How Technology is Changing Psychotherapy: Perspectives from Therapists

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Abstract

Technology has become an ever-present part of our reality, and it is clear that many individuals are turning to the internet and online resources for mental health information (Giles & Newbold, 2011). In order to understand how the career of the psychotherapist has been impacted by this new technological society (Barney, 2007), it is imperative we hear from the therapists working in the field.

Drawing on Super’s Lifespan Lifespace theory (1980), and using a Constructivist Grounded Theory approach (Charmaz, 2006), this study aims to understand what impact technology has had on the career of a psychotherapist working in private practice in a Canadian landscape. Using data gathered from the individual interviews of three psychotherapists, this research indicates that while psychotherapy is providing new challenges to the career of psychotherapy, it is also simultaneously providing the resources and tools required to navigate these challenges.

The psychotherapists have to navigate changes to the structure of their career, including creating new boundaries around technology use, navigating workload changes, all while adapting and learning through these changes. Psychotherapists are also presented with new challenges in what their clients are bringing to their therapy sessions, including the impact of social media on mental health and the concerns around self- and other-diagnosis. This is changing the client-centered work that the psychotherapists must complete within their sessions with clients, navigating a new pace of psychotherapy, all while juggling the paradox that technology brings to their work. However, technology is also providing a host of resources for their clients needs, including video-therapy, medical information, and more appropriate and empowering resources for their clients needs.
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Chapter 1: Introduction

Technology is a large and rapidly changing part of our current culture. From smartphones that allow us to search anything at the tip of our fingers, to computers that we can carry with us anywhere we go, there have been immense advances in technology that have allowed us to access more information and faster than ever before. Just as many aspects of our lives have been changed by the advancement of technology, psychotherapy has also been impacted. In the world of psychotherapy, it means clients have faster access to resources, online support, and a wealth of information about mental health (Giles & Newbold, 2011). Therapists need to be aware of how these changes are impacting not only what their clients are coming to session with, but how they use these resources to work with their clients, and what this means for their careers. While research has been done to understand the increased use of the internet (Gray et al., 2005), the effectiveness of online-based programs (Kaldo et al., 2015), and the benefits of applications and online-resources (Lindhiem et al., 2015), very little research has been done to understand the psychotherapist’s perspective on these changes. Psychotherapists are the ones who are experiencing these changes first-hand, and in order to get a full understanding of technology’s impact on their careers, it is imperative that we hear directly from them.

Traditional psychotherapy is typically considered to be face-to-face, and has been used in Western culture since the 19th century (Marks, 2017). There have been various waves and changes in psychotherapy since its early uses by Freud, many of which were influenced by the culture in which they were born (Seligman & Reichenberg, 2014). These waves include the various theories that have come to define psychotherapy, such as psychodynamic, cognitive-behavioural, and existential-humanistic therapies (Seligman & Reichenberg, 2014). These changes in the various styles of psychotherapy have therefore impacted the way that we view
mental health, and how we “generate models of mind and dysfunction, which in turn may shape innovations or modifications in practice” (Marks, 2017, p. 11). Therapists must always be aware of their cultural surroundings, as these will play a role in not only what the client brings to psychotherapy, but how the therapist works with that client. It is important for therapists to be aware of how the outside culture may play a role in the diagnosis and treatment of clients.

Culturally, Canada has become a technological society (Barney, 2007), which means that psychotherapists must understand the impact that technology will have on their work. This is especially true of psychotherapists working with children, as children today have grown up in this technological society (Dauphin, 2013). Therapists who do not understand technology, risk “pathologizing the technology and the use of it or to overinterpret the possible pathological meanings in the use of technology without a fuller consideration of its strengths” (Dauphin, 2013, p. 48).

One of the biggest changes this technological society brings to us, is that almost everyone has the ability to find out information on various psychological conditions (Giles & Newbold, 2011). This means that therapists are no longer the only experts out there with valuable information about mental health, and everyone is able to “match a set of behaviours to a syndrome identified in the manual” such as the Diagnostic Statistical Manual-V (Giles & Newbold, 2011, p. 427). Information about a variety of mental health conditions is just a few google searches away, and more and more individuals are comfortable accessing the internet to look up this type of health information (Neal et al., 2011). What does this mean to the psychotherapists who were previously relied on for this type of information? And how does this change what pre-existing knowledge clients may be coming into sessions with?

While this ease of access to information allows individuals to look up terms they
previously may not have understood, it also risks the possibility of false diagnosis (Eichenberg, 2013). An individual without a full understanding of mental health and its surrounding facets may misinterpret or misunderstand the terminology and impact of a diagnosis (Van Ameringen, 2015). For example, current research notes that there may be an increase in “cyberchondria”, a “person who (obsessively) researches health information on the internet, typically to find a disease matching particular (real or imagined) symptoms” (Loos, 2013, p. 440). Much of the research on cyberchondriacs is being conducted in the medical field (White & Horvitz, 2009) and far less is known about the impact it may have in the therapeutic world. However, with the increased accessibility of the Diagnostic Statistical Manual-V (DSM-V, American Psychological Society, 2013), it is imperative that we begin to understand its impact on the world of mental health as well, and how therapists are dealing with these changes to their work.

However, the ease of access to information about mental health has also allowed for a decrease in the stigma surrounding mental health (Best et al., 2016). Conversations surrounding mental health have become more common, and information has become more accessible to those who previously may not have had the means to or felt comfortable accessing therapeutic services (Gowen, 2013). Even with this increased access, there is still a lot of stigma and shame around accessing mental health services. This means that many individuals may not feel comfortable sharing information regarding their mental health to their physicians, or to reach out to support services. A common theme found in online mental-health forums, is that individuals are more likely to disclose information due to the perceived anonymity of the internet than to their therapist (Giles & Newbold, 2011). The availability of information through the internet allows for individuals to not only find support from others who are experiencing similar concerns, but to become more comfortable around conversations about their mental health, as well as potentially
being more honest and vulnerable (Giles & Newbold, 2011). This could provide some challenges for a therapist, as it could lead to feeling threatened by the online support groups community that may overpower the professional services provided. A discourse analysis by Giles and Newbold in 2011 of some online support forums found that these forums can be a site for exploration of identity, while also warning of the possibility of providing potentially lethal advice to fellow users, such as is seen on pro-ana groups that support anorexia-nervosa behaviours. It is important for therapists to be aware of this and how it may impact their work with clients who do use these online support groups.

The increased access to information does not release all of the shame and stigma around mental health, but it does allow for more conversations around the topic. This greater public awareness could increase the comfort that people have reaching out to therapeutic services, and normalize accessing this type of support. Studies suggest that even those support pages that normalize discussions around mental health, usually also encourage accessing professional help (Giles & Newbold, 2011). With less stigma around the use of services for mental health, it is fair to wonder if more people are reaching out for support when they are struggling, and if there is a change in trends regarding the demand for these types of services to be available to all. This shift could also potentially impact the workload and expectation of the psychotherapist, and is something that needs to be looked at further to be fully understood.

Another benefit that technology may bring to psychotherapy is the availability of resources and support through various programs and applications that allow for the client to be more actively involved in their healing process. For example, programs have been developed that are designed to act as an adjunct to the therapeutic process. Programs such as goACT allow therapists to provide “appointment reminders, two-way pre-scheduled messaging (secure SMS,
online, email), self-monitoring, secure journaling, online homework records, and online psychometric assessments” (Richards et al., 2018, p. 172). These programs are not designed to replace face-to-face psychotherapy, but rather act as an adjunct to the process, and allow for the client to have a more active role in their journey should they so choose (Richards et al., 2018).

More so, copious amounts of online applications and websites have been dedicated to things such as meditation, mindfulness, and self-help strategies that can be used as additional supports for clients in between sessions (Cristol, 2018; Bauer & Moessner, 2012; Lindhiem et al., 2015). These changes, while beneficial, may create pressure for the therapist to keep up with the times, and to be aware of the information and technology available to their clients. This may seem like an impossible task with the amount of new information and resources being made available every day. It is important that we understand how this increased information has impacted the way that therapists move within their careers, and if this is something that has helped or hindered their journeys with clients.

Super (1980) developed a theory that we enter into various roles throughout our lifespan. This impacts our life-space, which in turn constitutes our life-cycle, and creates our entire career pattern (Super, 1980). The roles that we choose and how we interact within those roles are impacted by “personal and situational variables” (Super, 1980, p. 288). Whenever major changes may occur within our career path, we reach what Super called “decision points” (Super, 1980, p. 291). Technology has created new decision points for experienced therapists, as they must decide whether they will embrace these new changes, or continue with their work as they have for many years. The current environment of the Western world means that some changes may be happening that are entirely outside of the therapists control, and how they adapt to this will influence the next steps for their career path. Super defined adaptability as “being able to change,
without great difficulty, to fit new or changed circumstances” (1980, p. 254). This adaptability may play a key role in how well therapists transition to the new technological society we have seen in the Western culture.

A therapist’s own perceptions and values play a large role in their choice of therapeutic theories and approaches. In order for a therapist to work alongside this increased technology use in our culture, it is important that we understand how this technology may impact their work. Technology has the potential to impact many facets, including case conceptualization, the process of clinical reasoning, and even the working alliance with clients. It will be important to understand how therapists’ personal processes and careers patterns have been impacted by this rapid advancement of technology in our current culture. This study aims to begin to understand this process by investigating the perspectives of the therapists who are working within this technological culture.

**Purpose**

In order to understand how these changes in technology have influenced the therapeutic process, it is important to discuss it with those who have seen it first hand; the therapists working with clients. As far as this primary investigator can tell, no previous theory has been established on the impact that technology has played on therapy. Based on this, this research will utilize Constructive Grounded Theory (CGT) to guide the interpretation and analysis of the results, and begin to establish a theory on how this has influenced the career and work of a psychotherapist. While it is important to speculate on how these changes may have impacted psychotherapy, and to start looking at quantitative data on the increased use of technology, it is equally important to gather input from those who have seen these changes firsthand. Therapists who have been
working with clients for over 10 years have been the most impacted by this rapid advancement of technology. These therapists started their careers when technology was just starting to become a major part of our culture, and have had to practice into a time where it is entirely entrenched in our culture. They have had to be aware of the changes in culture, while simultaneously being able to be flexible and adaptable within their work to allow for these changes. It is important to hear the voices of those who are experiencing this in order to truly get an understanding of how this change has impacted the world of psychotherapy, and what future therapists need to be informed of in order to continue this work into the future.

To understand this, this research will ask therapists to describe how technology has impacted their work. The specific research questions will be: How has technology impacted the traditional career of the experienced psychotherapist? Specifically, has the career been impacted by the increased accessibility of mental health information? Has there been any changes in the way that traditional face-to-face therapy is conducted with the increased access to digital resources?

**Significance**

This research is important in order to understand not only how things may have changed over the years, but how therapists are adapting to and addressing these changes within their work and careers. A therapist has always had to be flexible to the changes of the culture around them (Goodwin et al., 2018). However, technology is changing our culture so rapidly that it may be difficult to keep up and adjust to all of the changes that it may be bringing to the world of psychotherapy. Having an understanding of how therapists see this change impacting their work and how they are coping with these changes, may help the profession to prepare for how we can
continue to move forward. It may also help us understand how these changes could impact the education of future therapists. Existing research has highlighted some of the potential challenges and strengths that the increased use of technology may provide the psychotherapy practice. However, to this primary investigator’s knowledge, there has not yet been any research on the impact of technology from the perspective of the therapists who have experienced this first-hand, and have worked with these clients for a prolonged period. It will be important for future therapists to understand how adjunctive technology may help or hinder the process of therapy, and how technology may impact the work they do with clients on a daily basis. This includes the impact of technology on the therapy session, the tools and resources available, and the pre-existing knowledge that clients bring to psychotherapy based on their internet research. This research will also provide insight into how the adaptability of a therapist can impact the life-span of their career in psychotherapy, and how therapists address these major cultural shifts within their work.

Chapter 2 will begin to look at some of the previously existing research in this area, and how this work has started to understand the impact of technology in the field of psychotherapy. This includes the impact of increased access to information, the use of online and mobile resources, as well as the impact of self-diagnosis. Chapter 3 will explain how this study was conducted and why, including analysis of data, delimitations, and possible limitations. Chapter 4 will discuss the results of the study, and Chapter 5 includes the discussion, directions for future research and limitations of the study.

As the primary investigator of this proposed study, I am both a student-therapist, and a researcher who is interested in understanding human behaviour. I have been interested in the role of technology and psychotherapy due to my role as an intake worker at a private practice for
psychology. In this role, I have seen how people use terminology and self-diagnose even in just the initial phone call to a therapist. I have also seen the benefits of using technology to help with the implementation of homework and other therapeutic strategies, such as meditation and daily gratitude mobile applications. I have personally recommended these programs to clients, as well as used them for my own needs. These two factors have encouraged my interest in seeing how these things may have impacted the therapeutic relationship, and what therapists are doing in their practice concerning these changes. Consistent with CGT approach, my “background assumptions and disciplinary perspectives” led me to notice and want to pursue this information in research (Charmaz, 2006, p. 16).
Chapter 2: Literature Review

Technology has become such a large part of our culture that a significant amount of research has been conducted on its impact on psychotherapy. In order to begin to understand the impact of technology on psychotherapy, there are many areas which need to be considered. It is important to consider the historical and cultural impact on psychotherapy, and how it has led to where we are today. Technology has allowed for increased public awareness of mental health, as well as increased access to resources and digital support. To gain a fuller understanding of how therapists and their careers have been influenced by the changes in technology, it is important that we understand what previous research has shown us about not only what these changes look like, but the impact they have had on various elements of psychotherapy.

Therapy in Western Culture

Psychotherapy has seen many changes since its emergency in the late 19th century within Western culture (Marks, 2017). Since this time, therapists have seen various waves of theories that have influenced therapeutic orientation and training. Freud was largely responsible for the first wave of psychotherapy, with his focus on the unconscious, past experiences, and long-term treatment forming the basis of psychodynamic psychotherapy (Seligman & Reichenberg, 2014, p. 2). Since then, the work and research of psychotherapists such as B.F. Skinner, Albert Ellis, Aaron Beck, and many others has led to the emergence of behavioural and cognitive therapies (Seligman & Reichenberg, 2014, p. 2). During the third wave of therapy, we saw the emergence of existential-humanistic psychotherapy (Seligman & Reichenberg, 2014, p. 2). Clinicians are currently in the midst of the fourth-force of psychotherapy, where efforts are made to understand people “as fully as possible”, and the previous “treatment approaches are integrated into a more
comprehensive and holistic effort” (Seligman & Reichenberg, 2014, p. 3). This history has shaped the world of psychotherapy, and within each of these various theories we have seen little impact from the world of technology. However, as we move forward into this technological society, it is important that we also consider what impact these changes have on the orientations that psychotherapists use going forward.

Cultural Impact on Therapy

Just as Freud was influenced by his Jewish background and cultural experiences (Seligman & Reichenberg, 2014, p. 41), the changes we have seen in the history of psychotherapy are largely based on the cultural shifts of the time in which they are founded (Nadezhda, 2017). As new therapists are trained in the world of psychotherapy, they must consider the cultural context in which they are being trained (Boyd-Franklin et al., 2013). The culture and time in history has always been an important factor in shaping the theoretical orientations that define psychotherapy (Zilberstein, 2015). It is imperative that therapists be aware of this dynamic, as it will directly impact the way that they work with their clients.

Therapist Education in Technology

Therapists have always been required to be flexible in the work that they do. Research has shown that therapists who demonstrate flexibility within the theoretical approach they use can have greater outcomes for clients (Hudson et al., 2014; Owen & Hilsenroth, 2014). Flexibility can also be associated with awareness of cultural changes (Goodwin et al., 2018). Adaptability has also been considered to be important as career changes and transitions happen throughout an individual’s lifespan (Super, 1980). One of these changes is that Canada has become a “technological society… saturated by technological devices and systems, many of them functionally integrated” (Barney, 2007, p. 30). Technology has become an important part
of our everyday lives, especially with the increased access to the internet (Eichenberg, 2013). In order for therapists to maintain their flexibility and adaptability, they must be willing to practice within this technological society. If a therapist is unable or unwilling to acknowledge the power and impact of technology, they may be more likely to “speak from a place of ignorance” rather than “curious exploration”, or potentially pathologize behaviours associated with technology use (Dauphin, 2013, p. 48). Dauphin (2013) also posits that we must find “new ways of cohabitating” (p. 49) with technology and the youth who master it, so as to work effectively with the clients who rely on these technologies. It is important for therapists to consider the influence of current technologies on not only their clients’ lives, but also on their own ways of interacting with their clients, and their own responses to these technological influences.

However, as of 2017, there is no requirement for students of psychotherapy to study the ethics and issues of providing online services, or how to work with this technology (Lustgarten & Elhai, 2017). A recent study provided training to military service providers on the “use and current research of various behavioural health apps” (Armstrong et al., 2018, p. 355). Within this study, they found that 37.3% of participants “didn’t know how to use apps in clinical practice” (Armstrong et al., 2018, p. 360). This not only creates barriers for implementation of resources for clients, but is also a strong indicator of the knowledge gap that is present for this field within psychotherapy. Some theorists believe that technology will likely have a major impact on the world of psychotherapy in the years to come. Imel et al. (2017) propose that not only will the delivery of psychotherapy be impacted by technology, but also the way that we train students and provide feedback to therapists. The researchers posit that technology may allow us to use programs such as “automated speech recognition, natural language processing algorithms, and machine learning models” to learn exactly how therapy “works” (Imel et al., 2017, p. 386). This,
alongside the ability to provide immediate feedback to student therapists may advance the work of therapy into an entirely new era (Imel, 2017). With this in mind, it is essential for therapists to be able to be aware of the many roles that technology may play in their careers both today and in the future.

**Increased Use of Technology in Mental Health**

**Access to Information**

These advancements in technology have created challenges for new and practiced therapists, as we see mental health becoming the forefront of conversations on many online platforms (Imel et al., 2017). In fact, using the internet to look up information about mental health has become increasingly commonplace in our current culture (Gowen, 2013; Zilberstein, 2015). One study conducted in Germany found that almost two thirds of internet users rely on the internet for health-related questions (Eichenberg, 2013). Specifically, young adults are frequently using the internet to gather information about diagnoses, medications, and to better educate themselves about mental health in general (Gowen, 2013). This is especially true in young males, who often experience more stigma around mental health due to the current masculine values within western culture (Best et al., 2016). However, it is important to note that this research has also indicated that this population still values the work of trained professionals, especially if those services are available to them in an online format (Best et al., 2016).

Why are so many young people turning to the internet for information about their mental health? Research completed by Gowen (2013) suggests that young adults are using the internet because of its anonymity, accessibility, and the fact that it is cost-effective. Research focusing on why adolescents use text-based therapy services indicated similar results, finding that texting
required less emotional exposure and provided more privacy than traditional face-to-face or even phone therapy (King et al., 2006). While this research seems to indicate that individuals may feel more comfortable using text-based or e-therapy services, other research has indicated that the rate of self-disclosure did not differ based on the method of psychotherapy delivery, i.e., whether the psychotherapy was conducted face-to-face or via phones or texts (Skinner & Latchford, 2006). With diagnosis of mental health-conditions in children and adolescents rising (Bitsko et al., 2018), it has become increasingly more important to have access to services and information available to families and caregivers. However, there are also many ethical considerations when it comes to the use of e-therapy, including confidentiality, difficulties establishing therapeutic rapport, and potential exploitation of clients (Griffiths, 2009). Regardless, it is clear that the “increasingly mobile, tech-savvy, and health conscious society will demand care delivery systems that expand beyond traditional office-based requirements to better fit diverse needs and lifestyles” (Zilberstein, 2015, p. 156). This means that therapists must be prepared to adjust their work format if they want to be able to effectively engage their clients.

The ability to search for information regarding mental health and diagnoses online can be a valuable tool for the average person. It may not only help someone feel more at ease about what is happening for them, but also to find appropriate resources for their condition (Loos, 2013). It may also provide a supportive community and encouragement from others who experience similar symptoms (Giles & Newbold, 2011). Research has found that online groups may provide reassurance and a safe platform for individuals to share their experiences with one another, in the safety and comfort of their own home (Giles & Newbold, 2011). However, some research still seems to indicate that those who are accessing the internet for diagnosis...
information, still view professionals as a trusted source of information (Giles & Newbold, 2015; Gray et al., 2005).

Within the medical field, physicians are finding that eHealth is empowering their patients to find information and resources for themselves, but that the “patient-physician relationship remains important” (Catan et al., 2015, p.817). These studies indicate to us that patients are using online information and resources at a high rate, and therapists must be aware of this and how it may impact their work and careers.

**Self-Diagnosis**

One of the potential benefits of the internet’s increased use, is the ability to more effectively screen for mental health conditions and create larger awareness. A recent study found that providing online tools for assessment and feedback regarding mental health concerns such as anxiety, can be a particularly helpful way to provide education and help individuals overcome barriers to seeking treatment (Van Ameringen, 2015). However, there are important risks to consider when we see an increased use of online resources for self-diagnosis. While diagnoses can provide validation and understanding for clients, it also causes the potential for creating an identity based on the diagnosis, which are often changing with more recent adaptations of the DSM (Giles & Newbold, 2011).

This potential for self-diagnosis also allows for new concerns around “cyberchondria”, or a person who “(obsessively) researches health information on the Internet, typically to find a disease matching particular (real or imagined) symptoms” (Loos, 2013, p. 440). While this is a relatively new and under-studied phenomenon, especially within the realm of mental health, it is something that therapists need to be aware of when dealing with any client who may have health phobias, or who may be using the internet to understand their own behaviours. A recent study
with a large sample size (N=526) found that increased cyberchondria was linked with heightened levels of Anxiety Sensitivity and Intolerance of Uncertainty (Norr et al., 2015). However, it was unclear if these were predictors of or just correlates of cyberchondria. Another study indicated that those who have increased illness anxiety experience increased levels of anxiety before and after searching for health information online, and therefore should be aware of the impact this may have on them (Doherty-Torstrick et al., 2016). While much of this research specifically discusses health anxiety, the primary investigator was unable to find any research looking specifically at individuals who are anxious about mental health concerns, and what this may look like for the therapist and client working with this.

Given that the internet is relatively unmonitored, the information that is put on various websites may not be entirely accurate or complete (Henderson et al., 2012; Robertson et al., 2014). The possibility of companies promoting their own products using information websites also creates an ethical concern around the use of the internet when trying to understand any conditions (Robertson et al., 2014). Given these ethical considerations, it is important for consumers of the internet, as well as the therapists who are working with those consumers, to be aware of the impact that these things may have. Therapists need to be aware of the information that their client may be accessing, while clients need to be aware of the potentially biased nature of the things that they may find online. However, the increased access to further information provides clients with more options and independence, as they are able to understand their conditions, and their options, in a more complete way than they may have previously. This allows the client some power in the relationship with the therapist, which has historically been in the hands of the therapist (Giles & Newbold, 2011).
Digital Applications and Resources as Supports for Therapy

Adjunct Technology and Therapy

Technology that is used in adjunct to face-to-face therapy, instead of replacing it entirely, has shown some success with clients (Richards & Simpson, 2015). Clients showed increased engagement and reductions in distress when using programs such as goACT, a mobile and web-based software application which “aims to provide patient and therapist with an interactive therapeutic process that can continue between face-to-face sessions” (Richards & Simpson, 2015, p. 58). This includes features such as reminder text, check-in messages, as well as digital worksheets, and a secure online journal (Richards & Simpson, 2015). Therapists who used this program also found that while there are some issues to be worked out, adjunctive programs such as goACT can be an effective tool for therapeutic support (Richards et al., 2018). Other research suggests that technology-assisted psychotherapy (TAP) has many benefits, including the use of digital assessment, providing educational materials, and teaching basic skills (Overholser, 2013). However, these therapists also warned for the discretionary use of such programs based on the client suitability, as well as the therapists’ ability to manage boundaries effectively (Richards et al., 2018). It is important to note that this research by Richards and Simpson (2018) was conducted with student therapists who were completing their master’s degree, and it will be important to understand how more experienced therapists also respond to this type of adjunctive therapy.

Other studies conducted on the use of adjunct mobile apps to the therapeutic process have also shown success. Specifically, Levin et al. (2017) looked at how using an app to coach clients and support skill acquisition may increase a client's ability to use therapeutic skills as well as increasing psychological flexibility (Levin et al., 2017). These clients used an Acceptance and
Commitment Therapy app daily for 2 weeks, while also attending regular therapy sessions. This study did find that clients improved on their depression and anxiety symptoms, as well as increase their psychological flexibility with the use of the app (Levin et al., 2017). Another study by Koffel et al. (2018) looked at the use of a mobile CBT-I Coach alongside regular psychotherapy. This study found this app was favourably received by participants, and the qualitative data suggested that clients were using the app as it was intended, which improved accessibility of therapeutic material (Koffel et al., 2018). This study also found that app use “related to better adherence to therapeutic recommendations”, which may indicate that therapists could see greater progress with their clients with the use of an app such as this one (Koffel et al., 2018, p. 11). Another study by MacKintosh et al. (2017) also found that the use of an adjunct Anger Management app (RELAX) to a regular Anger Management group therapy program did not show significant increases when compared to the regular Anger Management group program alone in reduction of anger symptoms. Regardless of its therapeutic impact, the RELAX app was still positively perceived, as clients who used it found the app to be helpful and easy to use (MacKintosh et al., 2017). However, all of these studies had small sample sizes, and notably did not get input from the therapists’ perspective, which may have provided a more well-rounded view of the clients’ improvement and the impact and usefulness of the app.

Programs have been designed to regularly assess clients symptoms in between sessions, allowing for more real-time data as well as more consistent check-ins with clients who may be struggling (Bauer & Moessner, 2012). A meta-analysis reviewing the research on mHealth, which is a “subset of eHealth interventions that involve the use of mobile devices such as personal digital assistants (PDAs), text messaging systems, and smartphone applications”, found that mobile technologies can greatly benefit the delivery and treatment outcomes of
This meta-analysis found that increased contact, alarms and reminders of upcoming appointments as well as reminders to practice skills, real-time assessments, and teaching new skills were some of the main benefits of the integration between psychotherapy and technology (Lindhiem et al., 2015). Another major advantage of mHealth is ecological momentary assessment (EMA) techniques, which is a “noninvasive method for collecting real-time data from participants concerning symptomatology, behaviour and thoughts” (Clough, 2015, p. 148). Although this is a relatively new area, early research has shown that using a mobile device for EMA may be an effective tool for monitoring patient symptoms (Clough, 2015). A recent case study by Cristol (2018) found that the use of a collaborative app between a client and his psychotherapist allowed them to be on the same page of his treatment journey, as well as allowing the client to feel more heard and validated. In this case, the technology was used in conjunction with regular face-to-face psychotherapy and provided self-awareness for the client, as well as a better understanding of the clients symptoms for the therapist (Cristol, 2018).

However, this research has not yet considered the impact that these adjunct resources may have on the career of a psychotherapist. As these apps and resources become more commonly used, the work of the therapist has shifted. Will the practiced therapist, who has been using traditional face-to-face therapy sessions for the majority of their careers, be willing to adapt and use these new tools as a method for their clients? It will be important to consider how this will change not only the education of future therapists, but the career changes to the current therapist.
Mobile Applications as Resources

In recent years, there has been a noticeable increase in the amount of smartphone applications aimed at helping clients and therapists work through their mental health, which has been termed mHealth (Hendrikoff et al., 2019; Luxton et al., 2011). While there are many benefits to the increased availability of smartphone apps, there are some important concerns to consider as well. The number of apps being made available brings into question the quality and management of these apps, including patient data privacy and safety (Luxton et al., 2011). Again we see a concern when it comes to the boundaries and expectations demanded from clients of their therapists, as well as confidentiality concerns around the privacy of information being shared (Luxton et al., 2011). However, therapists now have access to thousands of resources and tools that are available at clients fingertips, and it is important to know how much or how effectively therapists feel clients are using these programs, so that we can understand how useful they are as an adjunct to traditional talk therapy.

Questionnaires completed by physicians, psychologists, and patients indicated that there is “substantial support for many features” of mHealth (Hendrikoff et al., 2019, p. 131). Medical doctors in the UK are already indicating that over 50% of them are using Medical Apps as a resource for medical information, and over 85% using the internet for this, with younger doctors showing even higher rates of use (Patel, et al., 2015). An online survey of individuals who self-identified as living with Bipolar Disorder found “predominantly positive attitudes towards mobile disease management apps or technological assistance” (Daus et al., 2018, p. 356). Therefore, it seems that there are largely positive attitudes towards the implementation of such support systems, but how does this compare to what the research shows about the impact of these mobile apps?
A meta-analysis of the research done in the field of mHealth demonstrated efficacy in the reduction of anxiety with the use of these mobile apps, while also cautioned that most of the apps that are available to the public through the app stores have not been scientifically studied (Firth et al., 2017). Research has shown mixed evidence on how effective these apps are as stand-alone supports for clients. One app (Be Good to Yourself) was studied using 19 participants put in a treatment group, while the remaining were put into a waitlist category (control group). This study found that after the four week treatment period, there was “no significant difference between the treatment group and the control group” for depression levels (Ludtke et al., 2018, p.759). In Lui et al.’s (2017) meta-analysis of mobile applications, a similar theme was found. What this analysis also found was that there does not appear to be enough research on one particular area or for one specific app for any of these mobile applications to be truly substantiated (Lui et al., 2017).

However, some apps have shown favourable results for clients using them. For example, Amadovar et al. (2018) found that Sinasprite, an app based around “Bandura’s social cognitive theory and [including] elements of CBT and mindfulness-based stress reduction”, was effective in decreasing depression and anxiety scores, while simultaneously increasing confidence in coping skills (Amadovar et al., 2018, p. 2). Another recent study by Fleischman et al. (2018) found that university students appreciated the option of having an Internet and Mobile Based Intervention (IMI), due to the flexibility, little effort required, and the long wait lists for face-to-face therapy. However, the students also indicated that they would prefer if the apps were tailored to their needs as students, implying that there is a need for apps specific to sub-populations, as opposed to generalized apps (Fleischman et al., 2018). Another study tested the use of an app to inspire hope for users with daily reminders and quotes (Daugherty, 2018). This
study found that those users in the intervention group did have a significant overall increase in hope when compared to the control group (Daugherty et al., 2018). However, it is important to note that these studies have all looked at the impact of these apps from the perspective of the client, often without any indication on if psychotherapy was being used in conjunction for any of these clients, and there has been limited research to indicate how therapists feel this is impacting their work with clients.

**Delivery Methods for Therapy**

While this paper will focus on the therapist’s perception of the impact of technology on traditional face-to-face psychotherapy, it is important to note that the method of delivery for psychotherapy has also been massively influenced with the increased use of technology. Phone, skype, and text-based therapy practices have become increasingly more commonplace in today’s culture, creating important changes to the role of a therapist (Vincent et al., 2017). Therapists have already seen an increased demand for evidence based treatments such as Cognitive Behaviour Therapy (Boyd-Franklin et al., 2013, pg. 6.), and it has already been predicted that more and more digital interventions and online clinics will be a part of psychotherapy’s future (Fairburn, 2017). Research conducted on online therapeutic services for gambling addicts found that it was an effective form of help for their concerns (Griffiths, 2009), as well as programs aimed at helping individuals who live with OCD (McIngvale et al., 2015). Therapist-guided and internet delivered CBT was also shown to be an effective method for treatment of insomnia (Kaldo et al., 2015). Some evidence suggests that individuals with certain problems and disorders may not be able to begin the process of face-to-face therapy due to the overwhelming nature of the presence of a therapist (Roesler, 2017). In these cases, tele-therapy or e-therapy may be a suitable starting point to begin the journey of therapy. However, other research has
shown that relying too heavily on manualized treatment and focusing less on the face-to-face interactions with a client can actually increase therapeutic drop out (Overholser, 2013).

It is important to note that many therapists have shown concern about the ease at which therapeutic relationships can be terminated when they are conducted in a largely digital format (Roesler, 2017). Similarly, the client is largely in control of how much they share about themselves within these interactions, which bids the question of therapeutic effectiveness (Roesler, 2017). These are some of the things that must be considered when using forms outside of the traditional face-to-face therapy, and it will be important for future therapists to be aware of these impacts based on their method of delivery. It will also be important for therapists to be aware of how their career might change in the future based on the new technological advances made in this world.

The above research points to the various changes that have been seen in the world of psychotherapy based on the increased use of technology. While the research has begun to take apart and understand these processes, there is limited research that looks at the impact of these changes from the perspective of those who it has impacted the most - the therapist. It is clear that technology will impact the world of psychotherapy, whether in its method of delivery, the resources available to clients and therapists, or even just the access to information about mental health. It is also clear based on the above research, that in order for therapists to be able to work effectively with the future generations who are so enmeshed in this technological culture, we must understand exactly how this impacts traditional face-to-face therapy. How this impacts the lifespan and career of the therapist will help us understand how we can prepare future psychotherapists to increase adaptability to this technological society. Once we are able to get a better understanding of these impacts, we will be able to make better decisions about the future
directions that the education of therapists will need to take in order to be not only be effective with their clients, but to also have clients feel supported and understood.
Chapter 3: Method

The purpose of this study is to begin to understand, from the perspective of the therapist, how the advancement of technology has impacted any of their careers within psychotherapy. As a constructivist grounded theory (CGT) (Charmaz, 2006) study, the primary investigator allowed for the participants to guide the responses and direction of the conversation, with the use of prompts or guiding questions in a semi-structured interview format. This allowed for insight into how the therapist perceives these changes are impacting their work, instead of biasing them with the expectations of the primary investigator. This section will discuss the design of the study, the participants, data collection and analysis methods the primary investigator used, as well as delimitations and limitations expected of the study.

Design of the Study

The study utilized a CGT approach (Charmaz, 2006). The goal is to understand how technology has impacted the career of the experienced psychotherapist. Specifically, has the traditional career of face to face psychotherapy been impacted by the increased accessibility of mental health information? Has there been any changes in the way that traditional face-to-face therapy is conducted with the increased access to digital resources? Connecting with psychotherapists directly allows us to understand not only the theoretical impacts and the cultural changes, but also how this change has impacted the work in the field of psychotherapy. Since psychotherapists are directly impacted by these changes, it is important to gain an understanding of their experiences in order to begin to understand how this may impact current and future careers in therapy. In CGT, the primary investigator is aware that the analysis is “contextually situated in time, place, culture and situation” (Charmaz, 2006, p. 131), recognizing that both the
participant and the primary investigator have interpretations of these concepts, which will need
to be considered within the analysis.

As is typical of CGT research, this study utilized a small sample size (n = 3), with semi-
structured questions used to probe the participants on their perspectives on these topics, but
ultimately allowing the participants to guide the direction of the conversation (Charmaz, 2006).
Having participants answer questions about the ways in which technology has impacted their
current practice allows us to understand what things we may expect for the future of
psychotherapy. Questions were focused on getting participants to think first broadly about how
technology has impacted their work, and then focusing on specific areas that they may have seen
changes in based on the literature review summarized in Chapter 2 of this paper. These specific
areas included client access to information and diagnostic criteria, as well as access to digital
resources and apps to use in conjunction with psychotherapy. These areas allowed the
participants to think about how technology has been changing the work they do on a daily basis,
including which resources they use and how, so that we can begin to understand how technology
may be changing the career of a psychotherapist. Lastly, it is important to understand how the
self-identity of a psychotherapist is impacted by the increased use of technology as that could
also play an essential role in shaping the future career of psychotherapy. The interview questions
were also focused on understanding how current face-to-face therapy may change with the use of
technology, so as to differentiate these changes from the increased use of e-therapy or tele-
therapy.
Participants

To gather data, the primary investigator conducted interviews with 3 participants. Participants are psychotherapists (i.e. two psychologists, one psychotherapist) who have been practicing psychotherapy for at least 10 years, and have worked with a variety of population ages. The population requirement was to ensure that the psychotherapists are not focused solely on working with young children, or older adults, who may have been less impacted by the changes in technology. Age categories were considered children (ages 0-11), adolescents (12-18), young adults (19-29), adults (30-59), and Older Adults (60+). Invitation to participate and flyers for participant recruitment had specific information about the inclusion criteria. Only therapists who have worked with at least three out of the possible four age criteria were invited to participate in the study on a first come, first served basis. Participants were recruited by use of convenience sampling, accessing the therapists that the primary investigator has established relationships with. It is important to note that in CGT, rapport with your participants can be helpful to the research process (Charmaz, 2006). Participants were also sought out by reaching out to the Manitoba Psychological Society and requesting dissemination of the study information to access therapists, as well as reaching out to a variety of local private practices for psychotherapy. Those who were interested were asked to contact the primary investigator directly to discuss their involvement. See Appendix A and B respectively for the invitation to participate, as well as the consent forms provided to participants to confirm participation in this study.

The study utilized saturation, as suggested by Charmaz (2006). The primary investigator analyzed the data after each interview, and assessed the saturation of content provided by the participants. The primary investigator assessed if changes need to be made to address the
richness of the content, or to get a deeper understanding of the areas that came out during the interviews. Saturation was continually assessed throughout the process of the research, to ensure that enough information had been collected to create a theory on the impact that technology is having on the career of psychotherapists.

**Data Collection**

To gather data, the investigator conducted semi-structured interviews with 3 participants at a location of their choosing. See attached Appendix C for a list of questions that were asked of the psychotherapists. These questions were used as prompts, and the primary investigator allowed the participants to guide the direction of the conversation based on their own perceptions and experiences, while probing for further insight. Therapists were sent the questions prior to the start of the interview, so as to allow time to prepare and consider the questions and topic area.

**Data Analysis**

The goal of data analysis is to identify themes among the various perspectives of the psychotherapists being interviewed. After each interview was completed, the primary investigator transcribed the interview verbatim and sent scripts of the interview to the participant for member-checking. The participants were asked to review, clarify, and add any additional information they may wish to add at that time. Participants were given one week to review their transcripts. Once confirmed, these transcripts were used for data analysis.

As is typical in CGT, memo-writing was a part of the process of analyzing and creating codes (Charmaz, 2006). After each interview, the primary investigator documented initial thoughts and important points. Once the interviews were transcribed, they were analyzed line-by-
line, alongside the memos created, to create the initial codes for each individual interview. The initial coding allowed for important topics to be identified and labelled, leading to a second set of more focused codes for each individual interview (Charmaz, 2006).

As mentioned, saturation was used, as is common in CGT (Charmaz, 2006). The primary investigator conducted a brief analysis each interview, including the memos, after they were completed, and determined whether any changes need to be made prior to the start of the next interview in order to fully gather an understanding of the topic being addressed. The primary investigator did not make any changes to the interview questions that were used as a guideline, as the responses provided by participants seemed to show saturation in a sufficient way. After the completion of 3 interviews, the primary investigator felt there was enough data and themes that had come up across all of the interviews to begin the second phase of analysis, and to begin to create a theoretical proposition (Charmaz, 2006) to summarize the findings of these interviews. It is important to note that after each interview was completed, the transcripts of the results were sent to the investigator’s primary research advisor to ensure there was no bias in the interviews, and to ensure that sufficient data was collected before moving on to the next stage of analysis. The primary research advisor was also given access to the coded data at various stages of analysis.

To create a theory based on all three participants’ data, the primary investigator compared the focused codes from all three interviews, analyzing which topics came up consistently across at least two out of three interviews, and with enough saturated data for each of these topics before considering them a theme. This allowed for more focused codes based on all of the data. In total, 11 themes were found within all of the data. These 11 themes were then reviewed and
analyzed, and grouped into four primary categories within the data. These four categories summarized the theoretical propositions that will be discussed in Chapter 4 of this paper.

**Delimitations**

The changes made by the increased access and use of technology are far reaching, and in order to get a full picture of how this has impacted the therapeutic process, there are many facets that need to be considered. In order to get a full and in-depth understanding of how this constantly changing aspect of culture is impacting therapy, it will be important to look at several factors in as much detail as possible.

Technology is impacting several areas of the therapeutic process, including access to services, delivery of services, the use and availability of information, and other areas. There are currently large technological advancements in the way that therapeutic services are being delivered. For example, the increased access of technology has meant that some therapists use services such as Skype, text-therapy, etc. (Vincent et al., 2017). However, because this project focused specifically on how the increased use of technology has changed the career trajectory in the lifespan of a psychotherapist, the focus was on this work rather than on how technology may be providing new methods of delivery for therapy.

There is a lot of interesting and important research being done on how technology may be used to replace face-to-face therapy, and how this shift impacts the therapeutic process (see Cardos et al., 2017), so this study focused on how technology may be supplementing or changing face-to-face therapy from the perspectives of the therapists.
Limitations

Given the nature of qualitative research, I am unable to draw any causal conclusions from the data. The goal of the study is to understand the perspectives of the therapists, and how they see these changes unfolding in their practice, and not to make any causal conclusions from the data. Because I interviewed a small handful of therapists using convenience sampling, the data provided is subjective and limited, and does not provide a full picture on the impacts of technology in the therapeutic world as a whole. We cannot make generalized statements about the impact on the therapy practice, especially to those practicing in different cultures and countries, where technology use may be different and therefore impacting the therapeutic process in a different way. All three participants were females who are working in private practice, and therefore the perspective is limited to those in private practice and does not generalize to those in public care psychotherapy services. The goal is to begin to form an understanding of how this change is impacting the Canadian culture, with the hope that further research will expand these findings in other countries across the world. Given that this is a Master’s thesis, the primary investigator’s time is also a limitation, as this is a project that could be studied for years and in more depth than given to complete the thesis process.

Lastly, given the primary investigator’s role in the research it is possible that the findings will be biased. As a student-therapist, as well as the primary investigator, it is difficult not to allow for my own conclusions and assumptions based on my personal experiences within therapy practice to bias the content of the interview as well as the analysis of the results. However, it is important to note that this perspective is considered to be helpful when completing any CGT research (Charmaz, 2006). With this in mind, I was diligent in seeking consultation from my advisors to ensure that my questions and analysis are limited in their bias, and that I am
approaching the research topic from a variety of angles wherever possible. Importantly, this position also allows me to be aware of the impact that technology has had in my own experience, allowing me to come to the study with an understanding of the process and impact that may help with a deeper understanding than might otherwise be expected.

**Validity and Trustworthiness of Findings**

As suggested by Elo et al. (2014), the trustworthiness of qualitative research studies is a process that takes place during every phase of the research process, including “preparation, organization and reporting of results”. To ensure this was maintained throughout the research process, the primary investigator consulted with the research committee, as well as the primary research advisor throughout the process to ensure reliability throughout the research process.

Prior to beginning data collection, the primary investigator consulted with her research committee to ensure that the questions included in the semi-structured interview were not biased in their wording, and that the sampling of participants was one that was supportive of the research question being asked, as well as the style of research being conducted (Charmaz, 2006; Elo et al, 2014).

To ensure the writer was able to limit bias within the interviews conducted with participants where a previous relationship existed, the writer focused on using the interview questions prepared, while also focusing on discussing the research question only during the scheduled one-on-one interview. Since the results of these interviews were similar to that of the interview conducted with no pre-existing relationship, one can infer bias was kept to a minimum in impacting the data collection process. It is also important to note that the pre-existing relationship may have allowed the participants to feel more comfortable engaging in the
interview and providing further insight due to this, as suggested by Charmaz (2006). Participants were also given the chance to engage in member-checking. Copies of the transcripts were sent to participants to verify the content, and to see if they were wanting to add or remove anything from their transcript. Participants were given one week to review the transcripts. Importantly, none of the participants made any changes to their transcripts and data analysis proceeded with their confirmation, which increases the validity of the findings.

As suggested by Charmaz (2006), during the coding phase, particular attention was given to the codes being used, using the participants language where appropriate, so as to stick as close to the data as possible. When organizing the coded data, the primary researcher consulted with her primary supervisor to ensure that the codes and subsequent themes matched what was presented in the original transcription of the interviews, to ensure for credibility of the results presented.

Lastly, when reporting the data, the primary researcher has emphasized the procedural steps taken to create the results presented in chapter 4, as seen in the “data analysis” section of this chapter. This is to ensure that the process is understood and clear to the reader, and to improve the trustworthiness of the findings.

However, given the nature of qualitative research, there is limited external validity in the study findings. I am able to make speculations, but no general conclusions about how these findings may apply to the general psychotherapist population, especially outside of Canadian culture. It is important to note that all 3 participants were female psychotherapists, working within a private practice setting within Manitoba. This means these results cannot be generalized to expand outside of these parameters, unless further interviews are conducted to confirm
Positionality of the Researcher

It is important to note the positionality of the primary investigator and how this may impact the results and analysis. As a student who is completing her training in counselling psychology, who also is employed at a therapy practice, I have had direct experience with the increased impact of technology use. This could potentially impact data collection as well as interpretation and analysis, as there may be the possibility of bias on the part of the primary investigator. With this in mind, I have kept in mind any possible presuppositions and how this may impact the interview and analysis of my data, as suggested by Charmaz for CGT approaches (2006).
Chapter 4: Results

As this study utilized a CGT approach (Charmaz, 2006), various codes were analyzed within the data, providing the results presented below. The data provided evidence that the career of psychotherapy is changing as a direct response to the impact of technology on our culture. The analysis process resulted in eleven major themes occurring within the data, which can be summarized into four categories. This includes the impacts to the structure of their career in psychotherapy, including the work-life boundaries the psychotherapist must have, the workload changes they may experience, and the adaptability and growth they will encounter throughout their careers. Psychotherapists may also see changes in what their clients are bringing to therapy, including the impact of social media on mental health, as well as increased client awareness of mental health conditions which may bring self- and other-diagnosis to the sessions. This will also bring changes to the actual client-centered work that is done within psychotherapy, including how quickly clients may move through the process of therapy, while also presenting a new paradox around navigating clients be present in the moment and mindful, while using resources on devices that often take us away from the present moment. Lastly, psychotherapists will have larger access to tools and resources needed to empower their clients, to provide them with access to programming as well as find resources that are tailored to clients needs, as well as being able to empower their clients to take their mental health into their own hands.

To provide these results, data from each of these themes will be summarized. In order to get a sense of where this data is coming from, the primary investigator believes it is essential to have a basic idea of the background of each of these therapists to provide context to their responses. Participants have been given pseudonyms to maintain confidentiality.

Brynn: A therapist with a background in Occupational Therapy that later led to Masters in
Marriage, Child and Family Counselling. She has been working independently in private practice for over 20 years, and is also an avid public speaker and writer. She works with many populations of clients, but mostly adolescent and older.

_Kerry:_ A psychologist who has been practicing since 1984, and has had a wide variety of experience, including working within school systems, working for the medical system to provide therapy to clients who knew they would be dying, while eventually settling into a private practice just over 10 years ago. She now works with mostly adolescents and adults, but has had experience in working with children over her varied career, especially while in the school system.

_Pat:_ Also a psychologist who has been practicing for over 30 years, working largely in the school system for many years, until opening up her own practice once her children were older and her schedule was able to be a bit more flexible. She still currently works with individuals spanning the entire life spectrum, including young children and into the later years.

Each of these three psychotherapists provided insight into how they have noticed technology impacting the work that they do. It is important to note that all three psychotherapists currently work in a private practice setting, but have had experience within schools and public healthcare systems as well. However, their current experience is based on working as a female within private practice and must be considered within this lens.

**The Impact of Technology on the Structure of the Psychotherapy Career**

Psychotherapists may see changes to the structure of their career as a direct impact of technology. Technology has created a whole new set of boundaries that clinicians must have, including the ease of direct access to a psychotherapist through emails or cellphones, as well as
navigating their work hours differently, including when and how they respond to messages through these means. Psychotherapists may also find their workload changes as more resources become available to their clients for between session use, and therefore more information is available to both themselves and their clients. Lastly, psychotherapists may find that technology allows for continued growth and learning within their field, and this growth may be what keeps them current and able to help their clients navigate the new technological society. Each psychotherapist interviewed provided perspectives on these impacts, and will be summarized below.

**Navigating Boundaries around Technology and Psychotherapy**

All three participants shared how important it is for them to maintain healthy boundaries around digital communication with clients. From Pat;

In terms of client contact I rarely do that outside of therapy hours or the hours of service, and um, I don’t do internet or emailing with clients which is a good boundary to keep. I don’t talk on the phone with them after hours, which is a very good boundary to keep.

However, what was also abundantly clear was that all 3 psychotherapists felt that most clients were fairly respectful of their boundaries. Kerry stated that she uses her cellphone for business reasons, and is clear with clients that she will only respond to them during business hours, “but you know I think people are pretty respectful of that, I really do”. What stood out during these interviews is that it was very clear that these experienced, practiced psychotherapists had been working on maintaining boundaries for much of their career. Technology may have provided another layer of boundary to maintain, but it was evident that all three psychotherapists were comfortable discussing boundaries. As stated by Brynn “we name them, we put them out on the table, we talk about them, we figure out how we’re going to handle
them, and we navigate them together.” Each of the therapists reiterated how important it was to maintain effective work-life boundaries, so as to not be burned out by the workload of psychotherapy. Brynn mentioned that maintaining effective boundaries with clients was also “modelling good boundaries...because I want them to have good boundaries”, and this was clear throughout all of the interviews. We cannot expect clients to have good, proper boundaries, if therapists themselves don’t also engage in effective boundary-setting behaviour. Therefore, “good boundaries, good therapy, good business, they’re all parallel” (Brynn).

Psychotherapists may also utilize social media for their own personal connections, and therefore must monitor and maintain appropriate boundaries that way. As Brynn mentioned “I think separating professional and personal is really important.” She also mentioned that having a personal social media account means not accepting clients there, and potentially having a separate one for public connection if the therapist chooses that route.

I do not accept clients on my personal page, but they’re welcome to join my professional page. Um, so there’s ways that they can get doses of me, that’s the professional {Brynn}, um, so that helps tide them over when I go on vacation. Right so there’s things like that where technology helps, and do people try to push the boundaries? Yes, and do we let them? No. And so it’s not a problem.

A large part of the psychotherapy profession includes navigating boundaries around clients outside of the psychotherapy hour. Technology may have added another layer of boundaries to navigate, but it was clear that these practiced psychotherapists felt comfortable being firm in their boundaries and continuing to assess and move through these as they work.
Workload Changes

One aspect of the career of a psychotherapist that has had to re-adapt with the onset of technology is the actual workload. Technology has created an abundance of information available to both clients and psychotherapists. Psychotherapists will have to navigate these resources as a part of their work, in order to know what is available, what may be helpful and good, and what may resonate with their client. Interestingly, two out of three participants found that with technology being so widely accessible, it has made for a decreased workload for them, while one participant found the opposite.

Both Brynn and Kerry acknowledged that because there is so much available, they find they are spending less time looking for those resources. Brynn mentioned that she is able to rely on her clients to find resources that work for them, stating “I think I feel less... like I don’t give out handouts at all anymore, um because there’s so much available on the internet, and I used to have a file if I wanted to resource the person on this, and now you can just say to go look for it online, just google it.” Meanwhile, Kerry stated;

I think less time to find resources. Absolutely. Because there’s so many, and sort of you go through your own screening methods in your head, and then over time, I think talking to other people, you know going to workshops, talking to people in the office, you kind of get an idea of what are the better sources to go to.

Whether relying on their clients to find more resources, or just having a better sense of what is out there and available, both of these psychotherapists have found their workload to have decreased.
However, Pat has found that she is spending “at least 2 hours a week, if not more, just in doing some research to keep abreast of what’s out there.” This discrepancy may be related to the different populations of clients that Pat works with. She was the only therapist who also works with younger children, including working with the parents of those younger children. She also discussed using video clips in many of her sessions, “clips for parents and children to watch together, which gives them something to talk about”. This seems to require her to spend more time finding these resources, whereas Kerry and Brynn who work with mostly adolescent populations and older, are able to rely on their clients to find their own resources.

Regardless of whether more or less time is spent, it is clear that technology has shifted where a psychotherapist's energy is being used. While two of the participants have found that they are spending less time navigating books and resources for their clients, one has found that she is spending more time. This is something that psychotherapists must consider when looking at what is a reasonable workload for themselves and managing effective work/life boundaries.

**Career Reward and Growth**

What was clear throughout each of the interviews, is that all three psychotherapists had a thirst for knowledge and this was a large driving factor for each of them. Pat stated “the reason I do this is because I’m a curious person, I get bored easily, what can I say. That’s the reason I do this. That’s the reason I’m always looking to do better.” Pat’s love of knowledge and information to help her clients was clear throughout the interview, stating things such as “the career is just a starting point, a launching of, it’s a ticket to be able to learn”, and “for me the payment for this job is not just financial, it’s also rewarding in terms of the impact that we can make on people, so that kind of impact can be enduring.” Kerry also stated “I certainly think that what it does is
reminds you that you have to keep up with the times, so if you don’t change with technological changes, I think you’ll be out of sync with your patients”. She also mentioned;

t sort of underlines you need to know what your shortcomings are, what your strengths are, what you’re good at what you’re not good at, where you need more help and you need to really keep abreast of what’s new in the field, whether you practice it or not you need to know what’s out there.

Brynn also pointed out “what I’ve become an expert in has not just been as a result of my education but because of all that my clients have taught me so if this is one more thing that I can learn, I will learn”. Additionally, while Pat mentioned that she spends more time than before finding resources for her clients, she also seems to find this rewarding and a part of her workload. When asked what she would recommend for future psychotherapists who are practicing in this technological world, she said;

Spend more time um seeking knowledge, and deciphering what is good and having a few tools to refer to, and uh, always be curious, and always think of what the person in front of you might benefit from rather than having a one-size-fits all recommendations.

Therefore, technology or not, it is clear that adaptability and a constant desire to learn is a massive driving factor for an effective psychotherapist who is working in this career long term, and who must adapt to the culture around them, which can be ever-changing. Technology has provided an extra layer to the knowledge that therapists must seek, but the awareness of cultural elements has been an essential part of what gives these psychotherapists longevity in their careers.
What Clients Bring to Therapy

All three therapists noted that technology has changed the things they see within their client sessions, as being constantly connected to our devices has created impacts on our mental health, and also provided us with access to more information to self- and other-diagnose.

The Impact of Social Media on Mental Health

The biggest change, mentioned by all 3 participants, is that individuals are now in a state of constant comparison to others via social media, and experiencing increased levels of anxiety and depression because of it. As stated by Pat “social media has had a horrible impact on young people in terms of their anxiety levels, and depression levels, and negative sort of sense of self.” When asked if there was any one age group that experienced this more, Pat stated “it’s everybody. Yeah, because the adults are looking and seeing what their friends are doing and what their children’s friends are doing and they feel more pressure to have their children doing the same things.” Brynn also said “you know there’s that we measure our insides to other people’s outsides, and um, those highly curated, beautiful shots on instagram are not peoples real life, but we can lose track of that, um so we have that sort of instagram envy that happens.” Kerry also mentioned;

In young kids, adolescents, and young adults I think it is that sort of comparative thing, they see images of other people, those are those people’s highlights, but they think they’re everyday life, and we see a lot of that impact on self-esteem, self-concept, that kind of thing.

Evidently, all 3 psychotherapists recognized that social media has impacted how clients view themselves, which is impacting what they are bringing to therapy. Pat mentioned that part
of navigating this impact is working on strengthening self-identity with her clients, “we’ll also work on talking about core values and learning about what’s important about the self, and uh, hopefully that will hold them through the storms.” Psychotherapists are now having to teach “cellphone hygiene” (Brynn) to encourage clients to use their devices more responsibly, and not let it impact their sleep, productivity, and self-esteem. Part of this also includes having clients be more aware of their cellphone use, as Brynn stated;

   The number of people that say I need to deal with my anxiety has gone up through the roof. Like, (pause) not in proportion to the population right? That our culture as a whole is becoming more anxious and my own experience as people are talking is that I think it’s that people don’t have as much time to be mindful and sit with their own thoughts, because people pull up their devices, and the analogy I use when I speak is like, when do we blink?

This is an important element for psychotherapists to be aware of as they navigate the changes that technology brings, since we will likely only see more of this moving forward.

Self and Other Diagnosis

   The access to technology and devices has also meant that clients are able to look up information that they previously did not have access too. This is both a strength and a limitation for the practicing psychotherapist. As all three therapists’ pointed out, when clients come in having done their research and believe they or someone in their life suffers from a specific condition can be empowering for the client, while also being something that they have to be willing to work through in therapy. Pat mentioned there is “more awareness of what their issues might be, absolutely, they’ve done some questionnaires on the internet”. As Kerry pointed out;
I think coming in with some knowledge, knowledge is always a good thing. It’s how invested they are in that knowledge, and how reputable their sources are, I mean if they come in and they’ve diagnosed and this is what they want, and they tell you what they think they have, you have to see how resistant they are or how open they are to another interpretation. But I think it’s helpful, I think people are doing… they’re taking care of themselves in that sense a little bit better.

Brynn also provided similar insight, sharing; “People come in saying ‘I have a narcissistic mother and I’m suffering from the effects of that and these are the effects’ and we’re like okay so we’re not starting from ground zero”.

The participants saw this as a form of empowerment for the clients, who were now able to find out information and resources to help themselves navigate through complex mental health needs. They indicated that this form of client empowerment was still something that they had to be willing to explore and discuss with their clients so as to help them navigate the information that they did have. However, as Kerry pointed out “There’s a danger of that too, there’s armchair psychology, or not going to reputable sources”, and so an awareness of where clients are getting this information from is an essential part of assessing it’s reliability. However, overall the therapists seemed to think this was a good thing, as Kerry thought “that people who are using technology and who are a little bit more psychologically sophisticated, they’ve done their work and they’ll share things with you”.

It is important to note that Brynn also acknowledged that clients coming in with more information should not threaten a practiced psychotherapist, as “sometimes they come more knowledgeable and I think I have to choose not to be threatened, but choose to be engaged and intrigued”. Staying open to learning from your clients, while also feeling grounded in the
knowledge and information that the psychotherapist already has, is essential in navigating this dynamic.

**Changes to the Client-Centered Work in Therapy**

As we can see, the career of the psychotherapist has been impacted by the advances of technology. But how has this influenced the day-to-day work that psychotherapists are doing with their clients? The psychotherapists interviewed shared that they felt the work they were doing was going at a faster, more intense pace than before technology, largely because of the access clients have to further information. Technology has also created an interesting paradox for psychotherapists to work through, as they try to engage clients in the present moment, while also utilizing the resources provided by the very thing that often pulls us out of the present moment - technology, specifically, smartphones and devices.

**The Pace of Psychotherapy**

Two of the psychotherapists believe that their work with clients has been sped up by the increased access to technology and internet resources. As Kerry says “We’re going faster right, as opposed to psychoanalysis years and years ago, and how much time you spent on the past, and um, the focus of therapy is more on the present”. Brynn also stated “you know sometimes we can use our time more effectively. You know therapy’s not cheap, I can be totally respectful of that” and “so we start at like Mile 10 instead of Mile 0.” Clients coming in more with more knowledge may not only increase the actual speed of the therapy work, but also allow the psychotherapist to go to deeper levels than they may have previously been able to go. If a client comes in resourced and educated, they may already be aware of many therapeutic strategies, which may allow the psychotherapist to go even deeper in the level of work. As Brynn stated;
You have some insight, you have some education, you’ve resourced yourself, and now we’re going to look at experientially some of the blind spots that you can’t possibly see right? So like that’s beautiful right? And people come in feeling like they can own things and they’re empowered because they have terms and terminology, and they’ve heard other peoples stories and they can resonate with those stories, so people come in, feeling less ashamed.

However it is important to note that all 3 of the psychotherapists interviewed for this project were working at private practice levels. Brynn acknowledged this privilege with her clients by stating

Here we’re private practice, people that come here can afford to pay the rates we’re paying, which means they’re fairly resourceful and creative, and so a lot of them are looking for that stuff, they want to look for that stuff, so I don’t do a lot of work for people, I say go hunt it out, right?

This shows that clients who are receiving services in private practice and coming in more resourced now, which allows the psychotherapists’ role to change and move away from psychoeducation, and go towards deeper levels of engagement within their clients. As Kerry pointed out “people don’t have to sit and wait so long, you know even if they’re waiting to come to an appointment, they can be doing something.” Kerry also mentioned that this is a function of today’s society;

There’s no delay of gratification anymore in society, it’s all at your fingertips. But the good part of that for therapy is like I do have patients, a few, who will go to the library for a book, but most of them are willing to buy a book or a workbook or an audiobook or
something like that. I think the process of therapy might be speeded up a little by that because people are accessing that information more quickly.

However, private practice or not, it is clear from these interviews that clients having access to more mental health information online, an increased access to resources and tools, as well as constant access to a device allows psychotherapists to work at a pace that is far greater than they may have previously experienced.

**Navigating the Paradox of Technology in Psychotherapy**

Another important element that came up in the interviews, was the dilemma that psychotherapists face when they are using technology to work with their clients. The psychotherapists recognized the benefits that technology had on their practice in many ways, but also recognized that the same tools that provide resources are also responsible for many of the stressors that their clients are bringing to the sessions. Both Brynn and Kerry brought this up frequently, as summarized beautifully by Kerry

> It’s an interesting parallel, because I think we have... we’re focusing more in therapy on the here and the now, and not getting ahead of yourself and being in the moment, and I think that kind of parallels just the use of a device and the access to information and trying to be in the moment, but it’s always a balancing act.

Technology has also forced us to be less present with our realities, as it’s so easy to shut things out by turning on Netflix, or scrolling our phones mindlessly. As Brynn stated, “people pull up their devices, and ... like when do we blink?” This is again part of the parallel of technology, as it brings so many wonderful resources to us but also pulls us away from our real lives more, which makes the work of psychotherapists just that much more challenging.

Psychotherapists must navigate this balancing act, by allowing clients to be both present in the
moment, and also recognizing the strengths and benefits that technology brings, even at the cost of pulling them out of the moment.

**Resources Used in Psychotherapy**

The interviews conducted for this study indicate that the widespread access of technology has changed the work psychotherapists do, as they may no longer be spending their time finding resources to use, and focus more exclusively on finding resources that are more tailored to the needs of their client.

**Appropriate Resources for Client Needs**

An important benefit that all three participants noted, was the ability to find resources specifically tailored to their clients needs and concerns. As Pat noted, “it’s just more accurate and more precise. And the match between what they need and the information we can give them is much more precise.” She also warns against “one-size fits all recommendations”, since there is so much information out there that it is unlikely that one approach, or one resource, will work for everyone who is accessing it. Pat pointed out that “the match between what they need and the information we can give them is much more precise. So they don’t have to go looking around.” Similarly, Brynn also stated

I love to use those resources to say, and I like to say you know so… try calm.com, try this try that, try three different ones and figure out which one works for you, right, and like sometimes it’s box breathing, sometimes it’s visualization, sometimes it’s…and we don’t have to try them all here, they can go off and figure out what works for them, without us having to do all of that work, because it’s so readily out there.
In this way, clients are empowered to find their own resources that work for them, and psychotherapists have a wide variety of tools to offer them, instead of being limited to just one or two different methods or approaches. As Kerry pointed out, clients are also able to do more work in between sessions with these resources, stating “people don’t have to sit and wait so long, you know even if they’re waiting to come to an appointment, they can be doing something.” At the core of this work, is the relationship between the client and their psychotherapist, as Pat stated “it still comes down to relationship, guidance with techniques that are appropriate, and tools that are appropriate for your client, that will make for the most efficient outcomes”.

**Video-therapy**

All three participants also pointed to using video-therapy for their clients who were less inclined to read resources. They were able to show them videos either in session, and then debrief them together, or to give them the homework of looking up specific videos and seeing what they connect with or what resonates with them. Brynn stated:

> I love that for some of my clients who aren’t readers, I can refer them to videos right? So maybe you don’t want to read John Gottman, but you can look at him online and you can watch a video of him. Maybe you don’t want to read about Brene Brown, but you can watch her Ted Talk and it’s pretty entertaining. And so there’s... I can resource people in ways that... I have more strategies and I will exploit those strategies if it will advance the work with my clients.

Pat shared that sharing videos with her clients, both in session and out, can solidify or reinforce work being done with the client, stating she uses

> Videos of the masters, who are talking about you know the concepts that I want to convey to them, and they say it so much more succinctly, and lots of times I’ll use
humorous clips to convey a comment or an idea to the client so in that way I will
sometimes show YouTube [videos] in sessions, but more importantly I like the idea of
being able to send them to clients so that reinforces the, um, I guess, the interventions
that we’ve talked about.

Kerry also mentioned using videos as a part of her therapeutic process with her clients;

So they’re getting their resources, you know the books are available, so there’s that more
immediacy, but I think that helps therapy when you know people are more willing to read
or talk about ted talks, or listen to short things like ted talks, and I actually have a number
of patients where we talk about a number of ted talks.

Whether they watch the videos in session with their clients, or send clients home to watch
videos to reinforce the work they have done, all three psychotherapists were glad to have this
additional resource as a way to work with their clients. As Brynn said, “That’s not the therapy,
that then becomes a tool that we talk off of”.

**Medical Information**

Psychotherapists now also have access to medical information that they previously may
have only gained access to in consulting with a medical practitioner. Specifically, both Brynn
and Kerry acknowledged the benefit of being able to look up the side effects for medications that
their clients may be prescribed for their mental health conditions. This is something that
previously may not have been accessible to the psychotherapist, especially not in an immediate
way or even during their session.

As Kerry stated, “that’s another way I use the apps, I see a lot of people with medical
conditions, and um, if I don’t know enough about it then I’m going to go to a reputable source to
find out about that.” Therefore, she found that the increased ease of technology use means she is
able to understand and research conditions that may be impacting her clients mental health, instead of relying solely on information from the client or waiting to consult with a medical doctor.

Kerry also mentioned that being able to look up medical information has increased how fast she is able to discuss medication management with her clients, as they may come in concerned about taking medication because of side effects, we can look up from a reputable source, a credible source, well what are the actual side effects and how long should they last, or what are your choices in terms of medication, so it’s I think maybe if anything it’s sped that up a little bit.

Brynn also mentioned “I also pull it out where in session somebody says I just started a new medication and I’m experiencing this and I’m like oh! Yup that’s a side effect!”

**Client Empowerment**

All three psychotherapists noted that the advantage to this technology is that they are now able to tailor their resources to their specific clients needs, and find things that connect with that client in a more meaningful way, allowing them to empower the clients to find even more resources such as that to really do this type of work. All of them discussed being able to tell their clients to look things up at home, or giving them homework to research a specific topic, and to find things that resonate for them. As Brynn put it “just because I like a particular resource… the client might not, and so find something… that resonates with you”. Each psychotherapist recognized that the clients have their own needs, and the internet provides them with the tools to be able to find resources they personally connect with, instead of the “one size fits all” approach. Pat stated that technology helps clients “realize that they can do that themselves, and find out how to do things in a way that they understand.” This has allowed the psychotherapists to
empower their clients even more, and to provide them with many more resources than they may have previously had.

Kerry noted that “people who are using technology and who are a little bit more psychologically sophisticated, they’ve done their work and they’ll share things with you”. Brynn also noticed this trend, stating “people come in feeling like they can own things and they’re empowered because they have terms and terminology, and they’ve heard other peoples stories and they can resonate with those stories, so people come in, feeling less ashamed.” Brynn, who works with largely an adult population, also shared;

Not all of it’s going to fit but … cause they might want a more experiential, they might want more story, they might want more academic, like I… go look at the literature and find something that you feel works for you, and I can say that knowing that don’t like all of it, use your judgment right like? Our clients aren’t stupid, right?

These examples clearly indicate that these practiced psychotherapists know that their clients are more than capable of finding their own resources, and being able to sift through the immense amount of information on the internet with some understanding of what will be a fit for their needs. This has allowed clients to be more empowered on their own healing journey, while still using the support of their therapist’s expertise.

**Summary**

All three psychotherapists interviewed for this process were able to engage in meaningful discussion around the benefits and risks with the increased use of technology. Each of them recognized that technology has created changes to their careers, in ways that they would have not been able to previously predict, but in order to continue to be effective with their clients they
have had to adapt. Adaptation has largely meant awareness for each of the psychotherapists around how technology may present new challenges for their clients, but also for the work that they do with these clients.

Psychotherapy has always had to adapt to the culture around it, and psychotherapists must always be engaged and aware of their surroundings and how this may impact their clients as well as their own work with their clients. Technology has created new dynamics for each psychotherapist to navigate, while simultaneously providing resources and solutions for the many new concerns that are being presented in this modern world.
Chapter 5 - Discussion

Psychotherapy has changed its form throughout history in order to meet the needs of the culture around it (Seligman & Reichenberg, 2014). The current technological society (Barney, 2007) is no exception, as psychotherapists must adapt their work to fit the changes this brings to our current culture. Technology has provided many new resources for psychotherapists to use, while simultaneously providing additional barriers and concerns that must be adapted to as well. Luckily, the psychotherapy profession has always benefited from adaptability and flexibility around clients needs and cultural changes (Goodwin et al., 2018). Psychotherapists, therefore, tend to be capable and willing to adapt to these changes in order to be the most effective with their clients. The results of this study indicate that the career of the therapist is changing, and this change is being driven by the catalyst that is technology. Technology has created new and more complex needs for clients, while simultaneously providing resources and tools for psychotherapists to address those needs.

It was clear from the interviews conducted, that psychotherapists practicing in private practice settings must be willing to be adaptable and flexible within their work in order to continue to meet the demands of their clients, while also maintaining healthy work-life balance. The original research questions were; how has technology impacted the traditional career of the experienced psychotherapist? Specifically, has the career been impacted by the increased accessibility of mental health information? Has there been any changes in the way that traditional face-to-face therapy is conducted with the increased access to digital resources?

Within this research, we can see that the career of the psychotherapist has changed due to the impact of technology on their work, including the new boundaries they must navigate, both in the use of technology within their sessions, and in the amount of work done between sessions.
to find resources for their clients needs. Psychotherapists must also be aware of how technology has changed what clients are coming to sessions with, and must be grounded in their own awareness and knowledge, but open to learning new information from their clients. Furthermore, psychotherapists must be willing to navigate new challenges brought to them by clients who are also learning how to adapt and survive in this new technological society.

Technology has created a new “decision point” (Super, 1980, p. 291) for psychotherapists, who must now decide whether they continue on with their work in the way they started, or are willing to adapt and move forward within this technological society. As is evidenced by the data cited above, psychotherapists are adapting and finding ways to use technology to their benefit within their work. As Super stated in his theory (1980), in order for psychotherapists to adapt their role within their career, they must be willing to adapt to the changes surrounding it. Their career pattern may change, but being adaptable and open to shifts within their career will help them with maintaining this career over the course of their lifespan (Super, 1980). The career of a psychotherapist has always been one that must adapt to the culture around it (Goodwin et al., 2018). Technology is now providing another element that psychotherapists must be willing to adapt to, and must be aware of in order to provide services that are relevant to the clients needs. With these adaptations, a psychotherapist can efficiently move through the lifespan of their career with ease, and be prepared to face any new challenges that they may face. From the interviews conducted for this project, it is clear that psychotherapist adaptability and flexibility is the key to longevity within the lifespan of a psychotherapy career.

It is clear that the core values of psychotherapy remain unchanged, with the relationship between the psychotherapist and their client being at the heart of the work that is done. This is similar to previous research conducted within the medical field, suggesting that the patient-
doctor relationship remains an important feature to medicine (Catan et al., 2015). Technology has provided even more avenues for the psychotherapists to explore their relationship with their client, by teaching them healthy boundaries, finding resources that are appropriate to their needs instead of generic resources, and empowering their clients to seek out information for themselves.

Boundaries have always been an important part of the psychotherapy process (Pope & Keith-Spiegel, 2008). Whether it’s having boundaries with their clients, or having personal boundaries in what psychotherapists share, it is clear that having effective boundaries is an essential part of the job. However, with technology being as accessible as it is, it can be difficult to maintain those boundaries. If a psychotherapist is using a cellphone, they may be more accessible than ever before, with the risk of clients assuming you are available between sessions and at all hours. Psychotherapists must now be able to create boundaries around accessibility, as well as their own personal workload to ensure that they are able to maintain this work in the long run. Importantly, psychotherapists must also be willing to assess their own limitations, and continue to learn and engage with new information and resources in order to suit their clients' needs, or else risk falling behind and missing out on important work. Technology has amplified these elements of the career of a psychotherapist, but for the career of a psychotherapist in private practice they are an essential part of staying relevant while also protecting healthy work-life boundaries.

While psychotherapists try to navigate how the day to day of their career may look different within this technological society, clients are also navigating major changes to their own mental well-being with the use of technology (Gowen, 2013). Previous research by Gowen in 2013 suggested that many young adults are frequently using the internet to gather information
about mental health diagnoses, medication and general information. This study confirms this idea, as the psychotherapists working with young adults are finding this to be an increasing reality of their work. This requires psychotherapists to navigate pre-existing knowledge, and ensure that they are able to guide their clients with this knowledge in useful and helpful ways for the client to process and engage with that knowledge. Simultaneously, many individuals, especially young adolescents and adults, are spending increased amounts of time on social media. With this, comes a new layer of social comparison that causes entirely new areas a psychotherapist has to work through with their clients. These have created new challenges for psychotherapists as they have to navigate these new concerns brought forth by their clients. This is consistent with research being conducted on social media and mental health. A recent study that interviewed 54 adolescents, and 8 mental health practitioners, found that while there are good elements of social media, such as being connected and finding resources, there are also “bad” and “ugly” sides as well, including social comparison, impacts on self-esteem, and bullying (O’Reilly, 2020). These elements must be considered when working with any population who heavily relies on social media use. As was evidenced in the data above, this is not limited to the adolescent population.

It is clear that technology has created some new challenges psychotherapists have to navigate within their work. Whether it’s now dealing with the after-math of increased social media use and how that impacts the self-image of those clients, or it’s helping clients understand diagnostic terminology that they have read about online, and unpacking that information within a safe and understanding space, therapists have to be prepared to handle these areas that have been brought on by the increased access to technology.
Technology is changing the day-to-day work that psychotherapists are engaging in with their clients. With clients coming in more informed and more knowledgeable on mental health conditions, it may allow therapists to go deeper, faster, with clients than they previously would have had to. There is less need to engage in psychoeducation, and more capacity to move beyond this area and engage on a deeper level. All three therapists noted that clients are coming in more aware, and also less present in the moment because of the increased access to technology. This has created an interesting shift in what the psychotherapist's role is, as they try to engage clients in the present moment, while also empowering them to continue to be aware and resource themselves with the very devices that take us away from our present moment. However, contrary to research conducted in the medical field, there was no evidence that psychotherapists have had to deal with any forms of “cyberchondria” with regards to mental health conditions (Loos, 2013). Simultaneously, similar to previous research suggesting that information on the internet may not always be reliable or accurate (Henderson et al., 2012; Robertson et al., 2014), this study also found that the psychotherapists are spending time assessing the value of the information the clients are finding for themselves online.

Providing tools and resources to clients has been an essential part of psychotherapy for many years. Whether it’s in the form of “homework” from the cognitive behavioural therapy model, or writing letters and stories through the narrative lens (Seligman & Reichenberg, 2014), these are essential parts of the work that is done by most psychotherapists. However, technology has allowed for more information to be available to clients at a much faster rate, often without leaving the comfort of your home. Finding resources is no longer limited to what may be available to the psychotherapist in their personal library, or from a workshop, but can expand to find resources from all over the world and in many different forms. When you form a
relationship with your client, and find resources and tools that will work for their personality and needs, you are able to strengthen that relationship and work at an even deeper level than you may have if you had only had access to limited resources. Therefore, technology has provided the tools for psychotherapists to expand their connection to and empowerment of their clients in a way that previously would not have been possible.

Bibliotherapy has long been a resource that clients have used (Seligman & Reichenberg, 2014), but with easy access to websites like YouTube and TedTalks, psychotherapists are able to engage their clients who may be less willing and eager to read through resources, and are more engaged in a visual medium. Again, we see that the resources are specific to the clients needs, as opposed to painting all clients with a one-size-fits-all approach. This adaptability in a psychotherapist has been long known to be an important element of how effectively a therapist can work (Goodwin et al., 2018), but technology has allowed psychotherapists to have more options than ever before, therefore allowing them to work more effectively with their clients needs. Similar to previous research suggesting that the use of apps alongside traditional psychotherapy increases the effectiveness of the therapy for the client (Levin et al., 2017; Koffel et al., 2018), this research also suggests that the use of apps and digital resources can increase the impact of the therapeutic work.

However, contrary to previous research suggesting that there may be a need to question the quality of content on the various apps and digital resources (Luxton et al., 2011), this research has found that most clients accessing private practice services are empowered and capable enough of sorting through these resources and selecting ones that are suited to their needs. Previous research suggested that individuals are seeking out mental health information through the internet, especially young males who may experience more stigma around mental
health in our western culture (Best et al., 2016; Gowen et al, 2013). This research reinforced that this education is not only allowing clients to engage at a faster pace in psychotherapy, but also allowing them to feel empowered to take their own mental health into their hands. While psychotherapists may need to assess the validity of the information their clients are accessing, the overall sense from these participants, was that this information was empowering to clients and allowed them to engage in psychotherapy in a more meaningful way. The decrease in stigma around mental health information has allowed clients to reach out more on their own, find more mental health information on their own, and empower the client. The psychotherapists interviewed for this study all seemed to think this provided a positive for their clients, and they were happy to see this change occur.

*The Future Training of Psychotherapists*

Psychotherapists have needed to be flexible and adaptable for a long time, with technology only creating new challenges to what this may look like within their work. While clients are navigating how to maintain effective boundaries with their technology, and within their personal lives, psychotherapists are navigating how to balance the use of technology to their benefit while also being aware of its limitations and the concerns it may provide for clients. This research also reiterated previous research, suggesting that psychotherapists feel they don’t have enough education and training in how to use these types of resources in their work with clients (Armstrong et al., 2018). Further education in the form of Professional Developments, as well as additional coursework during the psychotherapist’s training may be helpful in helping future psychotherapists navigate these changes.

Importantly, all three psychotherapists mentioned feeling relatively blind in how to navigate this technology, as there is no formal training or courses provided to them and they are
just finding ways to move forward on their own. As Pat stated, “I think it would be very helpful for therapists to have some kind of coursework or, um, or lectures in how to use technology.” This is an important consideration for the future education of psychotherapists, and a strong reminder that focusing on adaptability and flexibility within the psychotherapist is an essential part of therapy. Providing these building blocks, combined with a general thirst for knowledge, allows psychotherapists to be prepared for whatever the future may throw at them, as they continue to navigate a world that is changing faster than training programs can adapt coursework.

On top of providing training to psychotherapists on navigating these technological changes, they may also benefit from understanding their role in mental health media literacy. Mental health literacy has been conceptualized to contain four main areas, including an understanding of how to obtain and maintain good mental health, understanding mental disorders and their treatments, reducing stigma against mental illnesses, and increasing help-seeking efficacy (Wei et al., 2015). Psychotherapists may now be required not only to provide psychoeducation to their clients, but also help clients navigate internet health information and social media use. Brynn mentioned having to do this work with her clients, stating that she is now finding herself discussing:

how can we practice good cellphone hygiene in your life so that it doesn’t hijack, you don’t even understand how it impacts your sleep, how it impacts your anxiety, and you’re not willing to go on a technology fast to find out, because you think it’s impossible, right? You don’t know how to live a life without technology. Like I think we have to figure out how to deal with this because we can’t not deal with it, but we haven’t recognized as a larger culture how much we do actually have to impact it.
Providing additional coursework within psychotherapy training programs, as well as Professional Development Training opportunities for practicing psychotherapists, may allow for psychotherapists to be better equipped in navigating the changes that technology may bring to their work. This will allow them to navigate the changes in their career brought on by this cultural shift with a deeper understanding, and potentially even more tools to allow for more successful work with their clients, and also more efficient boundaries for themselves.

It is also important to consider the long term impact of technology on the mental health of the general population. Psychotherapists will need to be prepared for how to handle and navigate this new world, and be ready to meet the needs of the ever-changing client demands. How do we step into this future together and provide the best possible resources and tools for clients while still staying grounded in the work that we do, which at its core is related to the opposite of the escape that technology provides for so many? It will be important for the training of future psychotherapists that we emphasize these elements, and focus on training psychotherapists to be adaptable and flexible, while also increasing awareness of the resources and tools that are available for themselves and for clients to use in order to engage in the most effective way possible.

What is clear from all of these interviews is that the career of the psychotherapist is changing, and if psychotherapists want to be able to understand their clients experiences they must be willing to keep informed, while also empowering their clients to stay informed as well. Psychotherapists must feel strong in their sense of self, and not feel threatened when a client comes with knowledge on a topic that they may not be as informed on. This will be an essential part of all future therapy training programs, as well as providing further continuing education for
therapists who have been practicing for many years, to ensure that they don’t fall between the cracks either.

All of these findings need to be considered within the lens of private practice psychotherapy, as all three participants interviewed worked in this setting. It is important to note that this could create different changes to psychotherapy than we may see in a public health care setting, or in crisis based services. Recent research has shown that clients with comorbid health issues, as well as adolescents and elderly populations, tend to be under-represented in the private sector (Bradley et al., 2019). This must be considered before making any generalized statements about the field of psychotherapy as a whole.

Psychotherapy has been changing for a long time, with technology being the catalyst that pushed it full speed into new territory. While clients are trying to navigate this new technological world, psychotherapists are navigating how to respond to these changes with and without the use of technology. It is clear from the results above that psychotherapists are using technology to their advantage to navigate the many challenges that it has also brought on their work. This dichotomy between being both a catalyst for the change, while simultaneously providing the resources and tools needed to navigate this change is an essential element to how psychotherapy can continue to move forward through technology. It is being aware of this relationship, both the impact that technology may have on what their clients bring to sessions, while also being aware of the resources and tools it can provide, that will be essential for all psychotherapists to effectively move forward and best meet the ever-changing needs of their clients.
Future Directions

It will be important to interview psychotherapists in other places to see how they are also experiencing and navigating these changes within their careers. As this study was limited in its depth and breadth, more research will be needed to fully understand the impact technology is having on the wider psychotherapy world. As of now, this information cannot be generalized to all psychotherapists, but can only be speculated to provide some insight into the experience of a private practice psychotherapist in Canada. Future research should consider comparing this information to those working in the public health sector, as well as comparing the experience of practiced psychotherapists to that of new, younger therapists who are entering the field with potentially more experience using technology within their day to day lives.
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Appendix A
Invitation to Participate E-Mail

October, 2019

Hello,

Thank you for your interest in my study. I am a graduate student at the University of Manitoba, pursuing my Masters of Education in Counselling Psychology. The purpose of the study is to begin to understand how psychotherapy has been impacted by the advancement of technology. Specifically, I am looking at understanding how technology may have impacted client awareness and knowledge, adjunct supports for clients to access in the therapeutic process, as well as how this may have impacted the personal process of the therapists themselves. I would like to understand this from the perspective of therapists who have worked with a variety of client populations over the years (at least 10+ years).

I will conduct an interview with you at a time and location of your choice. The interview will involve questions about your views on how technology has impacted your career in therapy. It should last about 45 minutes to an hour. With your permission, I will audiotape and take notes during the interview. The recording is to accurately record the information you provide, and will be used for transcription purposes only. After the completion of the interview, I will transcribe the interview and send you a copy of the transcription. You may make any changes, deletions or additions that you feel best capture what you were intending to say.

If you are interested in being a part of this study, please reply and I will forward you the consent form as well as the interview guide, to properly prepare you for the expectations of the research. Should you feel discomfort at any point, you may choose to discontinue the process.

Thank you for the consideration of your valuable time,

Shelly Isbach
Appendix B
Participant Consent

Research Project Title: How Technology is Changing Psychotherapy: Perspectives from Therapists

Researcher:
Shelly Isbach

Research Supervisor:
Dr. Grace Ukasoanya

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Purpose and Process
I am a graduate student at the University of Manitoba, pursuing my Masters of Education in Counselling Psychology. I am currently enrolled in the thesis portion of my Masters program. The purpose of my study is to

I would like to conduct an interview with you at a time and location of your choice. The interview will involve questions about how you believe the advancement of technology has impacted therapeutic practice and career. It should last about 45 minutes to an hour. With your permission, I will audiotape and take notes during the interview. The recording is to accurately record the information you provide, and will be used for transcription purposes only. After the completion of the interview, I will transcribe the interview and send you a copy of the transcription within one week of the interview. You may make any changes, deletions or additions that you feel best capture what you were intending to say within a week of receiving this transcript. I will send you a reminder email within one week of submitting the initial transcript, and will allow for three more days to review the transcript before I assume there are
no changes you would like to make. The review should take no longer than one hour. The total
time required for this process should be no more than 4 hours, including your review of the
transcript. I will also take written notes during the interview to allow me to recall the discussion
and as a back-up in case the audio recording malfunctions in any way.

**Participation**
Please remember that your participation is entirely voluntary, and you may choose to withdraw
at any point in the process without any consequences. If you choose to withdraw, simply let the
researcher know by phone or email. If you choose to withdraw, any data acquired will be
immediately destroyed. Once the current research has been completed, I can send you a
summary of the early findings (by December 2019). There will be no compensation for
participation, but I will offer the purchase of a beverage should we choose to meet at a coffee
shop.

I expect to only conduct one interview; however, a follow up phone call may be required for any
fact checking or clarification. Please note, you are in no way obligated to participate when the
time comes. The time period on this follow up will not exceed four years (December, 2023).

Your data will be stored in a locked filing cabinet that is accessible only to myself, the primary
researcher. Any digital data will be secured using password protected and encrypted documents
that are only accessible to the researcher. Identifiable and de-identified data will be kept in
separate places. Within 4 years of this study, all digital and physical data will be destroyed.

**Confidentiality**
Your interview responses will remain confidential between myself, Shelly Isbach, as well as my
thesis advisor Dr. Grace Ukasoanya, and a thesis committee. The findings will be discussed
with these individuals. If the findings are found useful for future research, I may also be shared
during any presentations or publications. However, when presenting any research on this topic,
I will use a pseudonym and not disclose any identifying information. Please note, I cannot
guarantee complete confidentiality, but will do all that I can. Should you have any concerns
about your confidentiality, please contact Human Ethics Coordinator at
humanethics@umanitoba.ca. Please be aware that any disclosures of abuse will be reported to
the authorities as it is required by law.

**Questions**
If you have any questions about this research, please feel free to contact me. I can be reached
at or kehlers5@myumanitoba.ca, or Dr. Grace Ukasoanya at grace.ukasoanya@umanitoba.ca.

**Consent**
Your signature on this form indicates that you have understood to your satisfaction the
information regarding participation in the research project and agree to participate as a subject.
In no way does this waive your legal rights nor release the researchers, sponsors, or involved
institutions from their legal and professional responsibilities. You are free to withdraw from the
study at any time, and /or refrain from answering any questions you prefer to omit, without
prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

This research has been approved by the Education/Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Coordinator at 204-474-7122 or humanethics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

Participant’s Name:

_______________________________________________

Participant’s Signature: ____________________________   Date: _____________________

Researcher’s Signature: ___________________________

___ I wish to receive the transcript by regular mail. My address is:

___ I wish to receive the transcript by e-mail. My e-mail address is:

___ I wish to receive the summary by regular mail. My address is:

___ I wish to receive the summary by e-mail. My address is:

___ I consent to being contact at this address/e-mail in the future for further research. My contact information is;
Appendix C

Interview Questions

1) How long have you been working as a therapist?
   a) Can you tell me about your professional journey as a therapist?
   b) What ages/population do you tend to work with most frequently? Are there any populations you have limited/no experience with?

2) We know that there is an increased use in technology in recent years. In what way have you noticed this impact your career?
   a) Have you noticed any impact from this in your therapy sessions? If so, what sorts of changes have you noticed? Please describe the impact this has had on your practice.
   b) Is this experience the same across all client populations? For example, is it the same in children, youth, and adults?

3) Access to Services/Information:
   a) Have you noticed any changes to the work that you do with your clients now that there is increased access to information for you and your clients? How has this impacted your role as a therapist?
   b) Have you noticed any trends in the access and utilization of services within the last 10 years? Have you noticed any specific trends based on any particular client populations?
   c) If so, do you think that this change has been helped or hindered by the increased use of technology? In what ways do you think this technology has impacted this?

4) Digital Resources for Therapy
   a) Have you noticed any changes in the resources and tools you use with your clients as created by technology? E.g. please share with me the changes which technology has introduced to the tools and resources you use with your clients.
      a.1) If so, what sorts of resources do you use and how?
      a.2) How do you feel these impact your clients progress and your involvement in this?
      a.3) How has this impacted your personal process, and how you define your role as a therapist?
      a.4) How has this trend changed over the last 2, 5, 10 years?
   b) Has the use of these resources impacted the way that you practice, or the way you communicate with clients?
      b.1) Has this impacted your boundaries with clients in any way?
5) Have you noticed any impact on the therapeutic process because of the changes we have discussed? Any impacts on your identity or personal/professional process as a therapist?

6) Are there any other impacts that you have noticed in your practice that you would attribute to the increased use of technology? Please elaborate.