MENTAL HEALTH PROVIDERS' RESPONSES TO THE COVID-19 PANDEMIC

A dissertation submitted in partial fulfillment

of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF PSYCHOLOGY

of

ST. JOHN'S COLLEGE OF LIBERAL ARTS AND SCIENCES

at

ST. JOHN'S UNIVERSITY

New York

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ABSTRACT

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The COVID-19 pandemic resulted in closures, increased stressors, and a high need for mental health services. To provide continuity of care and meet the rising need for therapy, mental health providers rapidly transitioned to telehealth. This transition occurred with the support of policy changes and leniency in telehealth guidelines. A survey including participant and client demographic variables, readiness for telehealth, transition time, methods for telehealth practice, and therapist efficacy in-person and via telehealth was created in Qualtrics. It was completed by 79 mental health providers to provide insight into this transition and inform future practice. This study hypothesized that (1) there would be differences between mental health professionals and how they adapted to telehealth based on demographic factors; (2) those with prior training and experience would be better prepared for telehealth and adapt more quickly, (3) therapists would feel more efficacious in their in-person practice than over telehealth, and (4) those with prior training and experience with telehealth would report higher levels of therapist-efficacy. The first hypothesis was supported, and differences were found in training, telehealth platform use, data collection and storage, transition time, and readiness for

telehealth across professions, type of facility, and years of experience. The second

hypothesis was not supported as no significant predictors of transition time were found.

The third hypothesis was supported and a large effect size was found indicating that

therapists felt efficacious in both settings, but more efficacious in-person (t(78) = 7.29,

P<.001, D = .854). Regarding the fourth hypothesis, client technology access was the

only significant predictor of therapist-efficacy over telehealth. These findings have

implications for clinical administration, graduate training, policy, and ethical

considerations. First, clinicians can prepare themselves for future telehealth use by

reviewing their consent process, technology, and data collection/storage strategies.

Second, graduate programs can support future mental health providers by incorporating

telehealth into their curricula. Third, policies regarding insurance reimbursement and

initiatives targeting the digital gap may improve telehealth services and ensure more

equitable access to healthcare. Finally, increased awareness of the risks of technology use

and clarification of regulations regarding telehealth can protect both clients and

clinicians.

ACKNOWLEDGMENTS

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Introduction

Statement of the Problem

In March of 2020, the COVID-19 pandemic took hold of the United States. The highly contagious virus rapidly overwhelmed hospitals in major cities and led to shutdowns and stay-at-home orders. Due to these mandates, the medical community was forced to quickly adapt to the world of telemedicine. At the same time, very little was known about how COVID-19 was spread, and the potential long-term impacts of the virus were anxiety provoking. These factors combined with the stressors of job insecurity, disruption of routine, and lack of social support contributed to a high level of distress and need for mental health care services (Sheridan Rains et al., 2021). There was, and remains, a growing need for mental health care resulting from the pandemic, which created additional stressors as well as environments that exasperate pre-existing conditions (Fegert et al., 2020). Holingue et al. (2020) tracked distress levels daily and found that between March 10th and March 16th the odds of participants' distress rating falling in the next higher classification on the Patient Health Questionnaire (PHQ-4) increased by 11 percent each day. This was problematic because mental health professionals' capacity to provide therapy decreased due to limitations on treatment settings and the need for treatment increased due to the high distress levels. Mental health professionals had an ethical obligation to meet the needs of those suffering, and telepsychology quickly became the solution. Over two years after COVID-19 began spreading, pandemic-related adjustments and trauma have created a continued high need for mental health care.

The American Psychological Association (APA; 2013) defines telepsychology as psychological services offered through telecommunication (e.g., phone services, smart phone apps, internet-based platforms, video-based therapy, etc.). Although telepsychology and telemental health services have been empirically supported, it was not nearly as widely used as it is now. Previous barriers to the implementation of telehealth included doubts about the ease of use and the utility of the practice (Pierce et al., 2020). Furthermore, prior research found that approximately three quarters of mental health providers were not willing to refer their clients to telepsychology services (Perle et al., 2014). Additional reported barriers include a lack of opportunities and training (Perry et al., 2020). Prior to COVID-19, there were further obstacles to offering telehealth due to the Health Insurance Portability and Accountability Act (HIPAA) that limited the technologies and platforms that could be used for telehealth (Pierce et al., 2021)

Since in-person services were either not allowed or highly discouraged depending on the state, healthcare had to rapidly transformed as medical and mental health professionals adjusted their practice and clinical care to fit the changing environment. To minimize the disruption of mental health services caused by the pandemic, policy makers and administrators deregulated many of the rules for telemedicine (Kannarkat et al., 2020). Providers were left to find a balance between filling the gaps in treatment and mitigating potentially unintended consequences resulting from the rapid implementation of telehealth services (Kannarkat, et al., 2020). Although the need and policies allowed for the transition to telehealth, most providers still had no experience. Pierce et al., (2021) surveyed 2,619 licensed psychologists practicing in the United States and found that prior to the COVID-19 pandemic 7.07% of psychologists were using telepsychology, during

the pandemic telepsychology use increased to 85.53%, and 67.32% reported that all of their work was over telepsychology. The psychologists in the study predicted that they expected about a third of their work would remain over telepsychology.

　　While some clinician had guidance for how to tackle the transition to telehealth, many did not. For example, countries impacted by severe acute respiratory syndrome (SARS) in the early 2000s had already published literature on providing telehealth during a public health crisis (Keshvardoost et al., 2020). However, licensed mental health professionals in the United States lacked this type of guidance and entered uncertain waters. With APA and HIPAA guidelines waved, mental health professionals were able to respond to the need for continued care but were tasked with providing ethical, effective, and efficacious treatment. There are many lessons to be learned from the paths that mental health professionals took to ensure continuity of care during a crisis.

　　Preparation to offer telehealth services often takes months of planning and training. Implementation science is a useful lens for studying how a clinician can be equipped for telehealth. The field of implementation science aims to fill in the gaps between researchers and practitioners by studying program readiness to integrate evidence-based practice and improve upon the efficacy and effectiveness of client care (Eccles & Mittman, 2006). It achieves this through the study of how to systematically translate research findings and evidenced-based practices into real-life health care services. The APA guidelines for telepsychology and the field of implementation science typically inform the decisions of those looking to integrate telehealth into their practice. However, these were not the circumstances under which telehealth was adopted this past year. This study used techniques and principles from implementation science to inform

ways in which programs can be prepared to address future crises by assessing the response from mental health professionals.

This study aimed to analyze and learn from how mental health professionals responded to the COVID-19 pandemic with telehealth. These lessons will provide guidance for institutions and clinicians to quickly adapt to a crisis and build up services in the future. To answer these questions and fill in these gaps, this study investigated demographic factors including: age, gender, location, profession, and years of experience; clinic factors including: ages of clients served and the type of facility; pre-COVID-era factors including: consent for telehealth, telehealth training and experience, and familiarity with telepsychology literature; administrative items including: time taken to begin offering telehealth services, video platforms used, HIPAA-compliant software, method of gathering consent and client data, client data protection, and post-COVID telehealth training; and clinical practice factors including: the types of services offered, client retention, progress monitoring, and crisis planning.

Many studies have considered the clients' emotional responses to the pandemic and how acceptable they find telehealth services (Barney et al., 2020; Fegert et al., 2020), but few have focused on how therapists felt delivering therapy over telehealth. Many clinicians regardless of training or experience transitioned to telehealth. To address this gap, this study gathered data on therapist efficacy to analyze if their self-report of therapist efficacy differed depending on whether they are providing in-person or telehealth services. For these analyses the independent variable was in-person versus telehealth services and the dependent variable was therapist efficacy.

Rationale

Telemental health (TMH) is a subsect of telemedicine used to provide psychological services through information and communication technologies such as video conferencing and real-time audio technology (Hilty et al., 2013; Jones et al., 2014; Whaibeh et al., 2020). TMH has been investigated as a means to provide mental health treatment for over 50 years (Hilty et al., 2013). The implementation of telehealth comes with a variety of logistical and ethical considerations such as: the format for services, local and state laws, ensuring privacy, and helping clients understand risks associated with telehealth (Chenneville & Schwartz-Mette, 2020; Hilty et al., 2013). Telepsychology has vastly expanded and has been most commonly used to provide mental health access to clients in rural communities or in response to major crises such as pandemics or natural disasters (Augusterfer et al., 2015; Jones et al., 2014). A study in 2000 found that two percent of psychologists used telehealth and a study in 2008 found that this increased to 10% (APA, 2010; VandenBos & Williams, 2000). Despite its growth over the last few decades, TMH was not used by the majority of psychologists in 2019 (Pierce et al., 2020) and largely remained a specialty that involved seeking additional training, specialty technology, and taking additional security measures. The widespread closures due to the COVID-19 pandemic led to the fast adaptation of telehealth by mental health professionals. To fully understand this process, one must consider traditional implementation of telepsychology and the circumstances under which telehealth was adopted beginning in March of 2020.

Telepsychology

Telepsychology is a means of delivering services over telecommunication technology (American Psychological Association, 2013). Research has shown telepsychology to be acceptable, feasible, cost-effective, and to have similar outcomes to in-person services (Backhaus et al., 2012; Hilty et al., 2013). Mental health providers have been able to reliably make diagnoses and utilize biopsychosocial measures over telehealth (Elford et al., 2000; Pesamaa et al., 2004; Richardson et al., 2009). In some studies of children and adolescents, telepsychology was more favorable than in-person treatment due to the novel use of technology and sense of control felt by the client in session (Myers et al., 2011). Research has also supported the use of telemental health in the treatment of a variety of disorders including depression, posttraumatic stress disorder (PTSD), substance use, dementia, attention deficit hyperactivity disorder (ADHD), developmental disabilities, and more (Fortney et al., 2013; Frueh et al., 2005, 2007; Jones et al., 2014; Richardson et al., 2009; Ruskin et al., 2004; Szeftel et al., 2012).

Varker et al., (2018) conducted a rapid systematic review including 24 articles on the use of telepsychology to treat anxiety, depression, PTSD, and adjustment disorder. The review demonstrated that both telephone- and video-delivered telepsychology had clear and consistent evidence that it was a beneficial treatment for mental health conditions (Varker et al., 2018). Augusterfer et al. (2015) reviewed the use of telemental health (TMH) in post-disaster and international settings. Whereas telemedicine has been used in response to disasters since 1988 to address elevated needs for services, the use of TMH in the face of disasters was limited. It has been recommended that TMH should be integrated into disaster response programs (Augusterfer, et al., 2015).

Efforts have been made to integrate strategies to ensure effective telehealth care. Telemental health measurement-based care (TMBC) is a model that enhances systematic ongoing monitoring, treatment engagement, and therapeutic alliance (Douglas et al., 2020). TMBC involves collecting data before, during, and after a session to monitor treatment progress and inform clinical decision making and thereby improve patient outcomes. Strategies include text reminders to complete, preferably brief or even customized, measures. Screen sharing allows clients to receive feedback. The monitoring also assists in tracking risk for suicidality, client goals, and therapeutic alliance (Douglas et al., 2020). TMBC can provide guidance for mental health professionals looking to provide high quality care.

The literature supporting telemental health has also sought to provide guidance on how to build up a telehealth program. For example, Jones et al. (2014) set up a telehealth Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) program for rural communities and provided guidance for establishing a telehealth practice. Many of the recommendations made by the researchers are less applicable during the pandemic. For instance, first, they recommended establishing community partnerships with memorandums of understanding to reach clients through community organizations that they already trust. The next set of guidelines provided by Jones et al. (2014) centered around the resources necessary for beginning telehealth: technological equipment, video conferencing software conducive to therapy, and a physical setup resembling a clinic. Luckily, most computers are capable of video conferencing at this point and a variety of software is available for download or directly usable in the internet browser. With stay-at-home orders, a clinic-like environment with privacy was not guaranteed. The next area

discussed by Jones et al. (2014) was clinic administration issues including: the distribution of paperwork, a plan to handle crises, finances, and reimbursement. During the pandemic, many insurance companies adapted and began covering telehealth services, but in some cases the burden fell on the therapists to choose whether to wave copays. The authors recommended preparing therapeutic resources for online distribution; this is a time-consuming task (Jones et al., 2014). In response to COVID-19, therapists had to take on this task week-by-week as they converted their practice from in-person to remote. The final recommendation was to ensure culturally competent services were being provided (Jones et al., 2014). With services occurring in the home, it is possible that lower income families may have difficulty accessing technology, bandwidth to support sessions, and privacy.

There are many considerations that clinicians historically made when deciding to offer telepsychology services. Due to stressors on the mental health system, only some of the typical considerations could be made and many decisions were rushed to ensure continuity of care and to respond to the ever-growing need for therapy (Wright & Caudill, 2020). Clinicians also had the complicated task of considering their clients' health and safety given their risk factors for COVID-19 as well as their capability to engage in telehealth which may be influenced by socioeconomic status (SES), age, and housing factors (Loeb et al., 2020; Perrin et al., 2020). Despite the rapid pace, there was still an obligation for therapists to adapt ethically.

Ethics.

Some of the most important considerations made by those looking to implement telepsychology are how to ensure ethical therapeutic practice. The principles of

beneficence and nonmaleficence necessitates that the psychologist's work benefits the client while minimizing harm (American Psychological Association, 2017). The circumstances created by the pandemic made telemedicine the most ethical approach to providing continuity of care while minimizing the risk of getting sick. However, those who were offering telehealth for the first time likely turned towards APA guidelines. The guidelines were not all practical in a crisis, and some acted as a barrier to treatment (Wright & Caudill, 2020).

Chenneville and Scwartz-Mette (2020) published considerations and potential barriers for the ethical implementation of telepsychology. The principles of fidelity and responsibility require psychologists to build trusting relationships, maintain their professional role, and accept responsibility for their actions (American Psychological Association, 2017). Clinicians new to telehealth may have had difficulty establishing a trusting relationship online and maintaining a professional role in their home where clients may gain personal information from their environment (Chenneville & Schwartz-Mette, 2020). Lastly, it was left to mental health professionals to ensure that they maintained their integrity by being honest about the uncertainty of the future regarding the virus and not take advantage of the chaos and those in a panicked state (Chenneville and Scwartz-Mette, 2020).

An increased need for free or low-cost services made the principle of justice important to consider (Chenneville and Scwartz-Mette, 2020). This principle asks that mental health providers offer equitable services and advocacy for individuals and communities most in need (Chenneville and Scwartz-Mette, 2020). As seen in some mental health centers, families of lower socioeconomic status were harder to reach over

telehealth (Perrin et al., 2020). There was also the potential for ethical conflicts between the providers and their organizations if they were required to continue seeing patients in person without proper personal protective equipment (Chenneville & Schwartz-Mette, 2020).

A key issue that acted as a potential barrier to implementing telehealth was the ethical standard regarding competence. Psychologists are not supposed to provide services outside of their training, experience, and abilities (Chenneville & Schwartz-Mette, 2020). Other than those serving rural populations, telehealth is not a common area for graduate training or standard clinical practice. However, in times of crises, the bounds of competence can be expanded (Chenneville & Schwartz-Mette, 2020). Psychologists were left to decide how much preparation they needed to meet the competence standards. Considerations for competently offering therapy included: informed consent, records of the therapist and client location for safety planning, and a plan for unexpected technology issues (Chenneville & Schwartz-Mette, 2020).

The key administrative areas that therapists were forced to navigate included: reviewing state licensure requirements, ensuring they had malpractice insurance for telemedicine, ensuring patients had insurance coverage for virtual services, adherence to confidentiality and security regulations, and the establishment of remote protocols (Wright & Caudill, 2020). This study will investigate how different types of mental health providers met telepsychology guidelines and how the guidelines related to mental health providers' ability to adapt to telehealth.

Mental Health Needs During COVID-19

The global pandemic increased the need for mental health services worldwide. Zhou et al. (2020) highlighted some of the psychological symptoms related to the pandemic. There was well-documented anxiety-driven panic buying, paranoia about attending events, stress related to school and work, and increased isolation and loneliness. For those with previous mental health issues, the pandemic led to circumstances that exasperated these problems. Fegert et al. (2020) expanded upon the different areas that amplified mental health issues at that time. Notably, the psychosocial environment rapidly changed, people were isolated, contact was restricted, and the economy saw historic stock market drops (Mann et al., 2020). There were increases in anxiety, a lack of social contact which limited the assistance of a social support network, and fewer methods available for stress management. In many cases, these psychosocial impacts were even more devastating for children who were already disadvantaged (Fegert et al., 2020). With these added stressors for those already experiencing difficult circumstances, continuity of care was incredibly important.

As a result of the additional psychosocial stressors, more people sought services and clients who had terminated treatment sought out treatment again. There were additional disruptions that led to an increase in new cases for therapists as a result of colleges and universities closing which resulted in students returning home and being disconnected from university services (Barney et al., 2020). With the increase in mental health needs a short timeline to transfer delivery-type is imperative.

Rapid Adaptation

      The additional needs that arose during the pandemic required a rapid response. Early data from the start of the pandemic indicated that telehealth was an acceptable form of mental health treatment as evidenced by the high volume of those seeking it (Zhou et al., 2020). Countries with larger networks of telepsychology services were able to adapt to a telehealth model faster than other countries (Zhou et al., 2020). Australia, for example, has large rural areas with little access to in-person mental health services and had already funded telehealth services meant to reach rural communities. With this infrastructure in place, they were well-equipped to transition to remote services (Zhou et al., 2020). Wright and Caudill (2020) suggested that mental health providers with experience working in telehealth may find the transition easier. Ultimately, institutions with previous experience and infrastructure prepared for telehealth were best suited to make this change. In response to the COVID-19 pandemic, researchers and clinicians published their experiences in an effort to provide guidance in this unprecedented time.

      Many researchers and institutions shared their approach to rapidly establishing telehealth services. These experiences provide insight into the processes and barriers faced by the mental health community transitioning to telehealth services. Smith, et al., (2020) describe how their outpatient medical center was able to fully convert to telemedicine in three days and saw 638 patients within the first month of closing. This impressive response was atypical. Notably, this outpatient center was not specifically limited to mental health but the guidance they provide would be applicable to any health field looking to adopt telemedicine. The researchers attribute their quick success to the fact that they already had eight elements they deemed necessary for telemedicine

integration. Specifically, an existing electronic medical record (EMR) system with remote access; a video calling service; IT support to assist with system overloads and ensuring adequate bandwidth and connection security; appropriate technology on both ends; patient education in technology; and integration of eligibility, coding, and billing. Successful acquisition of these elements required considerable effort by the administrative staff (Smith et al., 2020). Additionally, if clinicians lacked access to the EMR, administrative staff or IT would have additional responsibilities to ensure providers received the necessary information from the chart.

Graduate student university training clinics also had unique barriers to implementing telehealth. Hames et al. (2020) highlighted the additional considerations for training clinics such as supervision and logistical barriers associated with a university affiliation. Members of the Association of Psychological Training Clinics (APTC) completed a survey to identify trends in training clinics' reactions to the COVID-19 pandemic. The survey found that the majority of training clinics were offering services through telepsychology, but assessment and new client services were often suspended. Perrin et al. (2020) reported on a training environment where trainees shared offices with other medical professionals leading to increased risk of infection for patients and providers. Due to these circumstances, the trainees were early adapters of telepsychology. Luckily, they were more prepared than most to make this switch as the university had received a grant for telepsychology services and training. Prior to seeing clients, all trainees completed a self-guided online training. The centers needed administrative support and some places were even reliant on volunteers. Perrin et al. (2020) found that patients were initially less comfortable in telehealth sessions, but after it became more

normal, they accepted the new services. They also noted some barriers to treatment such as difficulty reaching diverse and marginalized groups, needing forms translated into Spanish, and patients skipping sessions. The trainees working with children faced additional difficulties. Specifically, children with challenging school behaviors often paused treatment, whereas those with internalizing problems continued treatment (Perrin et al., 2020).

Therapists working with adolescents and young adults faced a particularly challenging task because there are no official guidelines for telepsychology in these populations (Barney et al., 2020). University of Southern California – San Francisco Adolescent and Young Adult Medicine Clinic made the rapid change to telemedicine. The center was large and offered a variety of services including general health, mental health, reproductive health, eating disorders, and addiction treatment (Barney et al., 2020). The clinic found that moving to telemedicine was feasible and acceptable, but that guidance regarding best practices were lacking. Barney, et al., (2020) highlighted confidentiality, quality of care, and potential health disparities as three areas that warranted further investigation. At the start of providing telehealth services, the clinic identified the following anticipated barriers: patients not having the appropriate technology, technology literacy gaps, patient rejection due to the lack of connections, language barriers, and problems with reimbursement. However, these issues did not prove to be insurmountable barriers to treatment and patients found telehealth acceptable. After transitioning, weekly meetings were held to allow for further adaptation and problem solving as the clinic adjusted to being remote. After gaining experience offering telehealth services, common obstacles were identified and addressed. For example, some

patients lacked a quiet and private environment for treatment which was resolved by using headphones in some cases. Lack of privacy was especially difficult for those that were of a lower socioeconomic status and lived in more crowded homes. Another common problem was difficulty administering ongoing assessments of symptoms, which was resolved by adding short questionnaires to the EMR (Barney, et al., 2020). Studies and publications on a single entity's response to the pandemic was the first step to learning from the COVID-19 telehealth transition.

In conclusion, the COVID-19 pandemic created a public health crisis that made in-person appointments an unnecessary risk while increasing stress levels and mental health problems. In response, telepsychology was quickly built up to provide continuity of care and meet the increased mental health needs. Telemental health has been supported by the literature to treat a wide array of mental health issues across different ages and populations, but the circumstances around COVID-19 permanently changed mental health services. Changes in policies allowed for the leniency that permitted clinicians to practice outside their area of competence without telehealth training and relaxed rules regarding technologies allowed to be used during for telemedicine. Since then, clinicians and researchers have published their experiences about adjusting to telehealth and studies have looked at changes in telehealth use and predictions of future practice. The purpose of this study was to gather data from a broad array of mental health professionals to increase the understanding of how clinicians adapted their practice to help provide guidance to maintain the lessons learned from this experience and increase preparedness for the continued telehealth use to provide flexible care for clients facing emergencies.

Hypotheses

Hypothesis 1: Different types of mental health professionals (i.e., different professions, facility types, and populations served) will have characteristic differences in how they adapted and aligned with APA guidelines and recommendations for the implementation of telehealth (i.e., transition time, software used, services offered, training, familiarity with the literature, and administrative and clinical aspects). There may be patterns in technology use and services offered based on profession as mental health providers looked towards their peers for guidance and support. I expect that professions and facilities with less overhead such as private practices may have transitioned more quickly but were less observant of APA guidelines. Those serving young children may have had more clients pause or terminate services.

Hypothesis 2: Those with prior training and experiences with telehealth were able to offer telehealth services more promptly.

Hypothesis 2a: This relationship will be moderated by pre-existing infrastructure, such that those with administrative aspects conducive to telehealth pre-COVID will have the most rapid adaptation.

Hypothesis 3: Therapist-efficacy will be higher for in-person services than for telehealth-services.

Hypothesis 4: Those with prior training and experiences with telehealth will have higher therapist-efficacy ratings for telehealth.

Methods

Participants

  This study recruited mental health professionals and trainees that offered telehealth services during the COVID-19 pandemic. Occupations recruited included psychologists, social workers, mental health counselors, and trainees in university, medical, and private practice settings. The targeted sample size was based on a power analysis that is summarized below.

Survey Development

  The survey to assess how mental healthcare workers adapted to the COVID-19 pandemic was created in Qualtrics (see Appendix A). The survey assessed demographic factors, practice adaptations made in response to COVID-19, and therapist efficacy in-person versus telehealth.

  The demographic variables included: age, gender, profession, state of practice, types of services offered remotely, and years of experience. Participants also reported on demographic information about their clients including ages of clients served, typical educational attainment, and average household income. The survey also asked participants to estimate their clients' COVID-19 risk and ability to participate in telehealth. Additional client variables included estimates of what percentage of participants' clients continued, paused, or terminated treatment.

  Six items were created to gather data on the participants' readiness for using telehealth pre-pandemic. These items were developed based on the APA guidelines for telepsychology. These questions assessed whether participants were prepared with

consent forms, technology for telehealth, prior telehealth training, experience offering telehealth, and familiarity with the telehealth literature.

Two items were used to assess the time frame it took to transition to telehealth. Participants were asked to report the date they ceased offering in-person services and the date they began offering telehealth services. Clinicians who began offering telehealth service but did not cease offering in-person services were prompted to enter a dummy date and their transition time was calculated as zero days.

Thirteen items were developed based on the APA guidelines for telepsychology to assess the participants' telehealth practice during the pandemic. Participants reported what platform they used for live telehealth services and whether or not they used a HIPAA-compliant video program with a Business Associate Agreement (BAA). Items also assessed the method of gathering consent for telehealth, remote client data collection, how client data was stored and protected, telehealth training sought after the pandemic began, and a plan for the remote management of crises.

Finally, a measure of therapist-efficacy was adapted to assess therapist efficacy in-person and over telehealth (Wilkerson & Ramirez Basco, 2014). This measure assessed clinicians' perceptions of their ability to empathize with their clients, adapt to their needs, develop a positive therapeutic alliance, address clients' problems, use effective therapeutic interventions, and work collaboratively with their clients. The only adaptation to the items was the specifier of "in-person" and "over telehealth" added to the end of each item.

Measures

Wilkerson and Ramirez Basco (2014) developed a survey assessing Self-Efficacy for CBT, which included a six-item subscale assessing Self-Efficacy as a Therapist. The subscale demonstrated excellent internal consistency ($\alpha = .927$). The subscale was used twice in the survey, once to assess self-efficacy of the therapist when they provide in-person sessions and then again to assess self-efficacy of the therapist when they provide therapy over telehealth. The order of these two conditions was randomized to account for potential order effects.

Survey Distribution

Participants were recruited online via email and social media. Recruitment emails were sent to several universities for distribution, multiple psychotherapy listservs, and directors of group private practices. Recruitment over social media was made in a public and shareable post over Instagram and Facebook.

Analyses

Analyses were conducted in R version 3.6.1 ("Action of the Toes"). Preliminary analyses included descriptive statistics of the data including frequencies, means, and variance to ensure that the data was normally distributed and had enough variance to meet the assumptions necessary for further inferential statistics.

Hypothesis 1

The first hypothesis that mental health workers from different backgrounds and environments will characteristically differ in how they adapted to telepsychology was tested with correlational, One-way ANOVAs and contingency table analyses (e.g., chi-square).

Hypothesis 2

The second hypothesis to determine if prior training and experience was predictive of shorter transition times between in-person and telehealth services was analyzed through a series of regressions. The dependent variable (transition time) was computed from the date the participant stopped offering in-person services and the date they began offering telehealth services. Items assessing prior training and experiences were the predictors in the models.

Hypothesis 2a.

To test the hypothesis that pre-existing infrastructure will moderate the relationship between prior experience/training and transition time, two moderation analyses were conducted with readiness for telehealth items as the moderator (see figures 1 and 2).

Figure 1

Training Moderation Model
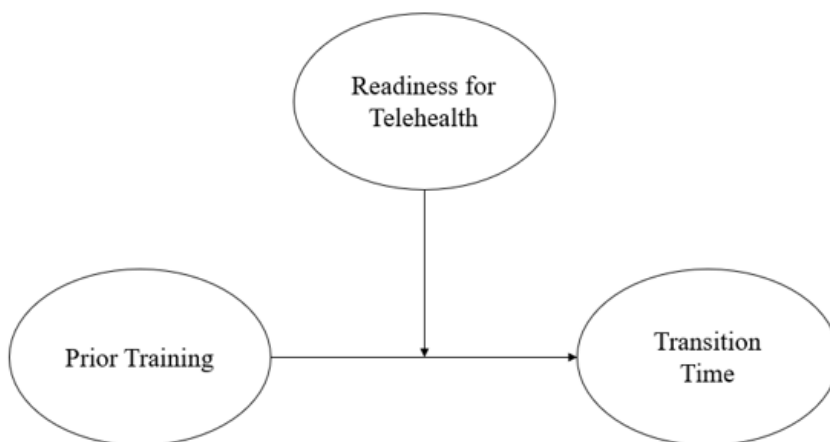
Figure 2

Experience Moderation Model
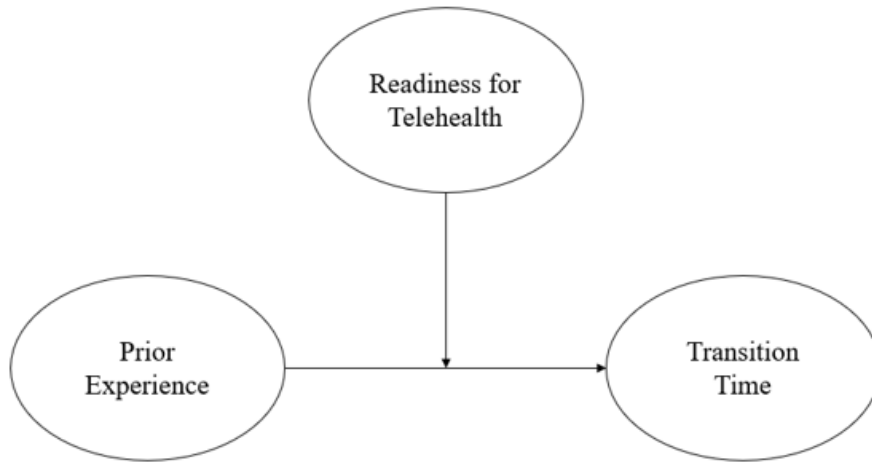
Hypothesis 3

  To test the hypothesis that therapists would rate their efficacy higher for in-person treatment than for telehealth, a paired t-test was conducted to compare the scores from the self-efficacy subscale.

Hypothesis 4

  The fourth hypothesis to determine if prior training and experience were predictive of self-efficacy as a therapist was analyzed through a series of regressions. Items assessing prior training and experiences were the predictors in the regression equation.

Power Analysis

  The G*Power software package (Faul, et al., 2007) was used to estimate ranges of sample sizes necessary to analyze the four hypotheses included in this study, which are presented in Table 1.

Table 1

Power Analysis

		Sample Size (N)			
	Power	Large Effect (d ≥ .6)	Moderate Effect (d = .3-.5)	Small Effect (d = .2-.1)	Range
Paired t-test	0.8	24	34-89	199-787	24-787
	0.9	32	44-119	265-1053	32-1053
	0.95	39	54-147	327-1302	39-1302
Regression 2 predictors	0.8	20	23-36	52-100	20-100
	0.9	25	26-43	67-130	25-130
	0.95	29	35-55	81-158	29-158
Regression 5 predictors	0.8	28	32-49	70-134	28-134
	0.9	34	39-61	89-171	34-171
	0.95	39	46-72	105-204	39-204
Regression 10 predictors	0.8	38	43-64	91-172	38-172
	0.9	45	51-79	113-215	45-215
	0.95	51	59-91	132-254	132-254
Moderation analysis	0.8	16	19-29	42-81	16-81
	0.9	20	24-38	55-108	20-108
	0.95	24	29-46	68-132	24-132

The range of predicted sample sizes to detect small effects in the regression analyses ranged from 52-254 participants. Moderation analyses typically have small effect sizes (Chaplin, 1991), which would suggest that the analysis would need 68-132 participants with .95 power. For the t-test to detect a small effect (d = .2) the sample would need to consist of approximately 200 people. Given the estimates in Table 1, a sample size of 100-200 people would be sufficient for the previously discuss analyses. If survey response rates are low, a smaller sample of 50-100 people would be capable of detecting moderate to large effects.

<center>**Results**</center>

Descriptive Statistics

Participant Demographics and Descriptive Statistics

   The majority of participants that completed the survey were female and from the

northeast United States (see table 2). Psychologists, student therapists, and licensed

clinical social workers were the most common professions and most participants worked

in private practice settings (see table 2). The distribution of participants' years of work

experience was U shaped, such that participants with zero to five years and 20 plus years

of experience were the most common (see table 2). A similar distribution was seen for

participant ages, which ranged from 24-77 with a median of 44 years old (see table 2).

Table 2

Participant Descriptives

	N
Gender	
Male	16
Female	62
Transgender Male	1
State	
California	1
Connecticut	3
Delaware	1
Florida	2
Illinois	1
Maryland	1
Massachusetts	10
Michigan	2
Missouri	1
New York	42
North Carolina	2
Ohio	1

<center>23</center>

Table 2 (continued).

Pennsylvania	2
Texas	2
Utah	8

Profession

Licensed Social Worker/LCSW	17
Marriage and Family Therapist	6
Licensed Professional Counselor	4
Licensed Mental Health Counselor	5
Student Therapist	16
Psychologist	31

Facility

Private Practice	55
Hospital	10
University	14

Years' Experience

0 to 5	24
6 to 10	11
11 to 15	7
16 to 20	10
20+	27

	Age
Range	24-77
Mean	47.48
Median	44

Client Demographics and Descriptive Statistics

The majority of participants in the survey served adult clients (83.54%), 46.84% of participants served adolescents, 30.38% of participants served children, and 12.66% served preschool aged children (see table 3). Most participants served clients that they estimated to have a college degree or higher. Participants were most reluctant to estimate their clients' average income, 40.51% of participants responded, "I don't know," the remaining participants estimates can be seen in table 3.

Clinicians were also asked to estimate their client's COVID-19 risk, ability to participate in telehealth, and choice to continue treatment over telehealth, and pause or terminate treatment (see table 3).

Table 3

Client Demographics

	N
Ages Served	
Preschool (0-4)	10
Children (5-12)	24
Adolescents (13-18)	37
Emerging Adults (18-24)	65
Young Adults (23-34)	66
Adults (35-44)	63
Older Adults (65+)	50
Client Estimated Average Education	
Some Highschool	4
Highschool/GED	4
Some College	19
College Degree or Higher	44
Client Estimated Average Income	
Under 20,000	5
20,001-40,000	5
40,001-60,000	8
60,001-80,000	12
80,001-100,000	3
100,001 or more	14

	Mean
Estimated percentage of clients	
at an increased risk of contracting COVID-19	47.39
at risk of developing severe symptoms if exposed to COVID-19	27.54
with access to technology necessary for telehealth	93.59
with access to a private space to engage in services	84.44
who continued services over telehealth (video)	76.9
who continued services over telehealth (phone)	14.22
who paused treatment	12.49
who terminated treatment	8.32

Hypothesis 1

The first hypothesis that mental health workers from different backgrounds and environments will characteristically differ in how they adapted to telepsychology was tested with chi-square analyses and one-way ANOVAs.

Telehealth Experience

The chi-square analyses indicated a significant association between profession and a desire for more training ($X^2 = 11.71$, P = .04). Students were the most likely to report that they wished they had more training in telehealth prior to COVID-19 (see table 5).

Telehealth Platform

There were also significant associations between professions, workplace settings, and telehealth platforms used. Profession was related to providing telehealth over the phone ($X^2 = 11.56$, P = .04), with LCSWs as the most likely to provided services over the phone (see table 4). There was also a significant association between profession and the use of WebEx ($X^2 = 17.7$, P = .003) and FaceTime ($X^2 = 12.95$, P = .02; see table 5). Providers from universities and hospitals were more likely than those in private practices to use WebEx ($X^2 = 27.34$, P = <.001; see table 5). Private practice clinicians were the most likely to use FaceTime ($X^2 = 27.34$, P = <.001).

Training Methods

Fifty participants reported that they sought additional training in telehealth to support their clinical practice during the pandemic. Years of experience was significantly associated with wishing for more telehealth experience prior to the COVID-19 pandemic such that clinicians with zero to five years of experience were most likely to report a

desire for more training ($X^2 = 15.18$, P = .004; see table 7). Setting was significantly associated with wishing for more training ($X^2 = 8.2$, P = .02), such that those at universities were most likely to report a desire for more training (see table 6). Significant associations were found between professions and participating in a webinar series ($X^2 = 26.36$, P = <.001) and single live webinar ($X^2 = 17.21$, P = .004). Participation in a webinar series was most common among student therapists and those with fewer years of experience ($X^2 = 10$, P = .04). Psychologists were the most likely to report participating in a single live webinar. See tables four, five, and six for all participants training methods across profession, setting, and years of experience.

Data collection and Storage

Significant associations were found between profession and pre-existing systems for remote data collection ($X^2 = 12.95$, P = .02). Licensed Professional Counselors (LPCs) and students were the most likely to have a system available for remote data collection (100% and 76.92%, respectively; see table 5). Access to remote data collection was less likely in private practice and most likely in university settings ($X^2 = 13.45$, P = .001). Remote data collection was most common in providers with zero to five years of experience and least common in providers with 20+ years of experience ($X^2 = 16.53$, P = .002). Similarly, access to progress monitoring was less common among those with 20+ years of experience ($X^2 = 14.7$, P = .005). Associations were also found between facility and progress monitoring ($X^2 = 6.01$, P = .05). Nearly all participants working in a university or hospital setting had access to progress monitoring tools to use over telehealth compared to 53.06% of participants in private practice settings (see table 6).

Data protection methods varied by setting and years of experience. Encrypted files were more likely to be used by those in university or hospitals ($X^2 = 10.17$, P = .006). Access to an EMR was related to years of experience, although most people had access to an EMR, a greater proportion of those without an EMR had over 20 years of experience ($X^2 = 15.08$, P = .005).

One-way ANOVAS

Transition Time.

A one-way ANOVA found significant differences across transition times by years of experience (F = 3.73, P = .008). New therapist took the longest to transition and therapists with 20 plus years of experience transitioned to telehealth the fastest. The largest decrease was between therapist with zero to five years of experience to six to 10 years of experience (See Table 9). Student therapists reported the highest average transition time compared to other professions (F = 8.07, P = <.001). There were also significant differences in transition time based on facility such that universities took the longest, which was consistent with the findings regarding years of experience and student therapists (F = 9.38, P = <.001).

Table 4

Frequency Totals

	N
Services Offered	
Therapy	79
Neurpsychological Testing	6
Assessment	16
In Home	2
Medium for Telehealth	
Phone	38
Doxy.Me	29
Vsee	5

Table 4 (continued).

Zoom	53
Facetime	15
Google Meet	10
Microsoft Teams	4
Skype	9
Used a HIPAA Compliant Platform with a BAA	60
Systems in place for Remote Data Collection	37
Access to Progress Monitoring Tools	45
Client Data Collection Methods	
Patient Portal	27
Cloud-Based Online Assessments	12
Email	34
Text	6
Protecting Client Data	
Electronic Medical Record	39
Password Protected Computer	39
Encrypted Files	18
Physical Lock	10
Training	50
Training Methods	
Single Recorded Webinar	22
Recorded Webinar Series	22
Single Live Webinar	27
Live Webinar Series	9
Online Courses	19
Emergency Plan	66

Table 5

Frequencies by Profession

	Licensed Social Worker/ LCSW	Marriage and Family Therapist	Licensed Professional Counselor	Licensed Mental Health Counselor	Student Therapist	Psychologist	Total
Data Protection							
Electronic Medical Record (EMR)	5	3	3	2	11	13	37
Password Protected Computer	8	3	2	2	6	13	34
Encrypted Files	3	1	1	1	6	2	14
Physical Lock	2	0	0	0	1	5	8
Telehealth Platforms							
Phone (No Video)	11	0	3	2	6	9	31
Doxy.Me	6	3	0	1	3	10	23
VSee Telemedicine	3	0	0	0	1	1	5
Zoom	11	2	3	4	10	15	45
WebEx	0	0	0	0	7	4	11
Facetime	9	2	2	1	0	10	24
Google Meet	2	0	1	0	2	4	9
Microsoft Teams	0	0	0	0	2	2	4
Skype	3	0	1	1	0	3	8
Training							
Single Recorded Webinar	1	3	0	1	5	7	17
Recorded Webinar Series	0	0	1	0	10	5	16
Single Live Webinar	2	0	3	0	3	15	23
Live Webinar Series	1	0	1	0	1	6	9
Online Courses	3	0	3	0	2	6	14
Desire for Training	4	2	3	2	11	9	31
Readiness for Telehealth							
Were there any systems or processes in place within your organization for remote data collection, storage, processing, analysis, and/or reporting?	5	2	4	1	10	8	30
Were you able to access progress monitoring tools?	9	3	3	2	10	12	39
Did you have a plan to handle emergency situations remotely?	12	4	3	3	12	19	53

Table 5 (continued.)

Did your consent form cover the risk of participating in telehealth service?	5	2	3	1	7	12	30
Did you have technology necessary for providing telehealth?	12	3	4	4	13	24	60
Did you ever participate in telehealth training?	4	1	3	0	7	9	24
Did you have experience seeing clients over telehealth?	7	2	4	2	5	13	33
Do you wish you had more training in telehealth prior to COVID-19 closures?	4	2	3	2	11	9	31
Total N	14	4	4	4	13	25	64

Readiness.

In regard to readiness to implement telehealth, mean readiness to implement telehealth did significantly differ by profession (F = 2.58, P = .03). There was no difference in the mean readiness to implement telehealth between private practices and hospitals; however, the mean for universities did differ (F = 2.70, P = .07; see table 8). Lastly, mean readiness to implement telehealth did not significantly differ by years of experience.

Table 6

Frequencies by Facility

	Private Practice	Hospital	University	Total
Training				
Do you wish you had more training in telehealth prior to COVID-19 closures?	20	2	9	31
Data Protection				
Electronic Medical Record (EMR)	25	4	8	37
Password Protected Computer	27	2	5	34
Encrypted Files	7	1	6	14
Physical Lock	7	0	1	8
Telehealth Platform				
Phone (No Video)	25	2	4	31
Doxy.Me	21	0	2	23
VSee Telemedicine	4	1	0	5
Zoom	35	3	7	45
WebEx	2	4	5	11
Facetime	23	0	1	24
Google Meet	7	0	2	9
Microsoft Teams	3	1	0	4
Skype	7	0	1	8
Readiness for Telehealth				
Were there any systems or processes in place within your organization for remote data collection, storage, processing, analysis, and/or reporting?	18	2	10	30
Were you able to access progress monitoring tools?	26	5	8	39
Did you have a plan to handle emergency situations remotely?	38	5	10	53
Did your consent form cover the risk of participating in telehealth service?	20	2	8	30
Did you have technology necessary for providing telehealth?	45	5	10	60
Did you ever participate in telehealth training prior to March 2020?	17	1	6	24
Did you have experience seeing clients over telehealth prior to March 2020?	28	1	4	33
Total N	49	5	10	64

Table 7

Frequencies by Years of Experience

Years of Experience	0-5	6-10	11-15	16-20	20+	Total
Training						
Single Recorded Webinar	6	1	3	3	4	17
Recorded Webinar Series	9	2	1	1	3	16
Single Live Webinar	4	4	2	3	10	23
Live Webinar Series	2	2	1	1	3	9
Online Courses	3	1	1	2	7	14
Do you wish you had more training in telehealth prior to COVID-19 closures?	14	5	0	3	9	31
Telehealth Platform						
Phone (No Video)	8	3	2	2	16	31
Doxy.Me	4	3	2	5	9	23
VSee Telemedicine	4	0	0	0	1	5
Zoom	13	5	3	4	20	45
WebEx	8	0	1	1	1	11
Facetime	4	3	1	4	12	24
Google Meet	4	1	0	3	1	9
Microsoft Teams	2	1	0	1	0	4
Skype	1	0	0	0	7	8
Data Protection						
Electronic Medical Record (EMR)	15	6	4	5	7	37
Password Protected Computer	9	5	3	3	14	34
Encrypted Files	6	0	2	1	5	14
Physical Lock	1	1	0	1	5	8
Readiness for Telehealth						
Were there any systems or processes in place within your organization for remote data collection, storage, processing, analysis, and/or reporting?	12	6	1	6	5	30
Were you able to access progress monitoring tools?	14	5	5	7	8	39
Did you have a plan to handle emergency situations remotely?	14	6	6	6	21	53
Did your consent form cover the risk of participating in telehealth service?	9	6	4	2	9	30
Did you have technology necessary for providing telehealth?	16	9	5	8	22	60
Did you ever participate in telehealth training?	8	3	3	4	6	24
Did you have experience seeing clients over telehealth?	4	4	4	5	16	33
Total N	17	9	6	8	24	64

Table 8

Transition Time

	Transition Time in Days
Range	0-51
Mean	6.01
Median	0

Table 9

Transition Time by Years of Experience, Profession, and Facility

Years of Experience	Mean Transition Time in Days	Mean Readiness to Implement Telehealth
0-5	12.58	4.75
6-10	4	5
11-15	5.14	5
16-20	3.8	6.9
20+	2.04	4.15
Profession		
Licensed Social Worker/LCSW	3.47	4.18
Marriage and Family Therapist	2	5.5
Licensed Professional Counselor	1.75	7
Licensed Mental Health Counselor	1	3.6
Student Therapist	18.81	5
Psychologist	2.94	4.35
Facility		
Private Practice	2.98	4.4
Hospital	9.7	4.4
University	15.29	5.64

Hypothesis 2

Multiple regression was used to assess if readiness for telehealth and telehealth training sought in response to the COVID-19 pandemic predicted transition time from in-person to telehealth services. The readiness variable was created by summing dichotomous variables assessing whether key factors for telehealth were present prior to

the onset of the COVID-19 pandemic. Training total is a summed variable of all types of

trainings that were completed by the participant after the onset of the COVID-19

pandemic. Familiarity with telehealth is a single item on a Likert scale that asked

providers to rate their familiarity with the telehealth and telepsychology literature. For all

items included in this regression analysis see table 10. Transition time was not predicted

by readiness, training, or familiarity with literature on telehealth and telepsychology. Two

moderation models were run to assess whether readiness moderated the relationship

between prior experience or training and transition time. Readiness did not moderate the

relationships between prior experience and transition time or prior training and transition

time (see figures 5 & 6).

Figure 3

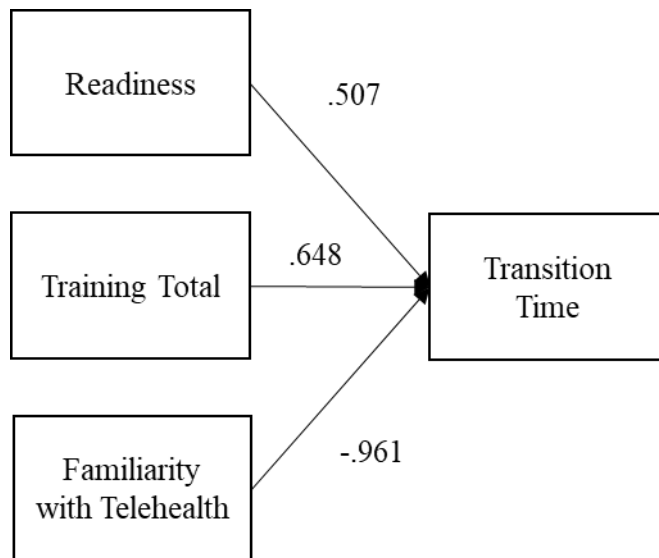*Transition Time Model Clinician Predictors*

Table 10

Description of Regression Variables

Hypothesis 2 Regression Variables

Readiness	Consent	Did your consent form cover the risk of participating in telehealth service?
	Technology	Did you have technology necessary for providing telehealth?
	Prior Training	Did you ever participate in telehealth training?
	Telehealth Experience	Did you have experience seeing clients over telehealth?
	Remote Data Collection	Were there any systems or processes in place within your organization for remote data collection, storage, processing, analysis, and/or reporting?
	Progress Monitoring	Were you able to access progress monitoring tools?
	Emergency Plan	Did you have a plan to handle emergency situations remotely?
Training Total	Single Recorded Webinar	
	Recorded Webinar Series	
	Single Live Webinar	
	Live Webinar Series	
	Online Courses	
	Other	
Familiarity with Telehealth	How familiar were you with the literature/research on telecommunication and telepsychology?	

Figure 4

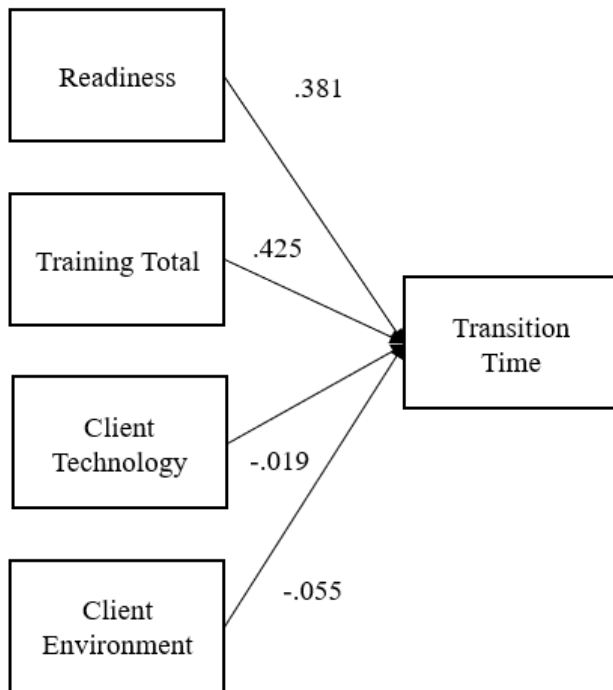*Transition Time Model: Clinician and Population Predictors*

Figure 5
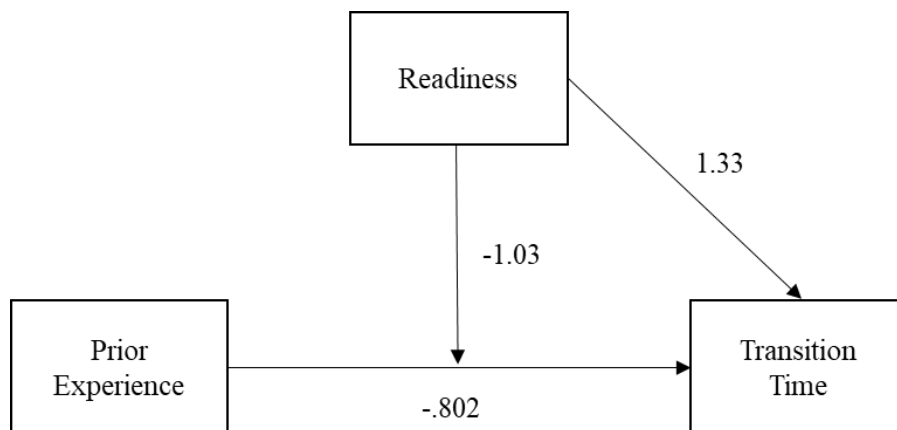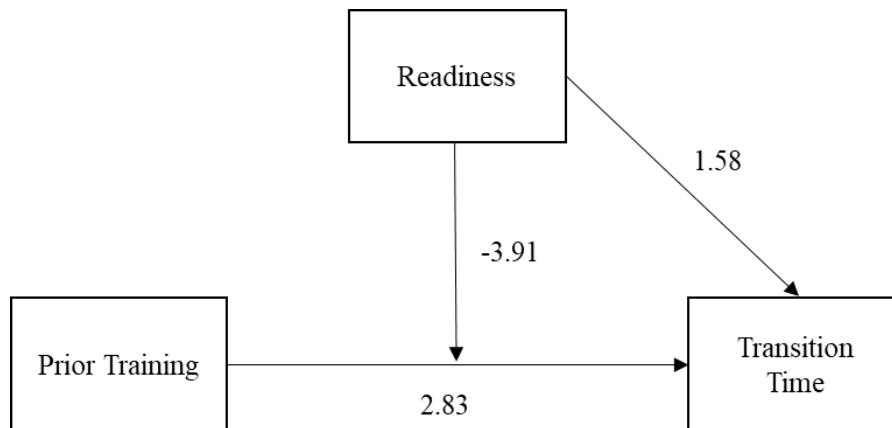
Prior Experience Moderation Model

Figure 6

Prior Training Moderation Model

Hypothesis 3

The results of the paired t-test supported the hypothesis that therapists would feel more efficacious providing therapy in-person than over telehealth. There was a significant difference between the mean scores in therapy efficacy in-person (M = 27.37, SD = 2.88) and therapist efficacy over telehealth (M = 24.48, SD = 3.82, t(78) = 7.59, P<.001). The effect size of this finding was large (D = .854).

Hypothesis 4

Multiple regression was used to assess if readiness for telehealth, telehealth training sought in response to the COVID-19 pandemic, and population factors predicted therapist efficacy over telehealth. The readiness variable was created by summing dichotomous variables assessing whether key factors for telehealth were present prior to the onset of the COVID-19 pandemic. Training total is a summed variable of all types of trainings that were completed by the participant after the onset of the COVID-19 pandemic. Client technology and client environment were both estimates regarding what percentage of the participants clients had access to the necessary technology and a private

place to participate in treatment. Client access to technology was the only significant

predictor of therapist efficacy over telehealth (P = .02; see figure 7).

Figure 7

Therapist Efficacy Model
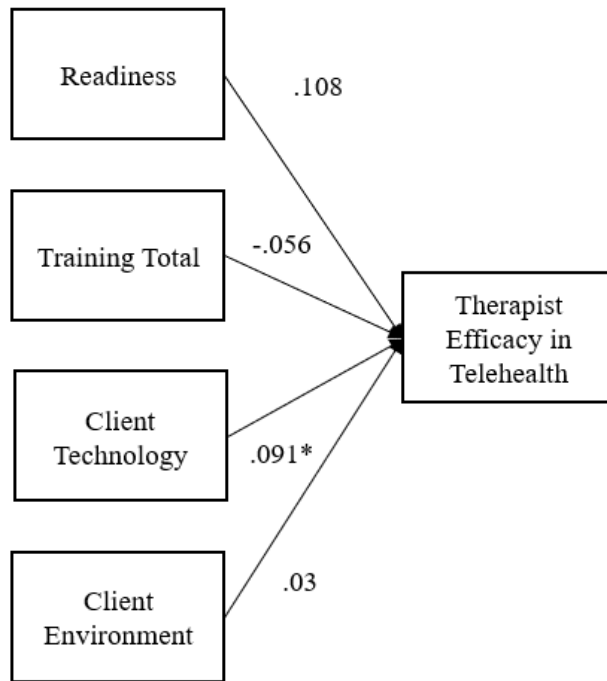
Discussion

The onset of the COVID-19 pandemic and the unprecedented circumstances faced by mental health providers cultivated an environment for the rapid growth of telehealth. Mental health providers were challenged with the task of ensuring continuity of care amidst stay-at-home orders and taking on new clients to meet the rising need for mental health care (Xiong et al., 2020). The only solution was the rapid onset of telepsychology. Although telepsychology and telehealth have been around for decades with research to support its efficacy, as of 2019, the majority of psychologists still did not have experience offering telehealth services (Myers Virtue et al., 2021). Furthermore, due to the hasty transition, many typical ethical boundaries and experience that clinicians seek out prior to transitioning to telehealth were not feasible to complete. This study aimed to investigate how mental health providers adapted to provide insight into the preparation for the future implementation of telehealth in the event of an emergency. Over the course of this discussion, I will review the results of this study in the context of clinical administrative implications, graduate training implications, policy implications, and ethical considerations.

Clinical Administrative Implications

The clinical administrative implications of this study can inform implementation scientists regarding the structure of their facility and factors that will support an efficient and responsive transition to telehealth services.

The first hypothesis that how mental health professionals with differing credentials, settings, and populations would vary in the implementation of telehealth and alignment with APA ethical guidelines was supported. Notably telehealth platform use

varied by profession such that LCSWs were the most likely to provide telehealth services over the phone. FaceTime was more likely to be used in private practices, which may be because of the overhead cost for other more secure software with a business associate agreement (BAA). Furthermore, FaceTime may have been a more accessible format for many clients and clinicians when they first transitioned to telehealth given the popularity of Apple products. Skype was also positively correlated with age (r=.351, p=.026). Skype is one of the earliest popular video-calling programs hitting the market in 2003 (Brittanica, 2020). It is likely that those who chose to use Skype for telehealth had previous experience with Skype. Differences between the use of various telehealth platforms may also inform future planning for clinical readiness for telehealth.

Clinicians should consider both popularity and security when selecting a platform. Familiarity with the platform may help the clients engage in services. The most popular video platforms used in this study were: Zoom, Phone (No Video), FaceTime and Doxy.me. In regard to security, not all providers were using HIPAA-compliant video software (e.g., FaceTime; Adler, 2021) and many other programs were only HIPAA-compliant with the addition of a BAA. Twenty-four percent of participants reported that they did not have access to a platform with a BAA at any point while offering telehealth. The widespread use of Zoom across workplaces, schools, and family virtual get-togethers during COVID-19 made it a popular option that many clients would be familiar with and has the option to add a BAA. With free and cost-effective HIPAA-compliant options available, clinicians have many secure choices to fit their needs. As clinicians transition back to in-person services, they need to consider the cost and benefit of maintaining a paid subscription to a popular telehealth option with a BAA or the use of a free option

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such as Doxy.me to allow for the intermittent or emergency use of telehealth. For a clinician who only rarely utilizes telehealth, Doxy.me may be a beneficial choice given its popularity and cost effectiveness. However, a clinician consistently using telehealth may prefer a more popular option such as Zoom with a BAA as it has more options to support telehealth like a shared whiteboard.

Methods of data collection varied by years of experience. In general, remote data collection, progress monitoring, and access to an EMR was more common in those with less experience and less common in those with 20 plus years of experience. Additionally, age was negatively correlated with the use of an EMR ($r=-.471$, $p<.001$), remote data collection ($r=-.369$, $p=.001$), and progress monitoring ($r=-.275$, $p=.014$). These findings suggest that older and more experienced clinicians may be less aware of or less comfortable with electronic record keeping. Clinicians may benefit from participating in continuing education regarding remote data collection and how to transition to electronic medical records to prepare their clinical practice to be more flexible to meet clients' needs in the future.

The results of this study also suggested that use of remote data collection varied based both on profession and setting. Licensed Professional Counselors (LPC) and graduate students were the most likely to have access to remote data collection, while those in private practice were the least likely to have access to remote data collection. Whereas most mental health providers had access to progress monitoring tools over telehealth, it was most common among those in hospital and university settings. In line with student access, was the finding that universities were the most likely to have access to remote data collection. Many universities already have access to a variety of online

scoring and assessments for training purposes, which likely helped the transition to
telehealth. These subscriptions can be costly compared to shorter or free paper measures,
which may explain why those working in private practices were the least likely to have
remote data collection.

In conclusion, mental health providers can take several steps to prepare their
centers for future emergency telehealth use. First, they may identify a cost-effective and
secure platform for the continued use of telehealth when needed. Next, clinicians who are
not using an EMR should make efforts to transition their clients' records. Finally,
providers should set a budget and seek out resources for remote data collection and
progress monitoring within their means.

Graduate Training Implications

One of the most robust findings from this study was that young therapists sought
out the most training and had the highest desire for additional training prior to the onset
of the COVID-19 pandemic. This study found that student therapists and those with zero
to five years of experience were the most likely to report a desire for more clinical
training prior to the onset of the COVID-19 pandemic. Age was also negatively
correlated with desire for more training ($r = -.293$, $p = .009$) suggesting that younger
clinicians desired more training. Trainee desire for more telehealth training was also
evident in the literature. Aafjes-van Doorn et al. (2020) also found that trainees wished
for more training in telehealth in a study on therapeutic working alliance via telehealth
during the pandemic. Interestingly, in this study therapeutic working alliance via
telehealth was rated lower by clinicians than in previous studies on the topic. This may be
explained by the difference in training for those offering therapy services. Prior to the

pandemic, those studying telehealth had been trained and carefully planned their telehealth implementation which may explain why they rated their therapeutic working alliance higher in telehealth studies (Aafjes-van Doorn et al., 2020). Furthermore, lack of training was previously the most frequently endorsed barrier to telepsychology among mental health providers (Perrin et al., 2020). These findings suggest that incorporating telehealth into graduate school curricula would be helpful in preparing students for emergencies and the changing field.

Furthermore, students and those with less experience differed in the level of rigorous training they sought in response to the COVID-19 pandemic. In terms of training sought out, students and new therapists were the most likely to participate in a webinar series, indicating an interest in more intensive training. Whereas, psychologists, those with the highest levels of education in the sample were the most likely to report participating in a single live webinar, suggesting that they recognized the need for training, but did not seek out as much training as students. This difference may also be explained by students' status as trainees and the possibility that more training was mandated by a supervisor. Full-time clinician may have also had more limited time and more pressure to provide continuity of care. Whereas clients of students may have been more understanding of a delay in services. Additional insight into graduate training can also be gathered by considering student transition time to telehealth services.

In this study, students and those with zero to five years of experience took the longest to transition. Furthermore, age was negatively correlated with transition time ($r = -.34$, $p = .002$). This is likely related to the lack of experience and increased training sought out by students in addition to greater oversight during the transition process. The

percentage of clients who terminated treatment due to the transition to telehealth was also negatively correlated with age (r=-.291, p=.009). When considered in context with the other findings regarding trainees and student therapists, it is possible that longer transition times led to the higher rates of clients terminating rather than transitioning to telehealth. A similar finding was also noted in Scharff et al. (2021) who reported that their initial retention rate was 82%. The researchers suggested that these clients may have been lost due to technology access or a lack of response due to trainees contacting clients from blocked numbers. Interestingly, although universities took longer to transition, their facilities were the highest for readiness indicating that they had the most infrastructure to support telehealth. The combination of these findings indicates that the longer transition time is explained by student status and clinical training as opposed to facility readiness factors. Universities have opportunities to improve telehealth training through both course work as well as practicum experiences. Therapy-based classes should include literature on telemental health applications and considerations for different interventions.

The third hypothesis, that therapist would feel more efficacious in person than over telehealth was supported. Although the effect size was large, the two means still fell into a range indicating that therapists felt efficacious in both settings. It did appear that there may have been a ceiling effect. Given the large effect size, future research should consider these differences in a larger sample and with a scale that allows for greater differentiation between levels of efficacy. Given the research supporting telehealth, additional incorporation of this literature into graduate level curriculums as well as practical experience delivering telehealth may improve clinician efficacy.

In an effort to facilitate a smoother transition in the future, universities and training placements such as externships and internships should use the lessons learned during this experience to improve telehealth training. Now that universities have been forced to consider how to support students in the implementation of telehealth, it is important that these supports are not struck down because the pandemic is shifting towards an endemic.

Policy Implications

While graduate training programs and clinicians themselves can make adaptations to prepare themselves for future telepsychology use, the field must also consider the system as a whole. At the start of the COVID-19 pandemic, many policies and laws were adjusted to accommodate telepsychology. After two years, the question of how to decide which policies or expectations should be permanently changed and which contingencies should be in place to address special circumstances and emergencies in the future remains.

In order to protect both clients at risk and clinicians, there was an urgent need for a socially distanced way to provide mental health services in March of 2020. About half of the clients served in this sample were perceived to be at an increased risk of contracting COVID-19 and about 27.54% percent were perceived to be at risk of developing severe symptoms by their mental health provider. One of the biggest barriers to accessing telehealth previously was limited health insurance coverage (Chen et al., 2022). Policies regarding reimbursement for mental health services are too dependent on insurance companies determining the acceptable and unacceptable platforms for telehealth despite the literature supporting multiple efficacious platforms. Clinicians in

this sample estimated that 76.9% of clients on average continued participating in telehealth over video and 14.22% continued over the phone. Historically, many insurance companies would reimburse for telemedicine occurring over a video format, but not over the phone (Chen et al., 2022). However, phone services are more accessible than those over video, as they do not require internet access, and have been supported to be efficacious in the literature for decades (Hilty et al., 2013). Researchers found that those who had heard of telehealth before receiving telehealth services valued it more (Knechtel & Erickson, 2020). The increased rates of telehealth will likely improve client acceptance of telehealth in the future. The implementation of telehealth has also consistently shown a decrease in missed appointments (Silver et al., 2020). During the COVID-19 pandemic, more insurance companies began covering phone-based services. However, coverage for audio-only services have already decreased. For example, the Office of Mental Health and Substance Abuse Services (OMHSAS) in Pennsylvania determined that audio-only outpatient telehealth services would no longer be covered without completion of an additional waiver to justify the needs for audio services (Bowen & Dyson-Washington, 2021). Chen (2022) found that patients that were on Medicaid, older, African American, and/or with lower broadband access may be disproportionately impacted by insurance companies no longer covering audio-only services as they were less like to use video-based services. Given the effectiveness of telepsychology services, insurance companies should continue to cover both phone and video-based services.

Interestingly, therapist efficacy was predicted by the population's access to technology. Although most clients in this sample continued treatment and had access to the necessary technology and a place to engage in treatment, Di Carlo et al. (2021) found

that there continues to be a technological gap based on socioeconomic status. Telehealth

should be practiced in a secure and private location, which negatively impacts clients of

lower socioeconomic status. Kronenfeld and Penedo (2021) reported that 44% of those

below the poverty line rely on public libraries for internet which is not conducive to

treatment. Furthermore, poor home internet connections, reliance on hot spots, and poor

smartphone connections can lead to technical difficulties that are disruptive to the

practice of telehealth. Researchers argued that these technical difficulties impact

nonverbal cues and continue to be a concern in these populations even with the

widespread adoption of telehealth (Di Carlo et. al., 2021). Improving technology and Wi-

Fi access for those below the poverty line is an important consideration for telehealth.

Public health initiatives should be considered to increase access to both technology and a

private space for telehealth. Given that libraries are already used by 44% of those beneath

the poverty line, they could be an ideal place to intervene. For example, if private rooms

for medical appointments could be reserved with sound proofing, more people may be

able to access telehealth. City-wide free Wi-Fi initiatives may also be a solution to help

close the digital gap. Free Wi-Fi initiatives have been successfully implemented in many

major cities that could be expanded upon and improved to further close the digital gap.

Ethical Considerations

In terms of ethical considerations, this study found notable differences in how

data was collected and stored. Guidelines four and five of the APA Guidelines for

Telehealth focus on the following: (4) confidentiality of data and (5) security and

transmission of data and information (APA, 2013). These guidelines emphasize the

importance of therapists balancing the addition of technology into their therapeutic

practice with the additional risks to privacy and confidentiality that these technologies introduce. Guideline four advises that psychologists should make a "reasonable effort" to protect client data and maintain confidentiality. Guideline five highlights the following threats to data transmission over telehealth: computer viruses, hackers, theft of technology devices, damage to hard drives or portable drives, failure of security systems, flawed software, and ease of accessibility to unsecured electronic files, and malfunctioning or outdated technology. These guidelines indicate that psychologists should understand the technologies they use as well as their potential vulnerabilities and consult with a technological professional when necessary.

Informed consent for telehealth requires: a review of the risk and benefits of videoconferencing, review of confidentiality, establishment of the technology to be used for a secure connection, the development of a back-up plan in the case of technological difficulties, and a safety plan in the event of an emergency (APA, 2013). Given that only 37.975% of clinicians reported that their consent forms included consent for telehealth prior to the pandemic, the majority of providers in this sample were not prepared to immediately offer telehealth services. Typically, informed consent is gathered prior to treatment, and best practices over telehealth often recommends an initial in person meeting (Maheu, 2019). However, when clients transitioned to telehealth after beginning treatment, consent needed to be gathered for this new format and clients were placed in a situation where in-person services were not an option. Given the importance of highlighting the risk of telehealth with clients, the pandemic led to an interesting problem where the strategy to gather consent for telehealth may require clients to use technology that they did not yet know the risks of utilizing. For example, is it ethical to perform the

consent process over a telehealth platform before reviewing the risks and benefits of telehealth? Furthermore, clinicians must consider how consent is gathered and documented. Typically, the informed consent process is completed with the client's signature. However, with social distancing, centers had to consider the pros and cons of verbal consent and digital signatures. Given that the specific laws around consent vary by state, it would be helpful to outline allowances for verbal consent and electronic signatures to help facilitate the use of telehealth with pre-existing clients ahead of time.

Martinez-Martin et al. (2020) highlighted how the relaxed HIPAA regulations allowed for the transition to telehealth, but placed the burden of ensuring their private mental health data was secure on the client's understanding of the technology. The authors highlighted that third parties can potentially sell or buy data specifically when considering how data is transmitted between clients and clinicians using apps and online servers. The FDA also lowered standards for mental-health-based apps during the pandemic (Al-Faruque, 2020). Martinez-Martin et al. (2020) reported concerns that rolling back these changes may be difficult and lead to a consistent lower standard of care available via mental health apps. An important aspect of ensuring private health information is secure depends on secure methods for data collection and storage. When this cannot occur in person, online methods can be ripe with opportunities for insecure data collection. Martinez-Martin et al. (2020) highlighted how use of apps to track progress monitoring in therapy often lack security. For example, some apps have known relationships with third parties that sell data. The idea that advertisers may know about a client's anxieties is a risk that may occur with an increased use of these apps and decrease in stringency regarding the telehealth process. Considering guidelines four and five,

clinicians must contemplate the ethical implications associated with their chosen form of data collection and storage. The authors suggested introducing regulations outlining the level of transparency that providers and clients must discuss during the consent process. They also highlighted, that the unclear standards are not only dangerous for clients, but for clinicians too, because with so many new technologies, there is not a legal standard for "reasonable care," which can be a risk in the event of a lawsuit.

In this sample, young clinicians and students had the greatest access to secure processes for data collection and storage. Private practices were the least likely to have access to remote data collection methods to support their telehealth practice. In light of these findings and the risks highlighted by Martinez-Martin et al. (2020), older clinicians and those working in private practice should take initiative in researching the risks of their chosen technologies and consult with a technological professional to protect themselves and ensure they are doing their best to protect their clients' personal health information.

Limitations

Although this study provided insight into how clinicians adapted to telehealth and the implications for mental health providers, graduate training, and future policies, it also has limitations that should be considered regarding its implications. One of the largest limitations of this study was the relatively small sample size (N=79). Whereas this sample size was large enough to detect small to moderate effects depending on the analysis, it limited the regression models. Given the small sample size, the regression analyses consisted of observed data, whereas with a larger sample, latent variables may have been an appropriate form of analysis.

Further limitations regarding the implications of this study relate to potential biases in the sample's demographics. The majority of the sample was practicing in New York followed by Massachusetts. Both of these states had major cities with hotspots at the start of the COVID-19 pandemic in the United States. Whereas states in the South, Midwest, and West were less represented. Although some participants were from different regions, there were not enough participants to analyze if mental providers' responses differed by region representing a potential confound. There was also only a small amount of variance in the facilities that clinicians were practicing in with the majority of participants working in private practices. The findings regarding the use of WebEx may also have been biased in this sample given that it is the video platform used at the university where the study originated. Another potential limitation to platform-based recommendations was that this study did not gather data on the kinds of EMRs that were used which may include additional insight into HIPAA compliant telehealth platforms for service delivery. Lastly, in terms of years of experience in the field, the data showed a U-shaped distribution rather than a normal distribution suggesting that this sample overrepresented new therapists with zero to five years of experience and advanced therapists with 20+ years of experience.

Future Research

Future research should address the limitations of this study by conducting a retrospective study with a larger and more representative sample. More studies should also be conducted to build off this work and further support changes to the mental health field as a whole. Public health research exploring options for lower SES patients and

clients to engage in telemedicine is an important next step to bridge the digital gap and ensure continuity of care in the event of future emergencies.

As graduate training programs adapt to better support students in their delivery of telehealth and incorporate more telehealth training, there are many opportunities for research regarding the best way to prepare students for telepsychology. Future pedagogical studies should investigate the strategies for teaching students about telehealth and support them in its delivery.

The adaptation to telehealth and its sustained presence in the mental health field over the last two years has indicated that it is here to stay. While some mental health providers still rely on additional accommodations allowed in response to the pandemic, it is time to ensure that telehealth services and the lessons learned across this experience are not forgotten. Research on how clinicians, students, insurance companies, and governments can support clinicians and clients as they continue offering telehealth services or return to in-person services is imperative.

Conclusion

The rapid adaptation of telehealth was born out of necessity to address an unprecedented worldwide experience and high need for mental health services. There was much to learn from the various experiences and ways that clinicians navigated these unchartered waters. Clinicians can prepare themselves by reviewing their consent process, technology, and data collection and storage strategies for the digital age. Graduate programs can integrate the lessons learned from trainees providing telehealth during the pandemic into their overall curriculum and training experiences. Policies regarding insurance reimbursement and initiatives targeting the digital gap may improve

telehealth services in the future and ensure more equitable access to healthcare. Increased

awareness of risk of technology use and clarification of regulations regarding technology

use and security can protect both clients and clinicians. By targeting these areas, we can

ensure current clinicians, upcoming mental health providers, clients, and the law are

prepared with the flexibility to utilize telehealth in the event of an emergency, whether it

is regional, national, or even personal.

Appendix A:

Survey

Informed Consent

You have been invited to take part in a research study to learn more about the mental health field's response to the COVID-19 pandemic. This study will be conducted by Aubrey Faber, as part of her doctoral dissertation. Her faculty sponsor is William Chaplin, Psychology department, College of Liberal Arts and Sciences, St. John's University.

If you agree to be in this study, you will be asked to complete a questionnaire about your background (age, gender, education, etc.) and clinical experience. Participation in this study will involve approximately 30 minutes of your time to complete the survey.

There are no known risks associated with your participation in this research beyond those of everyday life. Although you will receive no direct benefits, this research may help the investigator understand mental health work in the era of COVID-19.

Confidentiality of your research records will be strictly maintained as no identifying information is collected; the anonymity of questionnaire responses is guaranteed. The information in this study will be used only for research purposes and will not reveal who you are. Data may need to be shared to a data library for publication purposes. You will not be identified in any publication from this study.

Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. You can stop the survey at any time if do not wish to answer a question.

If there is anything about the study or your participation that is unclear or that you do not understand or if you have questions or wish to report a research-related problem, you may contact Aubrey Faber at aubrey.faber17@stjohns.edu, or the faculty sponsor, William Chaplan at chaplanw@stjohns.edu. For questions about your rights as a research participant, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair digiuser@stjohns.edu 718-990-1955 or Marie Nitopi, IRB Coordinator, nitopim@stjohns.edu 718-990-1440.

Please select your choice below. You may print a copy of this consent form for your records. Clicking on the "Agree" button indicates that

- You have read the above information
- You voluntarily agree to participate
- You are 18 years of age or older

○ Agree

○ Disagree

Did you offer mental health services remotely during the COVID-19 pandemic?

○ Yes

○ No

If you provide mental health services in more than one setting (e.g., hospital and private practice, university department clinic and externship site, etc.), please answer these survey questions with your primary place of practice in mind (i.e., where you spend the most time or see the most clients).

What is your age?

_____

To which gender do you most identify?

○ Male

○ Female

○ Transgender female

○ Transgender male

○ Non-binary

○ Other _____

What country do you practice in?

☐ The United States

☐ Canada

☐ The United Kingdom

☐ Other _____

What state/province do you practice in?

▼ Alabama ... Wyoming

What is your profession?

    ○ Licensed Social Worker

    ○ Marriage and Family Therapist

    ○ Licensed Professional Counselor

    ○ Licensed Mental Health Counselor

    ○ Student Therapist

    ○ Psychologist

    ○ Other _____

How long have you been working as a therapist?

    ○ 0-5 years

    ○ 6-10 years

    ○ 10-15 years

    ○ 15-20 years

    ○ 20+ years

What type of facility do you work in?

○ Private Practice

○ Hospital

○ University

What age group(s) do you serve?

☐ 0-4

☐ 5-12

☐ 13-18

☐ 18-24

☐ 25-34

☐ 35-44

☐ 45-54

☐ 55-64

☐ 65+

What is the typical educational attainment of your clients?

○ Some Highschool

○ Highschool/GED

○ Some College
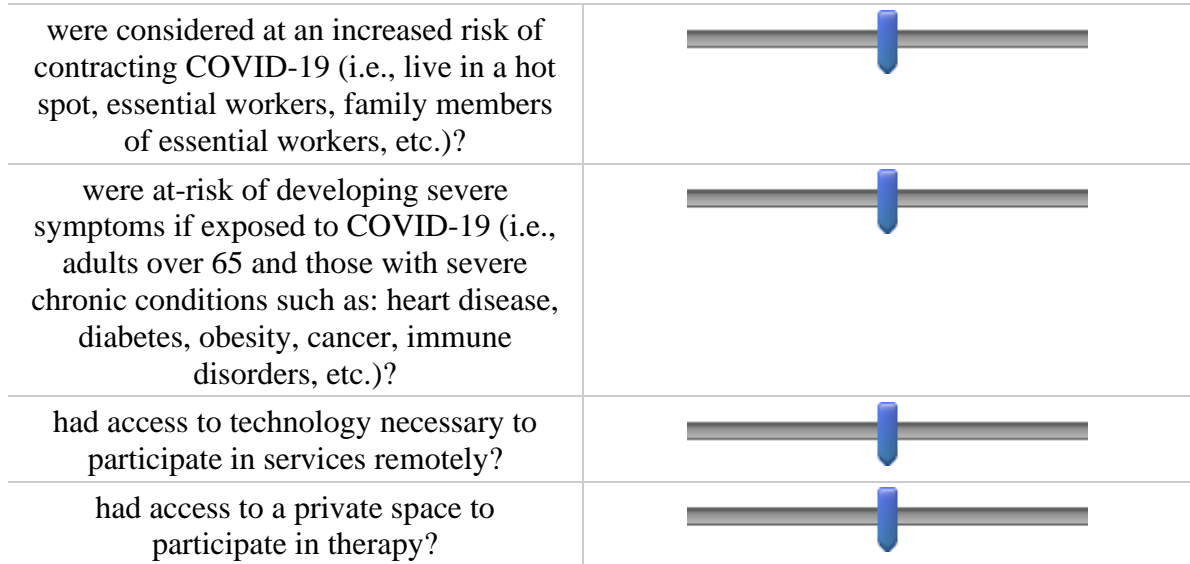
○ College Degree or Higher

○ I don't know

What is the average household income of your clients?

○ Under $20,000

○ $20,001 – $40,000

○ $40,001 – $60,000

○ $60,001 – $80,000

○ $80,001 – $100,000

○ $100,001 or more

○ I don't know

Approximately what percentage of your clients

I don't know

0 10 20 30 40 50 60 70 80 90 100

were considered at an increased risk of contracting COVID-19 (i.e., live in a hot spot, essential workers, family members of essential workers, etc.)?	
were at-risk of developing severe symptoms if exposed to COVID-19 (i.e., adults over 65 and those with severe chronic conditions such as: heart disease, diabetes, obesity, cancer, immune disorders, etc.)?	
had access to technology necessary to participate in services remotely?	
had access to a private space to participate in therapy?	

End of Block: Demographics

Start of Block: Pre-Covid Items

The following items are about your mental health practice before the COVID-19 Pandemic shut down (before March 2020).

Did your consent form cover the risk of participating in telehealth service?

○ Yes

○ No

Did you have technology necessary for providing telehealth?

○ Yes

○ No

Did you ever participate in telehealth training?

○ Yes

○ No

Did you have experience seeing clients over telehealth?

○ Yes

○ No

Do you wish you had more training in telehealth prior to COVID-19 closures?

○ Yes

○ No

How familiar were you with the literature/research on telecommunication and telepsychology?

○ Extremely familiar

○ Very familiar

○ Moderately familiar

○ Slightly familiar

○ Not familiar at all

The following questions refer to your mental health practice during the COVID-19 pandemic.

When did you cease offering face-to-face services?
If you never ceased in-person services, please write 09/09/1999.

_____

When did you begin offering telehealth services?

_____

What platform did you use for telehealth? Select all that apply

☐ Phone (not video)

☐ Doxy.Me

☐ VSee Telemedicine

☐ Zoom

☐ WebEx

☐ Facetime

☐ Google Meet

☐ Microsoft Teams

☐ Skype

☐ Other

Did you use a HIPAA-compliant video program with a Business Associate Agreement (BAA) at any point?

○ Yes

○ No

How did you gather consent for telehealth services?

○ Verbally

○ Electronically

○ Did not due to HIPAA suspension

How did you collect client data?

☐ Patient Portal

☐ Cloud based online assessments (e.g., Pearson QGlobal, MHS Assessments, etc)

☐ Email

☐ Text

☐ Online Survey Builders (e.g., Qualtrics, Survey Monkey, etc.)

How was client data protected?

☐ Electronic Medical Record (EMR)

☐ Password Protected Computer

☐ Encrypted Files

☐ Physical Lock

☐ Other _____

Did you participate in any telehealth training from March 2020 to present?

◯ Yes

◯ No

How did you seek training? Select all that apply

☐ Single Webinar (Recorded)

☐ Webinar Series (Recorded)

☐ Single Webinar (Live)

☐ Webinar Series (Live)

☐ Online Courses

☐ Other

The following questions refer to your mental health practice during the COVID-19 pandemic.
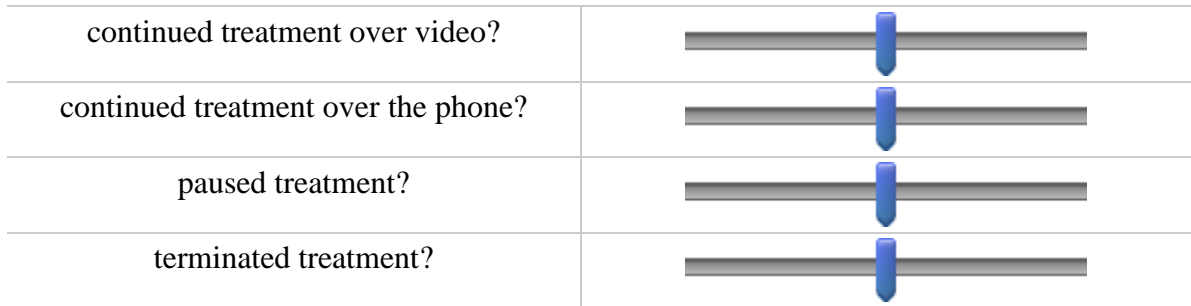

What services did you offer remotely?

☐ Therapy

☐ Neuropsychological testing

☐ Assessment

☐ In-home services

☐ Other, Please Specify

_____

If you continued offering assessments, what steps did you take to ensure valid test administration?

_____

_____

_____

_____

_____

As a result of COVID-19, approximately what percentage of your clients

0   10   20   30   40   50   60   70   80   90   100

continued treatment over video?	
continued treatment over the phone?	
paused treatment?	
terminated treatment?	

Were there any systems or processes in place within your organization for remote data collection, storage, processing, analysis, and/or reporting?

○ Yes

○ No

Were you able to access progress monitoring tools?

○ Yes

○ No

Did you have a plan to handle emergency situations remotely?

○ Yes

○ No

How would you rate your capacity for:

	Very Limited	Limited	Fair	High	Very High
empathizing with the client in-person?	○	○	○	○	○
adapting to the needs of the client in-person?	○	○	○	○	○
developing a positive therapeutic alliance in-person?	○	○	○	○	○
identifying and prioritizing your client's problems in-person?	○	○	○	○	○
implementing effective therapeutic interventions in-person?	○	○	○	○	○
working collaboratively with client in-person?	○	○	○	○	○

How would you rate your capacity for:

	Very Limited	Limited	Fair	High	Very High
empathizing with the client over telehealth?	○	○	○	○	○
adapting to the needs of the client over telehealth?	○	○	○	○	○
developing a positive therapeutic alliance over telehealth?	○	○	○	○	○
identifying and prioritizing your client's problems over telehealth?	○	○	○	○	○
implementing effective therapeutic interventions over telehealth?	○	○	○	○	○
working collaboratively with client over telehealth?	○	○	○	○	○

Appendix B:

Correlations

	Age	Years of Experience
Consent	-0.165	-0.168
Technology	-0.167	-0.052
Emergency Plan		0.057
Prior Training	-0.186	0.104
Prior Experience	0.130	0.233**
Desire for more Training	-0.293**	-0.247**
Familiarity with Telehealth	-0.018	.148
Transition Time	-0.340**	-0.366***
Clients Continued Treatment (Video)	0.064	-0.002
Clients Continued Treatment (Phone)	0.060	0.036
Clients Paused Treatment	.127	0.229**
Clients Terminated Treatment	-0.291**	-0.245**
Platform		
Phone	0.172	0.219*
Doxy.Me	0.156	0.096
Vsee	-0.020	-0.195
Zoom	0.108	0.010
WebEx	-0.388***	-0.382***
Facetime	0.317**	0.265**
Google Meet	-0.109	-0.082
Microsoft Teams	-0.208*	-0.146
Skype	0.251*	0.294**
Data Collection/Protection		
EMR	-0.471***	-0.455***
Passwork Protected Computer	0.134	0.053
Encrypted Files	-0.112	-0.110
Physical Lock	0.142	-0.189
Remote Data Collection	-0.369***	-0.351**
Progress Monitoring	-0.275**	-0.286**
Training		
Single Recorded Webinar	-0.059	-0.074
Recorded Webinar Series	-0.388***	-0.328**
Single Live Webinar	0.034	0.195
Live Webinar Series	-0.056	0.010
Online Course	0.066	0.067
Training Total	-0.094	0.025

Note. *p<.1, **p<.05, ***p<.001

References

Aafjes-van Doorn, K., Békés, V., & Prout, T. A. (2020). Grappling with our therapeutic

    relationship and professional self-doubt during COVID-19: Will we use video

    therapy again? In *Counselling Psychology Quarterly* (pp. 1–12).

    https://doi.org/10.1080/09515070.2020.1773404

Al-Faruque, F. (2020). FDA relaxes regs for COVID-19 mental health apps. *Medtech*

    Insight.

American Psychological Association (APA). (2017). Ethical principles of psychologists

    and code of conduct (2002, amended effective June 1, 2010, and January 1, 2017).

    http://www.apa.org/ethics/code/index.html

American Psychological Association (APA). (2013). Guidelines for the practice of

    telepsychology. Retrieved from

    https://www.apa.org/practice/guidelines/telepsychology

Augusterfer, E. F., Mollica, R. F., & Lavelle, J. (2015). A review of telemental health in

    international and post-disaster settings. *International Review of Psychiatry*, *27*(6),

    540–546. https://doi.org/10.3109/09540261.2015.1082985

Barney, A., Buckelew, S., Mesheriakova, V., & Raymond-Flesch, M. (2020). The

    COVID-19 Pandemic and Rapid Implementation of Adolescent and Young Adult

    Telemedicine: Challenges and Opportunities for Innovation. *Journal of Adolescent*

    Health, *2019*. https://doi.org/10.1016/j.jadohealth.2020.05.006

Bowen, J., & Dyson-Washington, F. (2021). *DBHIDS and CBH Joint Guidance Related*

    to Telehealth Services.

Britannica, T. Editors of Encyclopaedia (2020, November 19). *Skype. Encyclopedia*

    Britannica. https://www.britannica.com/technology/Skype

Chen, J., Li, K. Y., Andino, J., Hill, C. E., Ng, S., Steppe, E., & Ellimoottil, C. (2022).

    Predictors of Audio-Only Versus Video Telehealth Visits During the COVID-19

    Pandemic. *Journal of General Internal Medicine*, *37*(5), 1138–1144.

    https://doi.org/10.1007/s11606-021-07172-y

Chenneville, T., & Schwartz-Mette, R. (2020). Ethical considerations for psychologists in

    the time of COVID-19. *American Psychologist*. https://doi.org/10.1037/amp0000661

Di Carlo, F., Sociali, A., Picutti, E., Pettorruso, M., Vellante, F., Verrastro, V., Martinotti,

    G., & di Giannantonio, M. (2021). Telepsychiatry and other cutting-edge

    technologies in COVID-19 pandemic: Bridging the distance in mental health

    assistance. *International Journal of Clinical Practice*, *75*(1), 1–9.

    https://doi.org/10.1111/ijcp.13716

Douglas, S., Jensen-Doss, A., Ordorica, C., & Comer, J. S. (2020). Strategies to Enhance

    Communication With Telemental Health. *Practice Innovations*, *5*(2), 143–149.

Eccles, M. P., & Mittman, B. S. (2006). Welcome to implementation science.

    Implementation Science, *1*(1), 1–3. https://doi.org/10.1186/1748-5908-1-1

Elford, R., White, H., Bowering, R., Ghandi, A., Maddiggan, B., & John, K. S. (2000). A

    randomized, controlled trial of child psychiatric assessments conducted using

    videoconferencing. *Journal of Telemedicine and Telecare*, *6*(2), 73–82.

Fegert, J. M., Vitiello, B., Plener, P. L., & Clemens, V. (2020). Challenges and burden of

    the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health:

    A narrative review to highlight clinical and research needs in the acute phase and the

    long return to normality. *Child and Adolescent Psychiatry and Mental Health*, *14*(1),

    1–12. https://doi.org/10.1186/s13034-020-00329-3

Fortney, J. C., Pyne, J. M., Mouden, S. B., Mittal, D., Hudson, T. J., Schroeder, G. W., Williams, D. K., Bynum, C. A., Mattox, R., & Rost, K. M. (2013). Practice-based versus telemedicine-based collaborative care for depression in rural federally qualified health centers: A pragmatic randomized comparative effectiveness trial. *American Journal of Psychiatry*, *170*(4), 414–425.

Frueh, C. B., Henderson, S., & Myrick, H. (2005). Telehealth service delivery for ppersons with alcoholism. *Journal of Telemedicine and Telecare*, *11*(7), 372–375.

Frueh, C. B., Monnier, J., Yim, E., Grubaugh, A. L., Hamner, M. B., & Knapp, R. G. (2007). A randomized trial of telepsychiatry for post-traumatic stress disorder. *Journal of Telemedicine and Telecare*, *13*(3), 142–147.

Hames, J. L., Bell, D. J., Perez-Lima, L. M., Holm-Denoma, J. M., Rooney, T., Charles, N. E., Thompson, S. M., Mehlenbeck, R. S., Tawfik, S. H., Fondacaro, K. M., Simmons, K. T., & Hoersting, R. C. (2020). Navigating uncharted waters: Considerations for training clinics in the rapid transition to telepsychology and telesupervision during COVID-19. *Journal of Psychotherapy Integration*, *30*(2), 348–365. https://doi.org/10.1037/int0000224

Hilty, D. M., Ferrer, D. C., Parish, M. B., Johnston, B., Callahan, E. J., & Yellowlees, P. M. (2013). The effectiveness of telemental health: A 2013 review. *Telemedicine and E-Health*, *19*(6), 444–454. https://doi.org/10.1089/tmj.2013.0075

Holingue, C., Kalb, L. G., Riehm, K. E., Bennett, D., Kapteyn, A., Veldhuis, C. B., Johnson, R. M., Daniele Fallin, M., Kreuter, F., Stuart, E. A., & Thrul, J. (2020). Mental distress in the United States at the beginning of the COVID-19 pandemic. *American Journal of Public Health*, *110*(11), 1628–1634.

https://doi.org/10.2105/AJPH.2020.305857

Jones, A. M., Shealy, K. M., Reid-Quiñones, K., Moreland, A. D., Davidson, T. M.,

López, C. M., Barr, S. C., & de Arellano, M. A. (2014). Guidelines for establishing

a telemental health program to provide evidence-based therapy for trauma-exposed

children and families. *Psychological Services*, *11*(4), 398–409.

https://doi.org/10.1037/a0034963

Kannarkat, J. T., Smith, N. N., & McLeod-Bryant, S. A. (2020). Mobilization of

telepsychiatry in response to COVID-19—Moving toward 21st century access to

care. *Administration and Policy in Mental Health and Mental Health Services

Research*, *47*(4), 489–491. https://doi.org/10.1007/s10488-020-01044-z

Keshvardoost, S., Bahaadinbeigy, K., & Fatehi, F. (2020). Role of Telehealth in the

Management of COVID-19: Lessons Learned from Previous SARS, MERS, and

Ebola Outbreaks. *Telemedicine Journal and E-Health : The Official Journal of the

American Telemedicine Association*, *26*(7), 850–852.

https://doi.org/10.1089/tmj.2020.0105

Knechtel, L. M., & Erickson, C. A. (2020). Who's logging on? Differing attitudes about

online therapy. In *Journal of Technology in Human Services* (Vol. 39, Issue 1, pp.

24–42). https://doi.org/10.1080/15228835.2020.1833810

Kronenfeld, J. P., & Penedo, F. J. (2021). Novel Coronavirus (COVID-19): Telemedicine

and remote care delivery in a time of medical crisis, implementation, and challenges.

Translational Behavioral Medicine, *11*(2), 659–663.

https://doi.org/10.1093/tbm/ibaa105

Loeb, T. B., Ebor, M. T., Smith, A. M., Chin, D., Novacek, D. M., Hampton-Anderson, J.

N., Norwood-Scott, E., Hamilton, A. B., Brown, A. F., & Wyatt, G. E. (2020). How mental health professionals can address disparities in the context of the COVID-19 pandemic. *Traumatology*, *27*(1), 60–69. https://doi.org/10.1037/trm0000292

Maheu, M. M. (Presenter). (2019). *Telepsychology Best Practice 101 Series: Legal, Regulatory & Ethical Rules of the Road - Segment #3* [Webinar]. American Psychological Association.

Mann, F. D., Krueger, R. F., & Vohs, K. D. (2020). Personal economic anxiety in respons to COVID-19. *Personality and Individual Differences*, *167*.

Martinez-Martin, N., Dasgupta, I., Carter, A., Chandler, J. A., Kellmeyer, P., Kreitmair, K., Weiss, A., & Cabrera, L. Y. (2020). Ethics of digital mental health during COVID-19: Crisis and opportunities. *JMIR Mental Health*, *7*(12), 1–14. https://doi.org/10.2196/23776

Myers, K. M., Palmer, N. B., & Geyer, J. R. (2011). Research in child and adolescent telemental health. *Child and Adolescent Psychiatric Clinics*, *20*(1), 155–171.

Myers Virtue, S., Howrey, H. L., Duffy, N. M., & Wallace, M. (2021). Shifting psychosocial oncology care to telepsychology during the COVID-19 pandemic. *Journal of Psychosocial Oncology*, *39*(3), 416–427. https://doi.org/10.1080/07347332.2021.1894526

Perle, J. G., Burt, J., & Higgins, W. J. (2014). Psychologist and physician interest in telehealth training and referral for mental health services: An exploratory study. *Journal of Technology in Human Services*, *32*(3), 158–185.

Perrin, P. B., Rybarczyk, B. D., Pierce, B. S., Jones, H. A., Shaffer, C., & Islam, L. (2020). Rapid telepsychology deployment during the COVID-19 pandemic: A

special issue commentary and lessons from primary care psychology training. *Journal of Clinical Psychology*, *76*(6), 1173–1185. https://doi.org/10.1002/jclp.22969

Perry, K., Gold, S., & Shearer, E. M. (2020). Identifying and addressing mental health providers' perceived barriers to clinical video telehealth utilization. *Journal of Clinical Psychology*, *76*(6), 1125–1134.

Pesamaa, L., Ebeling, H., Kuusimaki, M.-L., Winblad, I., Isohanni, M., & Moilanen, I. (2004). Videoconferencing in child and adolescent telepsychiatry: A systematic review of literature. *Journal of Telemedicine and Telecare*, *10*(4), 187–192.

Pierce, B. S., Perrin, P. B., & McDonald, S. D. (2020). Path analytic modeling of psychologists' openness to performing clinical work with telepsychology: A national study. *Journal of Clinical Psychology*, *76*(6), 1135–1150.

Pierce, B. S., Perrin, P. B., Tyler, C. M., McKee, G. B., & Watson, J. D. (2021). The COVID-19 telepsychology revolution: A national study of pandemic-based changes in U.S. mental health care delivery. *American Psychologist*, *76*(1), 14–25. https://doi.org/10.1037/amp0000722

Richardson, L. K., Frueh, C., Grubaugh, A. L., Egede, L., & Elhai, J. D. (2009). Current directions in videoconferencing tele-mental health research. *Clinical Psychology: Science and Practice*, *16*(3), 323.

Ruskin, P. E., Silver-Aylaian, M., Kling, M. A., Reed, S. A., Bradham, D. D., Hebel, J. R., Barrett, D., Knowles, F., & Hauser, P. (2004). Treatment outcomes in depression: Comparison of remote treatment through telepsychiatry to in-person treatment. *American Journal of Psychiatry*, *161*(8), 1471–1476.

Scharff, A., Breiner, C. E., Ueno, L. F., Underwood, S. B., Merritt, E. C., Welch, L. M., Fonda, C., Weil Malatras, J., Lin, B., Hormes, J. M., Pieterse, A. L., Gordis, E. B., Halpern, L. F., Pazienza, R., & Litchford, G. B. (2021). Shifting a training clinic to teletherapy during the COVID-19 pandemic: a trainee perspective. In *Counselling Psychology Quarterly* (Vol. 34, Issues 3–4, pp. 676–686). https://doi.org/10.1080/09515070.2020.1786668

Sheridan Rains, L., Johnson, S., Barnett, P., Steare, T., Needle, J. J., Carr, S., Lever Taylor, B., Bentivegna, F., Edbrooke-Childs, J., Scott, H. R., Rees, J., Shah, P., Lomani, J., Chipp, B., Barber, N., Dedat, Z., Oram, S., Morant, N., Simpson, A., … Cavero, V. (2021). Early impacts of the COVID-19 pandemic on mental health care and on people with mental health conditions: framework synthesis of international experiences and responses. *Social Psychiatry and Psychiatric Epidemiology*, *56*(1), 13–24. https://doi.org/10.1007/s00127-020-01924-7

Silver, Z., Coger, M., Barr, S., & Drill, R. (2020). Psychotherapy at a public hospital in the time of COVID-19: telehealth and implications for practice. In *Counselling Psychology Quarterly* (pp. 1–9). https://doi.org/10.1080/09515070.2020.1777390

Smith, W. R., Atala, A. J., Terlecki, R. P., Kelly, E. E., & Matthews, C. A. (2020). Implementation guide for rapid integration of an outpatient telemedicine program during the COVID-19 pandemic. *Journal of the American College of Surgeons*. https://doi.org/10.1016/j.jamcollsurg.2020.04.030

Szeftel, R., Federico, C., Hakak, R., Szeftel, Z., & Jacobson, M. (2012). Improved access to mental health evaluation for patients with developmental disabilities using telepsychiatry. *Journal of Telemedicine and Telecare*, *18*(6), 317–321.

VandenBos, G. R., & Williams, S. (2000). The internet versus the telephone: What is

    telehealth anyway? *Professional Psychology: Research and Practice*, *31*(5), 490–

    492.

Varker, T., Brand, R. M., Ward, J., Terhaag, S., & Phelps, A. (2018a). Efficacy of

    Synchronous Telepsychology Interventions for People With Anxiety, Depression,

    Posttraumatic Stress Disorder, and Adjustment Disorder: A Rapid Evidence

    Assessment. *Psychological Services*, *16*(4), 621–635.

    https://doi.org/10.1037/ser0000239

Varker, T., Brand, R. M., Ward, J., Terhaag, S., & Phelps, A. (2018b). Efficacy of

    Synchronous Telepsychology Interventions for People With Anxiety, Depression,

    Posttraumatic Stress Disorder, and Adjustment Disorder: A Rapid Evidence

    Assessment. *Psychological Services*, *16*(4), 621–635.

    https://doi.org/10.1037/ser0000239

Whaibeh, E., Mahmoud, H., & Naal, H. (2020). Telemental Health in the Context of a

    Pandemic: the COVID-19 Experience. *Current Treatment Options in Psychiatry*,

    7(2), 198–202. https://doi.org/10.1007/s40501-020-00210-2

Wilkerson, A., & Ramirez Basco, M. (2014). Therapists' self-efficacy for CBT

    dissemination: Is supervision the key? *Journal of Psychology & Psychotherapy*,

    4(3). https://doi.org/10.4172/2161-0487.1000146

Wright, J. H., & Caudill, R. (2020). Remote treatment delivery in response to the

    COVID-19 Pandemic. *Psychotherapy and Psychosomatics*, *89*(3), 130–132.

    https://doi.org/10.1159/000507376

Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., Phan, L., Chen-Li, D., Iacobucci,

M., Ho, R., Majeed, A., & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, *277*(August), 55–64. https://doi.org/10.1016/j.jad.2020.08.001

Zhou, X., Snoswell, C. L., Harding, L. E., Bambling, M., Edirippulige, S., Bai, X., & Smith, A. C. (2020). The Role of Telehealth in Reducing the Mental Health Burden from COVID-19. *Telemedicine and E-Health*, *26*(4), 377–379. https://doi.org/10.1089/tmj.2020.0068

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