cases common in counselling technology literature. On the other hand, I have experienced and heard about issues with mislaid paper client files, with professionals leaving paper intakes in view on their desks, and with thin office walls. Again, familiar, routine activities using older technologies become invisible while newer technologies remain controversial, regardless of the real level of risk associated with either practice.

As discussed above, despite perceptions of difference, most of the available video conferencing platforms have similar standards of security. FaceTime's encryption and privacy protections are similar to those of other platforms (HIPAA Journal, 2018). However, the two participants who regularly used video counselling reported that they used FaceTime if their platform of choice was not working for that session, but said they knew they should not, as they both believed FaceTime to be less secure than other platforms. The participants were concerned about security but were not necessarily aware of the technical specifications

behind the software they used. Perception of security may have been more important to them than actual security,

Most participants described the care they took in ensuring that their email platforms and practice management software were secure. Several participants stressed the importance of servers used for client information being physically located in Canada. While none of the relevant laws in Alberta require electronic files to be stored on Canadian servers, there is an argument to be made for this position. Legislation requires counselling professionals to retain responsibility for the security of client data, regardless of where it is stored. As foreign governments may retain rights to access any information in their jurisdiction, counselling professionals may not be able to exercise control over information stored outside of Canada (Mylrea, 2017). Canadian data storage businesses emphasized this position in their marketing (e.g. “Why Storing Your Data In Canada Matters,” Slos, 2017); that two of the three participants who discussed using Canadian servers seemed unfamiliar with the precise legislation concerning server location (PIPA requires storage location disclosure as part of the consent process if servers are located outside of Canada) or the rationale behind it could suggest these businesses’ success in mediating counsellors’ understanding of security regulations. Again, it is the perception of security and of compliance with regulators that may be most important to the participants and to other counselling professionals.

What Are the Benefits of Using Technology in Counselling?

Access. The primary benefit my participants identified using technology with clients was ease of access. P2 described her early uses of video counselling:

> The first couple clients that I had via video [lived in] smaller towns where they didn't necessarily have access to a counsellor who at least identifiably was LGBTQ friendly or worked from a feminist perspective so they didn't feel they had a safe option but they needed to explore some stuff, so being able to do that by video became extremely important.

P2 said she did not remember if she was the first to suggest video counselling to her clients or if they had requested the service. In either case, this aspect of her practice was not created by the counsellor as an independent actor: The existence of the technology within her network created a possibility of connection and work that she and her clients responded to and allowed the counselling to happen. Video conferencing as an actor made counselling possible. Increased access for clients in rural areas is consistent with perceived benefits described in the literature on technology use in counselling (Riding-Malon & Werth, 2014) and with MHCC's stated hopes for increased technology use (MHCC, n.d., 2017).

My participants also described increased access in a wider sense. The other participant who used video counselling had moved from one part of the province to another. Using technology allowed her to continue working with clients in her former community. Moreover, P2 provided further examples of video counselling overcoming barriers to accessing counselling even within the same geographical area:

> Clients who have had barriers. Like clients who maybe have been in bad pain days because of chronic pain issues and it might just be a bad pain day generally or pain that's been made worse by the cold. "I can't get out of bed today," or "Maybe it would be better to be at home, can we do a video? It might not be safe to drive, can we do a video?" . . . It's made things a bit more possible for people in that way.

P2 talked about various barriers to physically coming to her office that clients experience, including illness. winter weather impacting driving, availability of child care, and not having enough money to buy gasoline or take a bus. Technology provided clients the ability to access counselling in a number of situations that they would not have otherwise been able to. Moreover, all of the participants, including those who did not provide video counselling, described technology facilitating their clients' access to them in moments of need between sessions by telephone, email, and text, as discussed above. Again, counsellor reach is being extended and opportunities provided by the technology they use.

Working with young people. The literature and MHCC suggested technology as an appropriate tool to provide counselling to young people (Barnett, 2018; MHCC, 2013). While one of my participants worked primarily with children, youth, and families, she did not attribute her choice to use technology in her practice to her client demographic, but again to access issues that could apply to any client population. She talked about working with people in distant and rural areas and about working with clients whose anxiety could prevent them from leaving their homes to come to her office.

While I was researching this report, I was invited by a participant's contact to attend an event held by Argyll Centre, Edmonton Public Schools' online alternative school. The school gathered staff, students, and people from the community to discuss options for better supporting student mental health in their online education environment. I had an opportunity to work with in a group with some of the school's high school students, who expressed preferences about what supports would work for them. The students who I worked with said that they felt more comfortable attending school online because they experienced anxiety attending classroom-based schools. They said that they preferred being contacted by school staff by text for whatever purpose because they felt less pressure than they would from phone or video calls. However, they also talked about wanting to meet face to face with counsellors, especially for the first time, in order to create a relationship with a person they could trust. These students were online, experienced barriers to accessing counselling, and technology facilitated their access to school. However, consistent with earlier research (Bradford & Rickwood, 2014; Glasheen et al., 2015), they wanted a connection with a counsellor that was not always facilitated by technology.

My participant said a number of issues could impact her decision whether or not to use video counselling with the young people she worked with. She said that she made clinical decisions based on the specific concerns her clients brought to her, as unhealthy relationships with technology were becoming more common reason for clients to see her. She also said she made decisions based on how the video sessions worked:

> Are they engaged? Are they following the rules, I guess, that we've set out for sessions? Because one thing I find with teenagers is they often initially think of our sessions as just talking to their buddy, they're talking to their friend. When we're doing sessions I want it to be like a session. You're sitting across from me and we're working on things and we're talking about things. You're not talking to your friend on your phone while you're talking with me because that's not how it would work in-clinic.

Adults, even first-time clients, come to counselling with expectations about what a counselling session will be like (Watsford & Rickwood, 2013) that may be more easily translated to video, or telephone, or text. Young people, on the other hand, have less clear expectations (Watsford & Rickwood, 2013) and may need a longer learning process and more guidance from counsellors, especially when they are not meeting face to face.

(Opportunity) cost and efficiency. As my participants were running private practices interwoven with technology rather than providing a technology-based program or running their practices entirely online, they did not consider cost in the same way that was described in the literature. However, most of the participants talked about electronic record-keeping, scheduling, and billing and practice management software making their administrative duties more efficient and giving them time to focus on other things. P1 said, "It gave me more time between sessions to have some down time so in that since I think it's beneficial in terms of not burning out." She spoke about new technologies that were challenging to set up, specifically scheduling software that did not always work as

it should (again, the technology was unreliable), but she was optimistic about the long-term effects on her practice: “Probably easier in the long run in terms of all the in between stuff. You’d have to write it down and then notify the person and this just does it automatically. It takes away a couple of steps I think.” Counselling professionals who spend less time on administrative tasks can spend more time on other aspects of their practice. Technological actors can facilitate additional time for clinical work or for self-care, which could have a positive effect on counsellors and their clients.

Effectiveness. None of my participants used effectiveness measures in their practices, so I was unable to obtain any information on the effectiveness of using technology in practice beyond my participants’ impressions. However, when I asked one participant at the end of our interview if there was anything that I should have asked her about that I did not, she surprised me by talking about drop-out rates. She said that client drop-outs, while still few, were much more common among her video counselling clients than her face-to-face clients. She said that after one or two sessions, some of her clients told her that they would prefer to see someone face-to-face, and when that was not possible for the clients, she would refer them to another practitioner. The participant said she was also surprised by the difference and attributed it to the medium not being a fit for some clients. Investigating what clients may feel uncomfortable with and whether it would be possible to address any of their concerns using alternative technologies could be important future research.

What Opportunities Exist Now for Intentional Responses to Technology in Counselling?

Intentionality. Practicing intentionally and reflectively is integral to counselling work (Haverkamp et al., 2011; Wampold, 2014). All participants identified thoughtful decision making as important to their uses of technology in counselling, both in the decisions they made about which technologies they used and in how they chose to use them. One participant explained that she was careful in deciding whether to use video counselling with her clients and that much of her decision was based on their responses in the first couple of sessions. She said, "Is there something that we need to work through or is that something we need to scrap? I think with technology there is a lot of clinical decision making on whether it's a good fit for the client." Other participants also spoke about clinical decision making and finding the right fit for their clients: In each interaction they described, they assessed their clients' situations and personalities and how they communicated in video sessions, or by email, or over the phone, and decided how to proceed based on their education, their experiences and what they were seeing.

This clinical intentionality extended to other forms of technology use, including their administrative practice and how they scheduled clients. P5 spoke further about her decision not to use online booking:

> To be honest some clients require more therapeutic effort than others. So if I have A, B, C, clients that are very intense and complex, I don't want to see back to back to back to back. Because my resources get diminished through that, so I think it's only fair for all my other clients who maybe

> aren't as complex, you know, to not have an exhausted [P5's name]. So I think that's really what I like about it too, that I have more control over which clients I see and when I see them.

P2 spoke to a threat she saw to intentionality in counselling from technology use, primarily on the side of clients. I asked her opinion about the American discount text-based counselling services that allow users to text their therapists as often as they want, whenever it is convenient for them. P2 saw a risk to people experiencing therapy as a smartphone app:

> It's important that we take therapy seriously; it's not just something we fit in, it's something you commit to, you take on. You wouldn't want clients to feel "Oh yeah, I'll fit you in on the lunch break. Whenever I can I'll just pick up the phone and sure I'll chat to you about that." It's an undertaking. It's hard work. An so I guess with technology if it's something that's easy to slip in, is there still a way to have it felt as an important commitment?

P2 pointed to technology shaping the way people experienced counselling and thought about counselling. She was one of the heaviest technology users that I spoke with. She was also one of the most aware of how important it was for counsellors to be intentional about how they used technology with clients and about how they thought about the technology they used. She compared potential risks she saw in telecommunications technology use with thoughts she had about manualized practice:

> When people get very rigid and manualized, like when they're stuck to their technology like glue, that it can start to feel robotic. Where we can

> start to lose the humanity in what we do . . . if we grip on to any of our technologies, whatever they may be: manuals, computers, et cetera.

The ubiquitous nature of contemporary telecommunications technology can make it easy for people to interact with others in a way that is routine: standardized and thoughtless. Counselling professionals can respond by being intentional and thoughtful; part of this is being aware of the influences of technologies, among other actors in the networks they belong to.

The black box. "Now things have become a little bit more routine for me and I sometimes don't think about why I make the decisions that I do" (P5).

Before I started interviewing, I expected that the people who had offered to speak with me would want to talk about technology in the most explicit and controversial ways described in the literature: counselling through videoconferencing or counselling using a text-based internet medium. Instead, the first person who offered to speak with me and two others who were suggested to me to speak with used technology in less visible ways: for practice management and for web marketing and recruiting clients. I did not anticipate participants to identify strongly with uses of technology less directly tied to client interactions.

However, practice management software, despite its familiar components of scheduling and record-keeping, is still perceived as being a new technology. Email, text, and telephoning were used by all of the participants but they generally did not highlight them as components of technological practice until I questioned them about their use. Substantial components of technology use in counselling

practice already exist in a black box, although these technological actors continue to impact when, where, and how counsellors and clients connect.

The sole time my snowball strategy was successful a participant recommended that I speak with her colleague because she was a heavy user of technology. When I approached her colleague to invite her to participate, the colleague reacted with surprise and confusion and insisted that she did not use technology in her practice. Her assumption was that a heavy technology user must be directly providing services by internet videoconferencing software. During our initial conversation and later during the interview, she expressed surprise at how much technology she used in her practice and how it shaped her choices and her interactions with clients.

In order for counsellors to respond intentionally to technology, they must be aware of their technology use. Reflecting on how text, email, telephone communications, and other familiar technologies impact work with clients is as necessary for competence in counselling technology as learning about newer, more controversial forms of technology use.

Responsibility. One theme that ran throughout participant interviews and throughout professional documents was the association of increased responsibility and technology use. Technology imposes new responsibilities on counsellors as they employ new tools and work with clients in environments outside of the counselling office. Counsellors are responsible for competence with technology, both to facilitate consistent communication and for data security, they are responsible for client safety in an extended counselling environment, they are

responsible for representing the profession online, and they are responsible for setting boundaries around technologically mediated expectations.

Responsibility for data security. As discussed above CAP and provincial legislation require counselling professionals in Alberta to be responsible for the security of client information. While PIPA asked only for reasonable security measures to be taken, CAP (2019) provided a list of specific criteria that aligned with HIA and with PIPEDA.

> 7.6 A psychologist who uses an electronic client record shall ensure that the electronic record has safeguards that protect the security and confidentiality of information including, but not limited to, the following:
>
> 7.6.1 only authorized users can access identifiable information;
>
> 7.6.2 appropriate password and encryption controls are used;
>
> 7.6.3 users can be uniquely identified;
>
> 7.6.4 users have documented access levels based on their role;
>
> 7.6.5 audit logging is enabled and meets the requirements of applicable legislation;
>
> 7.6.6 information is securely transmitted;
>
> 7.6.7 data integrity is protected, and secure back-up and access protocols are in place;
>
> 7.6.8 users can be authenticated where electronic signatures are permitted; and
>
> 7.6.9 electronic data is disposed of in a secure manner disallowing reconstruction. (p. 7)

CCPA's (2018) practice guidelines, on the other hand, included three and a half pages on counsellors' responsibility for data security, including sections on considering server locations, understanding WiFi security, and disabling automatic cloud backups. My participants were generally confident in their ability to use technology to provide counselling services using technology but did not necessarily share the technical competence to address all of the issues that CCPA believed to be integral to responsible technology use (potentially CCPA could make the ambitious requests it did because CCPA guidelines are not legally binding, in contrast to CAP's standards of practice). The literature indicated that counselling professionals did not believe that online counselling services could be secure (perhaps because of an awareness of the unreliable nature of technology), but would still choose to use them (Glasheen et al., 2013) and that most people do not use basic security measures online (Elhai & Hall, 2016). My participants had differing ideas about what was necessary for data security and admitted that they did not always follow their own standards, as in the example above of counsellors using FaceTime although they did not believe it was secure. Additionally, some participants said that they were not aware of their professional organizations' guidelines concerning technology use. Guidelines (legal or not) and personal standards are not useful if they are not followed; clear, consistent, and achievable technological competence responsibilities would aid counsellors' intentional responses to data security, as would increased awareness of what is expected by legislators and professional bodies.

Responsibility for client safety in the extended counselling environment. Attitudes to responsibility for the extended counselling environment were also presented differently by CAP and CCPA. Discussion of the limits to confidentiality and crisis management in technology-aided communications were required as part of informed consent by CAP (2018), while CCPA (2019) offered as a key consideration:

> First, we do not have control over the situations of clients and any issues they face may be impossible to detect. We have no control over where they choose to be, who is with them, what kind of distractions may be present, their level of personal safety, and so on. (p.17)

Elsewhere, in regards to video counselling, the CCPA guidelines made a distinction between factors related to clients' external environments, naming them "A host of practical considerations" (p. 15), separate from, "A host of ethical considerations: for example, will you allow clients to record sessions? If so, can they post portions to the Internet?" (p. 15). Given that knowledge of and responses to who or what may be present in clients' environments during counselling can have an impact on client safety and confidentiality, ethical decision making about counsellors' responsibility for the counselling environment is necessary. Neither professional organization identified the importance of counselling professionals' awareness of the extended counselling environment and the participants who did video counselling said they were largely unaware of their clients' environments during sessions. P2 said, "I don't notice much of what's in their space because it tends to be mostly their face." Social work and nursing literature on home

visitation has suggested the need for a different level of awareness of the environment for professionals who do home visits (Sharps et al., 2016), as has telephone crisis support training (domesticshelters.org, 2017).

When I was a telephone crisis support worker, I was speaking with a caller in suicidal crisis who was considering killing himself with a knife. I failed to note that when his roommate came home he moved into his bedroom, where he kept the knife. He injured himself while we spoke; while I had no control over his environment or his actions, greater awareness on my part may have changed our conversation and the course of events. As a result, I feel strongly about the need to be aware of clients' environments when I am working with them outside of a controlled counselling space.

Despite sharing similar underlying ethical principles, social workers, nurses, CAP, and CCPA represented different beliefs about their responsibility for clients' home environments, as have I and my participants. Responsibility for external influences in the counselling environment is an ethical question: for counsellors to respond intentionally to that question, they must be aware that the question exists.

Responsibility for representing the profession(al) online. Unlike in British Columbia, Albertan counselling professionals have no specific guidelines that require them to represent their professions in a positive way beyond their professional activities and actions and statements related to promoting equality and the good of the Canadian public (CPA, 2017). However, as discussed above in regards to social media, counselling professionals and especially private

practitioners have an implied responsibility to present themselves in a professional manner in all public forums, which includes anything on the internet at any time. P5 said,

> I feel like when it comes to technology now there's that extra layer. It's not just how I present myself or how I speak or my academic background that is part of the image that I'm projecting as a therapist but like you said, now, what does my email look like? What does my phone number look like? What does my web page look like? So I feel like now there's another layer of having to present our best selves in terms of counselling because you don't want to go and see a counsellor who has a bunch of spelling mistakes in their Psychology Today profile or has an email address that's like stopbeingsad@therapy.com.

Arguably, counsellors could choose not to engage online; however, as noted above, clients will search for their counsellors, and the choice not be present on the internet also carries the risk of negative perception. Here, the existence of internet technology and its close connections to many clients' lives requires a responsibility for professional online presentation for the majority of counselling professionals, regardless of whether they want to be present online.

Responsibility for setting boundaries. As the issue of the difficulty of boundary-setting and technology use was prominent in the literature (Lustgarten & Elhai, 2018; Vincent et al., 2017), I asked the participants about how they handled setting professional boundaries around communication using technology, especially around between-session communications. The literature indicated that

counsellors were more likely to have difficult setting boundaries around email communications. CPA's (2006) draft ethical guidelines recommend "Psychologists set appropriate boundaries with clients regarding their availability" (para. 20) and CAP's (2018) practice guidelines require Alberta psychologists to "Identify and discuss strategies for managing potential boundary issues" (p. 4) as part of the informed consent process. The participants identified that clients regularly contacted them between sessions using technology, often when the clients were in crisis. P1 said,

> Some of them I've given my phone number to if they are kind of higher risk. I know some people have regretted giving their phone numbers out. It's just an option and they don't necessarily use it. One person who texted me at 11:00 last week. It was just a few back and forths. Not a big deal. I would certainly put boundaries around it if my time was being too much. I would refer them to crisis lines if that was appropriate at that point. It happens rarely enough that I'm okay with that and if someone was in crisis of suicide or something. You know I might not always get them; I'm not always up until 11 o'clock but I happened to be at this time.

P1 said she felt that it was her responsibility to set boundaries. Similar to the other participants, she accepted that the technology gave people the ability to contact her and believed that if she was using time outside of working hours to contact clients, she needed to improve her boundary setting. She talked about pressure she felt to respond to clients:

> Pressure I put on myself I think more than anybody else puts on me. But right now it's pretty manageable because I don't have a lot of that happening on weekends or evenings. I think my clients are pretty respectful in that regard. If I felt that it was getting to be too much I could certainly limit that or clarify like I'm only available between this time and this time and of course I'll answer the next time I'm available. I wouldn't hesitate to implement that.

However, P1 and P5 both identified repercussions for how they chose to with clients outside of office hours. P1 felt that she needed to answer the phone over the weekend rather than allowing calls to go to voicemail.

> If I'm preoccupied I won't answer it. I think we were missing a lot of calls over the weekend because with an answering machine we wouldn't get to them for two or three days. Like if they call on a Friday evening we don't get it until Monday. They've probably already gone and booked with somebody else at that point, right?

P5 spoke about a conflict she experienced between what she felt to be her ethical responsibility to clients and her boundaries around work, and especially working without compensation. She and most of the other participants said they used Psychology Today's therapist directory to connect with clients. Clients were able to find counsellors on the Psychology Today website and to provide them with contact information and a description of their concerns, which counsellors could then use to arrange initial appointments. P5 said of the contact form that clients used,

> It doesn't really limit people's ability to tell me what they want to tell me. Because it's that free format people can put a lot of information in there. A lot of it can be helpful, but when they start going into too much detail ad maybe there are some potential risks I can pick up on or concerns I have for somebody's safety or well-being that kind of really puts it into another category, so probably a couple times a month . . . I'll get emails from people who say you know, these are some of the things that I'm experiencing: I'm fighting with my spouse, I'm unemployed, I have no money, I'm gonna be kicked out of my apartment, I'm going to, you know, I have suicidal ideation, I'm thinking about hurting myself or I'm thinking about all this sort of stuff. It really forces you as a practitioner to figure out, you know, what your boundaries are, what your duty for responsibility and ethics are in terms of connecting with these people. And, you know, how much do you want to work for free? When people are reaching out in those really vulnerable crisis situations I end up referring them to a crisis agency, or the hospital, or the Distress Line, so weirdly I don't get a lot of them coming back.

P5 said that she knew of other practitioners who did not respond to these communications. She said her colleagues told her they did not have time but she identified that they did not prioritize the users in crisis.

All participants identified setting boundaries as their responsibility alone. However, other actors participated in creating an increased responsibility for boundary-setting among professionals who use technology. Psychology Today has

responsibility for its specific website design. Governments share responsibility for their (lack of) funding and promotion of crisis services, which could otherwise support clients in immediate need. The culture as a whole, as well as specific companies and engineers, share responsibility as they have created and popularized technology that is always on and with it the associated expectation that people are always working, whether or not they are paid for their efforts. An awareness of the external imposition of the increased need for boundary setting on counselling professionals could change the way counsellors think about technology and boundary setting and allow different responses to that imposed responsibility.

The reasonable person and intentionality. Where specific requirements are not indicated, legislation, standards and practice, and codes of ethics use the standard of reasonable efforts to guide the extent of counselling professionals' responsibility (CAP, 2019; CCPA, 2008; CPA, 2017; PIPA, 2003). Reasonable is a fundamental legal term in Canada associated with the reasonable person in Canadian law. From "The Reasonable Person" in *LawNow Magazine*:

> Canada inherited the reasonable person standard from England in Vaughn v. Menlove, 1837 132 ER 490. In this case, an individual of "lower intelligence" (as noted in the case) built a shoddy haystack too close to the plaintiff's land. The defendant was warned that the haystack was poorly constructed, but ignored this advice. Unfortunately, the haystack spontaneously combusted and destroyed some of the plaintiff's property.

> The court rejected the defendant's argument that he had acted honestly and in good faith even though he built a shoddy haystack. The court also rejected the idea that imposing liability on the defendant would unfairly punish him because of his lower intelligence. Instead, the court found the defendant liable and stated that the defendant must "adhere to the rule which requires in all cases a regard to caution such as a man of ordinary prudence would observe". This is the basis of the reasonable personal standard. (para. 2-3, Peerani, 2017).

Legislators' and professional bodies' choices to draw on the reasonable person standard highlights the foundation of Canadian law as an actor present in counselling networks. Peerani added that professionals are held to a higher standard based on their expertise: thus, a counsellor would be held to the standard of a reasonably competent counselling professional. Graduate training programs in counselling and psychology and professional standards of practice develop and guide this standard of competence in practitioners in areas directly related to counselling practice. Without training in technology use in counselling practice and without clear understanding of how technology imposes responsibility on counselling professionals, the standard of reasonableness breaks down. Despite my participants' ambivalence concerning the need for training in technology use in counselling, this suggests a need for some form of standardized education. Here is a clear opportunity for an intentional response to technology in counselling practice: professional bodies and individual counsellors can clearly examine the responsibilities presented by technology and graduate programs can assist

practitioners in meeting the standard of technological competence required in contemporary practice.

Trust. The second theme that ran throughout the interviews was trust. When participants spoke about how they learned about technology, impacts technology had on practice, and the differences between face-to-face counselling and counselling services delivered via technology, they often referred to trust or mistrust of actors present in their network. Rempel (2018) and Jerry (2014) discussed the integration of technology by counsellors in terms of Erikson's developmental stages. The two earliest stages are concerned with issues of trust of others (basic trust vs. mistrust) and trust of self (autonomy vs. shame and doubt). While some of the issues that participants brought up (e.g. efficiency or managing relationships) could suggest individuals related primarily to a later stage of development, foundational concerns about trust were consistent throughout the interviews. This points to counselling professionals' relationships with technology at this place and time belonging to these foundational developmental stages.

Trust and learning about technology. The participants identified two methods they used to learn about technology and to choose the technology they employed in practice: suggestions from others or reading about the technology online. None of the participants had received formal training in technology use and while some of them said they took care to follow their professional bodies' guidelines, the guidelines did not provide detailed instructions about what technology to use or how to use it. Some participants mentioned learning about specific services from colleagues who used them in their practice, but more often

they spoke about learning from others: supervisors, family members, and service providers. When they did, they spoke about trust. P4 said she mostly took direction from her supervisor and cited her trust of the supervisor as the basis for her reasoning, “At the time it made me feel like, okay, I trust you, I trust that you know what you’re talking about.” P2 said she did not remember the rationale that led her to choose one of her software platforms, but that she had talked with support staff from the service provider before she started using it. She said, “They assured me this was going to be a lot more safe and secure.” On one hand, this ability to trust in others facilitated learning and the ability for the counsellors to make informed choices about the technology they used. On the other, a reliance on trust could be problematic for professionals: the advice was coming from single sources and in the case of the service provider was part of making a sale.

In other cases, participants said they had learned about technology by doing their own research. P1 said. “I pretty much learned this stuff on my own in terms of how to do the website and all that. Just kind of figure it out as I go.” Most participants spoke about doing their own research about technology by reading about it online. This suggests a higher level of autonomy and trust in one’s own abilities than would taking on practices based on others’ advice, but raises some other questions.

Falzon, Davidson and Bruns (2010) wrote about the challenges of following an evidence-based research process for practicing psychologists in terms of time and of available resources. Available resources for technology use in professional counselling practice are further limited: little literature exists on the

topic, especially on specific practices, and any documentation available concerning software platforms is most likely to be sales material. Service providers are biased and may not have an accurate understanding of the needs of counselling professionals. For example, Owl Practice, which refers to itself as "Canada's comprehensive practice management solution" (Owl Practice Inc, n.d.), also stresses on its website that it is compliant with the Personal Health Information Protection Act (PHIPA). PHIPA is Ontario provincial legislation; although Ontario may be a large market for Owl Practice, the company's failure to acknowledge needs of users outside of the province in national marketing materials led me to wonder what else was omitted in their presentation or in their own research of practice standards. A Google search for "counselling practice management software canada" on June 30th, 2019 returned a first page of links to Google advertising, company web pages, paid review sites, and no other content. What information, then, can a counselling professional draw from online to make decisions about which technology to use? What information can be trusted?

Falzon et al (2010) also stressed the importance of clinical decision-making in the application of research as part of the evidence-based process. As discussed above, the participants indicated that when they chose technologies and when they chose online materials to use with clients, they looked for appropriate fit with their clients. P4 said she learned about resources to use with clients from other people and online:

> I showed a client that video so I guess I got it from the presenter. It comes up on things like Facebook, it comes to me in different ways and if I feel it

> makes sense for my client and if it can support or help what we're trying to accomplish.

Regardless of where she sourced her materials, she appeared to trust herself as clinician enough to make confident decisions about what materials to use with clients. Other participants shared similar views: clinical competence may offset the lack of trustworthy resources concerning technology and counselling practice and the wide availability of materials related to counselling of varying levels of trustworthiness available to counsellors through Facebook, YouTube, and Google searches.

Net neutrality. One participant raised the issue of net neutrality and how she believed it could influence the practices counsellors used as well as what information about counselling and psychology that counsellors and clients had access to. Net neutrality is the principle that internet service providers (ISPs) give equal priority to any content transmitted over the internet (Canadian Radio-Television and Telecommunications Commission [CRTC], n.d.). In practice, this should prevent ISPs from prioritizing traffic based on corporate or political interests and preserve what the CRTC (n.d.) called "choice, innovation, and free exchange of ideas" (para. 1) on the internet. The CRTC held public hearings on net neutrality (CRTC, 2008) and has stated that it is committed to preserving net neutrality in Canada. However, how much control the CRTC has over preserving neutrality on the internet is questionable. The CRTC is able to respond to complaints about how Canadian ISPs manage their traffic, but P5 argued that

counsellors' and clients' access to information was tied to an actor most people interact with regularly that lies outside CRTC jurisdiction: Google. P5 said,

> In terms of now the internet being the first stop whenever people are gathering information, as soon as people might start feeling anxious or depressed, usually their first go-to is going to go to the internet. Going to start researching. What happens is depending what browser they're using, depending on which search engine they're using, depending what could even be what computer they're using, the responses they're getting from searching out those questions that they have, those concerns that they have, can and will, I'm sure, in the future, be impacted by net neutrality. . . . Even thinking about modalities or thinking about people they might end up connected with. That can be a real challenge I think moving forward in terms of how we are going to keep clients safe in that space outside of corporate interests.

Net neutrality relates to trust: when people use the internet in general and search tools in particular, they expect to be able to access information based on relevant responses to the queries they put to the system, not based on what is preferred or advantageous for the people and companies who create and maintain the systems they use. Google uses complex algorithms to determine its search results and how exactly they work is not publicly available (DeMers, 2016). Although Google has stated that it is committed to net neutrality (Google, n.d.), these algorithms necessarily affect what content its users have access to and which other actors are brought close to users when they search for information. Which search results are

common returned affect what services people access and what people believe: P5's mistrust of these systems is related to the trust counsellors, clients, and others may place in a part of the network that is largely hidden from view.

Trust in the body, trust in the professional self. Many counsellors trust in the presence of the body, as reflected in the concerns in the literature about potential loss of information when counsellors and clients are not present in the same space and the focus in regulatory and professional bodies' guidelines on the potential for miscommunication and misunderstandings when counselling from a distance. Counselling literature has posited that controlled, shared physical space promotes client safety (Pearson & Wilson, 2012), development of trust (Dales & Jerry, 2008; Russel, 2018), client organization and regulation (Dales & Jerry, 2008), and opportunities to practice managing difficult conversations (Russel, 2018). Some participants endorsed this perspective: those who did not choose to use video counselling attributed their choices in part to the importance they placed on the presence of the body in counselling sessions. P1 said that she felt comfortable during our conversation and in using videoconferencing for consulting, but did not think that that comfort could extent to work with clients: "If we were doing actual therapy stuff for me to read your body language and be more attuned to you I think that would be more difficult." She said that with clients it was important for her to know**, "**what their feet are doing, what their hands are doing, are they hugging a pillow?" P5 agreed and emphasized the importance of being able to practice in a shared physical space:

> I don't do online counselling, I don't do Skype counselling because I really feel that having that person in the room is very important and especially when it comes to practicing interventions or practicing coping strategies I think it's important to have that one on one connection.

However, as discussed above, participants who had substantial experience with telephone and video counselling did not identify any kind of loss in the work they did with people at a distance. As P2 suggested, counsellors who provide services using technology may be attending to different kinds of information, but what they receive may be enough to do effective therapeutic work. Context beyond verbal communication exists in video and telephone counselling: for example, changes in facial expression, tone of voice, and rates of breathing can provide information about what a client is thinking or feeling that counsellors can pick up on and respond to similarly to how they would body language does in face-to-face counselling sessions. Again, existing counselling literature concerning technology use is primarily theoretical and based on an understanding of decades face-to-face counselling communication. Without process and outcome comparisons of counselling using different media, counselling professionals who take either position are relying on trust: either trust in the importance of the body or trust in the professional self.

Client trust. Although I did not pursue collecting data from counselling clients for this report, their voices were present in the network. The two significant points I took from client voices were concerned with trust and reflected the positions discussed above in relation to counsellors: clients trust in both the

physical presence of counsellors and in the role of the counsellor as professional. The students from Argyll Centre highlighted their need for face-to-face connection to establish trust. Despite wanting much of their communication with school staff to be mediated by technology and preferring text, arguably a more distant medium, to telephone or video communication, they said it was important to establish trust in an initial face-to-face meeting with a counsellor.

On the other hand, the clients P5 described who used Psychology Today's web form to disclose intimate details of their lives to a stranger demonstrated a willingness to trust a counsellor with whom they had no relationship to a surprising degree, and, with the use of the web forms, an accompanying trust in web technology and in the company that produced it.

I cannot know what the differences are among these clients or among their situations that produced seemingly different positions on who to trust, but it is interesting that trust in the face-to-face encounter and the expectation of professional competence and care that were the aspects of client experience that were most apparent to me through the network. P5's responses to Psychology Today users acts of trust was shaped by their actions and likely reinforced their trust of counsellors and the technology they used. Counsellor responses to client demonstrations of trust are significant: Counselling professionals are teaching clients who and what they should trust. not only in sessions but in all counsellor-client interactions. The technology they use and the attitudes they take toward it are implicated in their responses to client behaviour.

Trust and the technology-mediated counsellor. It is important to highlight again that technology presented itself as an unreliable actor repeatedly during my research. In my practice, in that of my participants, and in the research itself, the technology we used failed. As discussed above, the unreliability of the technology counsellors use endangers the perceived reliability of counselling professionals and of counselling practice: in which, again, trust is central. Counsellors and the technologies they use cannot be separated out in the network or in clients' experiences. Intentional responses to the unreliability inherent to technology are critical in order to preserve the integrity of the counselling endeavour. Borrowing again from Rempel (2018) and Jerry's (2014) Eriksonian developmental model, without a positive resolution of the foundational trust versus mistrust stage of the development of technology use in counselling, detrimental effects will be carried forward as technology use continues to develop.

Chapter 6. Discussion and Conclusion

ANT is a descriptive methodology; in the previous chapter I attempted to describe the data in as much detail as possible. While I will not attempt to interpret what I saw (beyond the interpretation that any author provides by what they choose to include, to leave out, or to focus on), this chapter contains an overview of the network around technology use in counselling practice and suggestions for how what I saw could be used in counselling practice.

The Network

By examining the network at this place and time, I have been able to identify many of its elements and observe how work flows through it: Actors shape and impact each others' behaviour, transforming the actions they take and the attitudes they hold toward it. Counselling professionals and the work they do are impacted by messaging from regulatory and professional bodies and from Canadian and provincial law, by cultural and professional beliefs about gender, age, risk, safety, data security, and counselling models, by their clients expectations, needs, and actions, and by the technology they use and the people and organizations who produce it. I was surprised by the prominence of the role professional organizations played as mediators in the network. Their impact is not unidirectional: instead, they reflect and reinforce cultural and professional beliefs represented by counselling professionals (who, after all, comprise the organizations) and by selected aspects of law and counselling literature, which themselves are prioritized by professionals and the beliefs they hold.

Interestingly, in the network of technology use in counseling practice, it is the technology that appears to be the most autonomous actor. The counselling professional participants and their organizations were constantly responding to the technology, whether by creating guidelines to manage their impact on practice, by telling themselves they needed to improve their boundary-setting skills, or by endeavouring to listen harder in a session when technology's unreliability made itself known. Counselling professionals are in some ways responding intentionally to technology with clinical decision-making and with managing the impacts of the technology that is present in their practice, but they are rarely responding proactively. Neither the counsellors nor the organizations they belong to chose to shape the technology they used other than by selecting among options presented to them by corporate actors (e.g., the participant who chose to use local hard drives over cloud storage for her practice) or by avoiding technology by refusing to engage in specific practices (e.g., video counselling or practice management software use). P5's Psychology Today users point to a different way of responding to technology. They used a standard online form n a way that it was not intended and leveraged it into an immediate cry for help to a professional with whom they might otherwise need to go through an intake and scheduling process and a potentially challenging conversation to communicate. While the outcome may not be ideal, the actions of these users suggest a way to shape the technology that is available to counsellors for use in their practice rather than only allowing technology to shape counselling practice.

In/consistency with Literature

In terms of the benefits and barriers to technology use in counselling practice, what I saw in this research was largely consistent with the counselling literature. Participants reported technology use to be efficient and to improve access for people who may not otherwise be able to access counselling. Significant barriers to technology use were the unreliability of technology and legal and ethical concerns.

However, the literature did not accurately reflect how participants were using technology or how they felt about it. Participants reported much more technology use than the literature suggested they might: Apart from those who used videoconferencing software for sessions, all of the participants routinely used email, text, and telephone to communicate with clients, and most used online materials (e.g., web pages, videos, and self-help materials) as part of their direct work with clients. In addition, the participants all used technology for some or all of their administrative tasks, such as case notes, scheduling, and billing. These practices were integrated into the participants' practice to the point that many of them did not think of them as technology use: They were comfortable, habitual, and black boxed. Moreover, the participants expressed confidence in their ability to learn about and use technology, despite their varying levels of trust in specific technologies and their divided opinions on the need for technology-specific training for counselling professionals. This comfort and confidence is likely impacted by the age demographic of this group of participants, but the behaviours are consistent with those of my older practicum site supervisor (and with those of

other older colleagues I have worked with). While technology use may remain controversial, its use is much more integrated than I had expected or than the existing literature reflects.

The Black Box and Intentional Responses

Latour's (2005) black box is the state of routine practice where the flow of work through a network becomes invisible and the voices and effects of individual actors become more difficult to identify. The use of technology in counselling practice has already become much more routine than I had anticipated and the obscurity of practice is likely to continue. Ethical and practice questions remain after decades of telephone and self-help use in counselling that carry over to contemporary applications of technology (Cujipers, 2018; Lester, 1977). Slowing down the process by increasing the space for research and further controversy and preparing intentional – and proactive - responses to technology use has the potential to reduce the power imbalance that currently favours technology's impacts on counsellors and their clients, and on counselling practice.

Implications for practice. From an ANT perspective, people are embedded in their networks and are presented with opportunities by the actors with whom they are connected. Technology use is part of contemporary counselling practice; for counsellors to have at active awareness of the technology they are using and how it impacts them and other close actors in their network is necessary for reflective, intentional practice. Part of that process is taking routine practice out of its back box. Between-session communication, in particular, is part of counselling practice and should receive the same attention as in-session

practice. Texting between sessions is as novel and as technological as video counselling: conscious planning around ethical and technical issues are important for both.

The two dominant themes that emerged in this research were responsibility and trust. Counsellors can enhance their relationship with technology use by examining these aspects of their practice. It is important for counselling professionals to know what they are legally responsible for, which in a changing field means regular checking-in with legislation and with practice guidelines (and with regulatory and professional bodies when this is unclear). It is also important for professionals to spend time reflecting on their ethical responsibilities. In this report, questions around boundaries in between-session communication, social media use, clients' locations and environments, data security beyond legal obligations, and technology failures were highlighted. Dedicated time to research these areas and work through an ethical decision-making process before problems occur would support counsellors in producing proactive responses to technology's impacts and promote better counselling practice.

Counsellors should also reflect on who and what they trust. There are several questions that could be helpful for counselling professionals to ask themselves: When they make decisions about technology, where are they getting their information? Why do they trust their sources? On what basis do they trust their competence in technology use? Do they trust the technology they use and the people who created it? Possibly most importantly, what are counsellors doing to ensure that they remain trustworthy people for their clients? A favourable

resolution to foundational trust-related stages of development for technology use in practice is essential for healthy growth of the practice. Counselling professionals can support this development by taking time to reflect on these questions and by being intentional about who and what they choose to trust.

Counteracting unreliability. It bears mentioning again that technology represented itself as unreliable in this research, which passes on a risk to the reliability of counsellors. On the other hand. using technology in counselling practice improves client access to counselling services by providing more points of contact and improves individual counsellor efficiency, which can lead to a higher quality of service provision. The first question that came to my mind was: Is the trade-off worth it? Yet, again, technology is already integral to contemporary counselling practice. Counselling professionals must act carefully and intentionally to offset the unreliability they inherit from the technology they use. Professional and regulatory bodies currently require professionals to address this risk through informed consent and my participants outlined back-up plans they commonly used in practice. However, participants also spoke about not choosing to break unstable connections with participants and being inconsistent with responding to messages between sessions. Making detailed plans with clients around technology use and technology failures and acting on them immediately and consistently is important for counsellors to work to distinguish themselves from the reality of the technologies they use. Neither the reliability of technology nor the use of technology in counselling are likely to change soon.

Implications for regulatory and professional bodies. The participants in this study were not always clear on what their responsibilities were in relation to technology use in counselling. While the most recent CAP (2018) and CCPA (2019) practice guidelines addressed many of the point discussed here, they were not always consistent with participant experience (e.g., CAP's literature-informed assumption that miscommunications and misunderstandings were common) or with each other (e.g., CAP and CCPA's different approaches to counsellor responsibility for clients' environments). Moreover, the organizations' guidelines stemmed from an assumption that technology use is a relatively unusual practice that is set apart from traditional face-to-face practice, when it is arguably an integral part of most contemporary counselling practice. Further research and consultation with practitioners could help clarify what responsibilities imposed by technology are most relevant to counselling professionals and help clarify the areas in which practitioners feel they need guidance.

More important, however, is the need for counselling professional to know their organizations' guidelines on technology use and for professional and regulatory bodies to ensure that their members levels of technological and ethical competence are consistent. While the participants were divided on whether training in technology use was necessary for counsellors, again, mandatory training is the primary method that organizations use to meet the Canadian standard of law which requires uniform competence among members of a given profession. If most counsellors are using technology in their work and professional guidelines exist for technology use, whether by training or by another method,

professional and regulatory bodies should support their members in understanding and following their professional guidelines and meeting their professional responsibilities.

Further Research

To see more of the network, it would be beneficial to look at it from a different point of view. As stated above, it would be beneficial to do further research to investigate the practices of a broader demographic of counselling professionals, from different age groups, from different areas, and from different types of practice. It would also be beneficial to view the network from the clients' side. Even in this report it was apparent that they are using technology in different ways than counselling professionals. More information on clients' technology use and on their expectations, needs, and experiences would allow counsellors to better use technology to support their work with clients. It could also be beneficial to spend more time with regulatory and professional organizations. Their voices came through the documents they produced, but speaking with representatives from these organizations could better inform understanding how the documents were created and what actors spoke most loudly to their creators.

Technology use in counselling continues to evolve. Future research that focuses on what is happening in practice can both capture its evolution and work against the back boxing of a practice that continues to require reflection and intentional responses to develop in a way that is beneficial to counsellors and to clients.

Conclusion

Technology use is already a routine part of counselling practice, which is not always apparent even to those who use it. It is perhaps unsurprising, then, that themes in the literature of what could and should be done in counselling practice were not always reflected in counselling professional participants' experience. Questions about responsibility and trust arose as themes much of what was communicated by the actors' voices captured in this report. By reflecting on these questions, counselling professionals can respond intentionally and proactively to issues that are likely to come up in practice. Technology is unreliable, which risks creating unreliable counselling professionals and unreliable counselling practice. By making the routine visible, and by creating plans and guidelines that are consistent, reflective of experience, and well-understood by counsellors and by their clients, counsellors and their regulatory and professionals can counteract the unreliability of technology use in counselling practice and contribute to its healthy development.

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Appendix A: Certification of Ethical Approval

Athabasca University
RESEARCH CENTRE

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (AUREB) has reviewed and approved the research project noted below. The AUREB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) and Athabasca University Policy and Procedures.

Ethics File No.: **23248**

Principal Investigator:
Ms. Karen MacMullin, Graduate Student
Faculty of Health Disciplines\Master of Counselling

Supervisor:
Dr. Paul Jerry (Supervisor)

Project Title:
Technology use in counselling practice: An actor-network theory report

Effective Date: January 10, 2019 **Expiry Date**: January 09, 2020

Restrictions:

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date:** January 10, 2019

Simon Nuttgens, Chair
Faculty of Health Disciplines, Departmental Ethics Review Committee

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Athabasca University Research Ethics Board
University Research Services, Research Centre
1 University Drive, Athabasca AB Canada T9S 3A3
E-mail rebsec@athabascau.ca
Telephone: 780.675.6718

Appendix B: Interview Questions

As these were semi-structured interviews, there were additional follow-up questions asked to participants; however, the following questions were the basis for all interviews.

1. What technology are you currently using in your practice?
2. How do you believe technology use has impacted your work with clients?
3. What barriers, if any have you encountered to using technology?
4. What benefits, if any, have you experienced?
5. How did you learn about the technology you use (people, resources, education)?
6. What supports do you believe could improve your use of technology?

Appendix C: Letter of Information/Informed Consent Form

LETTER OF INFORMATION / INFORMED CONSENT FORM

Technology Use in Counselling Practice: An Actor-Network Theory Report

Researcher:
Karen MacMullin
Phone: 780-288-2840
Email: kmacmullin1@athabasca.edu

Supervisor:
Dr. Paul Jerry
Phone: 1-866-313-4373
Email: paulj@athabascau.ca

You are invited to take part in a research project entitled *Technology Use in Counselling Practice: An Actor-Network Theory Report*.

This form is part of the process of informed consent. The information presented should give you the basic idea of what this research is about and what your participation will involve, should you choose to participate. It also describes your right to withdraw from the project. In order to decide whether you wish to participate in this research project, you should understand enough about its risks, benefits and what it requires of you to be able to make an informed decision. This is the informed consent process. Take time to read this carefully as it is important that you understand the information given to you. Please contact the principal investigator, Karen MacMullin, if you have any questions about the project or would like more information before you consent to participate.

It is entirely up to you whether or not you take part in this research. If you choose not to take part, or if you decide to withdraw from the research once it has started, there will be no negative consequences for you now, or in the future.

Introduction
My name is Karen MacMullin and I am a Master of Counselling student at Athabasca University. As a requirement to complete my degree, I am conducting a research project about technology use in counselling practice. I am looking at how professional counsellors are using telecommunications technology in their work with clients and how technology impacts what they do. I am conducting this project under the supervision of Dr Paul Jerry.

Why are you being asked to take part in this research project?
You are being invited to participate in this project because you are a counselling professional who uses technology in your work. You have been recommended to me by another professional or you have identified yourself to me as a counselor who is using technology in counselling practice

What is the purpose of this research project?
In this project, I hope to produce a snapshot of the current state of technology use in counselling practice that identifies the influences technology is having on the work counsellors are doing with clients in everyday practice. I also hope to identify

opportunities for intentional responses to technology by counsellors that could benefit counsellors, clients, and the counselling profession

What will you be asked to do?
You will be asked to participate in an interview conducted over Skype. The interview should take between one and two hours and will be recorded using Windows native video recording software. If you agree to be interviewed, the interview will be arranged for a time that is convenient to your schedule.

If you agree to be contacted for follow-up, I may reach out to ask additional questions and/or to ask you to confirm that your views are accurately portrayed before completion of the final report.

What are the risks and benefits?
There are unlikely to be any risks to participants beyond those present in everyday life. You are encouraged to consider what you choose to share during the interview and who you choose to share your participation with if you have any concerns about social or economic risks you may incur.

There will be no direct benefits to participating in the project. However, I am hopeful that what is learned from participants may contribute to an understanding of how technology impacts counselling practice. If this project is successful, it may suggest opportunities to use technology in ways that will benefit counsellors and counselling practice.

Do you have to take part in this project?
As stated earlier in this letter, involvement in this project is entirely voluntary. You may choose to end the interview at any time and/or decline to answer any questions. If you choose to withdraw from the project entirely, any data collected (video recordings and/or video transcripts) will be permanently deleted. You may choose to withdraw at any time during the data collection process and until final data analysis begins. You will be informed of the final withdrawal date at the time of the interview.

How will your privacy and confidentiality be protected?
The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use or disclosure. Video recordings and video transcripts will be encrypted and password protected and stored on a password-protected unshared computer to protect your privacy. If you have any concerns about the security of Skype, please contact me and we can discuss alternatives.

Excerpts from video transcripts may be shared with my supervisor and project committee members and/or included in the final report. At that time, identifying information will be removed from the data. Only the researcher will have access to the video recordings.

If you have been recommended to me by another professional, that person may be aware of your participation in the project; however, the contents of your interview will not be shared.

How will my anonymity be protected?
Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance. Every reasonable effort will be made to ensure your anonymity; you will not be identified in publications without your explicit permission. Participants will be identified in the final report only by age range, range of years in practice, and gender identity.

How will the data collected be stored?
Data collected will be stored on a password-protected, unshared computer for five years after project completion. At that time, data will be permanently deleted using native Windows software or the technological standard at that time. Any hard copy data will be digitized and the paper copy destroyed immediately.

Again, only myself, my supervisor, and my committee members will have access to video transcripts during analysis. Any electronic transfer of data will be encrypted and password-protected.

Transcript excerpts may be included in the final report and may also be used in articles or presentations derived from the final report in the future.

Who will receive the results of the research project?
The existence of the research will be listed in an abstract posted online at the Athabasca University Library's Digital Thesis and Project Room and the final research paper will be publicly available.

When the project is complete, I will send you a copy by email.

Who can you contact for more information or to indicate your interest in participating in the research project?
Thank you for considering this invitation. If you have any questions or would like more information, please contact me by e-mail (kmacmullin1@athabasca.edu) or telephone (780-288-2840) or my supervisor, Dr. Paul Jerry, by email at paulj@athabascau.ca. If you are ready to participate in this project, please complete and sign the attached Consent Form and return it by email.

Thank you.

Karen MacMullin

This project has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in this project, please contact the Research Ethics Office by e-mail at rebsec@athabascau.ca or by telephone at 1-800-788-9041, ext. 6718.

Informed Consent:
Your signature on this form means that:

- You have read the information about the research project.
- You have been able to ask questions about this project.
- You are satisfied with the answers to any questions you may have had.
- You understand what the research project is about and what you will be asked to do.
- You understand that you are free to withdraw your participation in the research project without having to give a reason, and that doing so will not affect you now, or in the future
- You understand that if you choose to end your participation **during** data collection, any data collected from you up to that point will be destroyed.
- You understand that if you choose to withdraw **after** data collection has ended, your data can be removed from the project at your request, up to the date provided at the interview.

	YES	NO
I agree to be video-recorded	◯	◯
I agree to the use of direct quotations	◯	◯
I am willing to be contacted for follow-up questions.	◯	◯
I am willing to be contacted following the interview to verify that my comments are accurately reflected in the transcript.	◯	◯

Your signature confirms:

- You have read what this research project is about and understood the risks and benefits. You have had time to think about participating in the project and had the opportunity to ask questions and have those questions answered to your satisfaction.
- You understand that participating in the project is entirely voluntary and that you may end your participation at any time without any penalty or negative consequences.
- You have been given a copy of this Informed Consent form for your records; and
- You agree to participate in this research project.

_____ _____
Signature of Participant Date

Principal Investigator's Signature:

I have explained this project to the best of my ability. I invited questions and responded to any that were asked. I believe that the participant fully understands what is involved in participating in the research project, any potential risks and that he or she has freely chosen to participate.

_____ _____
Signature of Principal Investigator Date