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Philadelphia College of Osteopathic Medicine School of Professional and Applied Psychology Department of School Psychology

## PARENTS PERCEPTION OF TELETHERAPY USE IN CHILDREN

By Beenish Rashid

Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Psychology

# PCOM SCHOOL OF PROFESSIONAL AND APPLIED PSYCHOLOGY

# **DISSERTATION APPROVAL**

This is to ce	rtify that the	e thesis present	Beenish Rashid		
on the	28	day of	March	, 2023, in partial fulfillment of the	

requirements for the degree of Doctor of Psychology, has been examined and is

acceptable in both scholarship and literary quality.

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## TABLE OF CONTENTS

ABSTRACT1
CHAPTER 1: INTRODUCTION
Statement of the Problem
Purpose of the Study
Research Questions and Hypotheses
CHAPTER 2: REVIEW OF THE LITERATURE9
CHAPTER 3: METHOD
Participants
Measures
Procedures
CHAPTER 4: RESULTS
CHAPTER 5: DISCUSSION
Interpretation and Implications
Limitations
Future Directions
REFERENCES
APPENDIX

#### ABSTRACT

Due to the demands of an ongoing pandemic, telehealth services have become increasingly popular particularly in the field of psychology. Teletherapy services are used on a regular basis by healthcare professionals and studies on teletherapy use in adults have shown that it is efficacious, convenient, and practical. However, prior to this study, there was a significant gap in literature about the use of teletherapy in children and adolescents. This study aimed to fill this gap in literature by providing data on how parents perceive teletherapy when compared to in-person therapy for their children. The data for this study was collected through a qualitative survey of parents whose children have utilized both in-person therapy services and teletherapy services. The results were analyzed using descriptive statistics and indicated that parents perceive teletherapy to be as effective as in-person therapy. Additionally, parents rated it high for ease of use and convenience. However, technological challenges and attentional challenges were considered to be negative factors associated with teletherapy. Despite these barriers, the majority of parents indicated that they would continue to use teletherapy services.

#### **CHAPTER 1: INTRODUCTION**

The New England Journal of Medicine defines telehealth as delivering health care services, health education, and information to patients through telecommunication technologies such as video-conferencing, telephone, email, and text (Catalyst, 2018). Telehealth is a cost-effective way of providing services to communities where it is difficult to have access to various health related services such as mental and behavioral health (Buvik et al., 2019; Hilty et al., 2017; Langarizadeh et al., 2017; Tuerk et al., 2010). Until recently, telehealth modalities have been used primarily to provide services to veterans, inmates, and patients in rural locations (Catalyst, 2018a). More recently due to the COVID-19 pandemic telehealth services have been offered to urban and suburban populations including children, and adolescents.

Given the increase in use of telehealth services across the broad spectrum of the healthcare services, it has also been critical to study both the effectiveness and practicality of this modality.

Many telehealth studies have shown the effectiveness and applicability of technology in providing mental health services to veterans in rural areas. The veteran population often has limited access to mental health facilities and resources. Twenty to thirty percent of combat veterans suffer from mental illnesses such as post-traumatic stress disorder (PTSD) (Tanielian, Tanielian & Jaycox, 2008). Numerous efficacy and satisfaction studies of teletherapy have been conducted with veterans; these studies have shown that teletherapy is as effective as in-person therapy and teletherapy has a high satisfaction rate (Acierno et al., 2016; Fortney et al., 2015; Morland et al., 2004; Morland et al., 2010; Tanielian, Tanielian & Jaycox, 2008; Ziemba et al., 2014). For example,

#### PARENTS PERCEPTION OF TELETHERAPY

Morland et al. (2004) conducted a study about video-conferencing for male veterans diagnosed with post-traumatic stress disorder (PTSD) and discovered that videoconferencing teletherapy had high client satisfaction scores. In 2010, Morland et al. conducted another study with veterans suffering from anger management secondary to PTSD to compare video conferencing teletherapy to in-person therapy and discovered that patient satisfaction and outcomes were similar between the in-person group and the teletherapy group, indicating the effectiveness of teletherapy.

More recently, Acierno et al. (2016) studied 232 veterans suffering from PTSD and major depressive disorder (MDD). The researchers compared the effectiveness of teletherapy to in-person therapy in reducing symptoms and discovered that both modalities were equally effective (Acierno et al., 2016). Furthermore, Fortney et al. (2015) concluded that PTSD symptom severity decreased in veterans receiving teletherapy vs. those receiving in-person therapy. Yuen et al. (2013) also studied the effectiveness of videoconferencing teletherapy compared to face-to-face therapy and concluded that there was no significant difference between PTSD diagnoses between the two modalities.

In 2011, Morland et al. studied therapist-client relationships with male military members and veterans who received cognitive behavior therapy for combat-related trauma. They concluded no difference in the therapist-client relationships between inperson therapy and videoconferencing teletherapy (Morland et al., 2011). A similar study on veterans was conducted by Tuerk et al. (2010). Specifically, they utilized videoconferencing modality for prolonged exposure therapy for veterans suffering from PTSD and studied acceptance rates of teletherapy (Tuerk et al., 2010). The study

#### PARENTS PERCEPTION OF TELETHERAPY

concluded that teletherapy services have a high acceptance rate comparable to traditional therapy (Tuerk et al., 2010). Moreover, Ziemba et al. (2014) showed that overall treatment satisfaction with telehealth in veterans with PTSD was slightly higher than inperson therapy, indicating the advantages of telehealth in psychotherapy. Overall, telemental health services have proven effective in treating PTSD symptoms.

Psychotherapy through videoconferencing was also provided to U.S male inmates with mood and psychotic disorders and yielded results similar to traditional therapy in terms of client satisfaction, efficacy, and treatment duration (Morgan et al, 2004). Carlson et al. (2012) conducted a telehealth study on participants of a smoking cessation program and demonstrated the efficacy of telehealth in successfully helping participants quit. This shows that teletherapy continues to be a positive avenue for adults with mental health disorders.

In general studies on adults with depression and anxiety who have received teletherapy have yielded positive results. Osenbach (2013) conducted a study on adults suffering from depression and compared the efficacy of telehealth treatment vs. in-person treatment. The study concluded that there was no difference in efficacy between teletherapy and in-person therapy. Dwight-Johnson et al. (2011) utilized the phone to deliver CBT therapy to rural Latino adults suffering from depression and discovered that patients in the teletherapy group had greater improvement in depression scores than traditional therapy. Additionally, Lovell et al. (2006) discovered that the effectiveness of telephone delivered therapy for Obsessive Compulsive Disorder was found to be as effective as traditional therapy and reported high satisfaction scores for teletherapy. Several researchers' studies have indicated the benefits of utilizing teletherapy for adults with depression (Mohr et al., 2005; Mohr et al., 2008; Mohr et al., 2011; Mohr et al., 2012). Mohr et al (2008) and Mohr et al (2012) discovered that attrition rates for teletherapy were significantly lower than face-to-face therapy highlighting an important benefit of teletherapy.

Therapeutic alliance is an integral part of therapy and involves a therapeutic bond with agreement between client and therapist on treatment goals and in session tasks (Bordin, 1979; Horvath and Greenberg, 1989). Several studies have been conducted on developing a therapeutic alliance during a videoconferencing session and have yielded positive results (Germain et al., 2010; Bouchard et al., 2020; Watts et al., 2020). The results of these studies suggested that a strong therapeutic alliance can be established in teletherapy. Additionally, Peterson et al. (2020) conducted a survey on college students who were utilizing teletherapy services. Both the students and therapists had high ratings for ease of use and convenience indicating the practicality of utilizing teletherapy modalities (Petereson et al., 2020).

Telehealth modalities have also been used in a consultation role for providing parents with Applied Analysis Behavior (ABA) strategies to use to support their children with autism and other developmental disabilities (Bagaiolo et al., 2017; Lindgren et al., 2016; Peterson et al., 2017; Tomlinson, Gore, & McGill, 2018). In the study by Lindgren et al. (2016), the researchers compared data obtained through in-home therapy, clinicbased telehealth, and home-based telehealth. The results showed that all three were effective in reducing challenging behavior, but the cost was lowest for home-based telehealth (Lindgren et al., 2016). Peterson et al. (2017) and Tomlinson, Gore and McGill (2018) also showed the effectiveness of providing ABA services through a telehealth model. Bearss et al. (2018) used a satisfaction survey to assess the perceptions of parents of children with ASD receiving telehealth services. The survey yielded high satisfaction ratings (Bearss et al., 2018).

#### **Statement of the Problem**

There have been numerous studies conducted about the use and efficacy of telemental health for rural communities and veterans who do not have access to direct mental health services. In addition, studies have been conducted to examine the effectiveness and acceptability of telehealth among adults with various mental health challenges and parents supporting children with various developmental disorders. However, there is a significant gap in research about both effectiveness and perceptions of telemental health services for younger children.

With the increase in use of telehealth services and advances of virtual platforms for health-related services to the pediatric population, it has become increasingly important to conduct efficacy and perception studies with all populations receiving services. These studies will help provide guidance for clinicians and mental health professionals working with children and families. Additionally, studies on the perception of telemental health can shed light on how professionals can improve their services to cater to the needs of their clients. Telemental health is a cost-effective and practical alternative and can be a potentially beneficial tool (Langarizadeh et al., 2017) for providing mental health services to young children.

#### **Purpose of the Study**

Overall there have been some studies indicating the effectiveness and client satisfaction of telehealth services. These studies have included mostly veterans with

#### PARENTS PERCEPTION OF TELETHERAPY

PTSD, adults with mood issues and children with developmental disabilities. Given the clear paucity of research in the area of telehealth services with regard to children's services, there is a significant need to examine parent's experiences with mental health services delivered to their child virtually. The purpose of the present study was to collect and analyze satisfaction survey data for the parents and caregivers of children who had previously utilized face-to-face therapy and switched to using a virtual model for their child's mental health needs. A descriptive analysis of satisfaction data in the present study was used to provide additional evidence that telemental health services are both acceptable to patients and effective and thus, can become a norm and reach a subset of the population who may otherwise have difficulty accessing services. A satisfaction questionnaire was used to assess the parent/caregiver's satisfaction of face-to-face mental health services as well as telemental health services. The satisfaction survey was designed to highlight the advantages and disadvantages of the two different mental health services modalities. The benefit of such a study can provide insight into how to improve teletherapy services or what changes should be made to accommodate the clients' needs.

Many parents and caregivers utilized teletherapy during the COVID-19 pandemic and continue to utilize it now to meet their children's needs. With the addition and ease of teletherapy services, the burden can be lifted, and more children can acquire the services they need. However, the primary goal should be to provide a safe, trusting, and effective environment, which can be accomplished by learning more about teletherapy perceptions of children and their parents.

## **Research Questions and Hypotheses**

1. Is teletherapy as effective as traditional therapy for young children based on parental perception?

2. What are the parental perceptions about teletherapy in terms of ease of use, convenience, and practicality?

It was expected that parental perceptions of teletherapy would be positive, and parents would perceive teletherapy to be as effective as in-person therapy. Additionally, parents would rate teletherapy highly for convenience and practicality.

#### **CHAPTER 2: REVIEW OF THE LITERATURE**

#### What is Telehealth?

Telehealth has become increasingly popular during the COVID-19 pandemic. Langarizadeh et al. (2017) defined telehealth as a communication system that is used for distant health-related services. Several different telehealth modalities can be utilized, such as video conferencing platforms, telephone, email, and text (Langarizadeh et al., 2017). As stated by the New England Journal of Medicine (NEJM), telehealth services can be used for diagnosis and treatment purposes (Catalyst, 2018a). Patients in local smaller hospitals have the ability to connect with specialists through telehealth (Catalyst, 2018a). As reported by NEJM, using healthcare management apps and watching educational videos all fall under telehealth. These technologies are used to provide education and remote care to patients (Catalyst, 2018a).

The use of telehealth for mental health disorders has become increasingly popular in the last decade. According to research conducted in 2008, 80% of the US population received mental health information through the internet (Elkin, 2008). According to Langarizadeh et al. (2017), telemental health services are utilized for therapy, and for consultation. Reay, Looi, and Keightley (2020) define teletherapy as communication that occurs in real time through phone or video conferencing. During the COVID-19 pandemic, therapists and psychologists have been able to continue patient care (Carter, 2020). As concluded by Carter (2020), due to self-isolation and quarantine requirements, it has become more critical than before to continue to reach individuals experiencing mental health disorders. Telemental health services have increased and can be expanded to offer counseling services to families through public health systems (Carter, 2020). Additionally, telehealth services are cost-effective, especially in rural areas, where it can be difficult to access mental health and behavioral therapy services (Langarizadeh et al., 2017). Numerous studies have proven the efficacy of telemental health (Hilty et al., 2002; Langarizadeh et al., 2017; Tuerk et al., 2010). Patient satisfaction is high for telemental health services in addition to easy accessibility (Langarizadeh et al., 2017). Studies have been conducted on adults, veterans, and parent consultation related to behavioral therapy. However, there is a significant gap in the literature of perceptions of teletherapy for the pediatric population.

#### Efficacy of Teletherapy Use in Various Populations

#### **Teletherapy and Adults**

Germain et al. (2010) conducted a nonexperimental active group design study on adults between 18 and 65 years of age with a diagnosis of PTSD to study the development of therapeutic alliance in individuals with trauma. The study utilized the Working Alliance Inventory (WAI), Session Evaluation Questionnaire (SEQ), Distance Communication Comfort Scale (DCCS), Videoconferencing Telepresence Scale (VTS), and Videoconference Therapy Questionnaire (VT-Q) to study the effectiveness of videoconferencing in the development of a strong therapeutic relationship (Germain et al., 2010). Germain et al. (2010) recruited 46 participants between the ages of 18 and 65 years old. Based on the results, both groups had a significant decline in PTSD symptoms and severity and the therapeutic alliance was developed similarly (Germain et al., 2010). Germain et al. (2010) noted that initial discomfort with video conferencing and negative perceptions of teletherapy did not have a negative impact on therapeutic alliance. Additionally, Germain et al. (2010) found that patients who initially were resistant to therapy or didn't believe in therapy were able to develop a strong therapeutic alliance during teletherapy. In contrast, the client's attitude did have a negative impact on the therapeutic alliance during in-person sessions (Germain et al., 2010).

In 2013, Yuen et al. (2013) studied the effectiveness, ease of use, and acceptance of video conferencing teletherapy for adults with generalized social anxiety disorder (SAD). According to Yuen et al. (2013), videoconferencing teletherapy can be as effective as in-person therapy due to the real time visual component which can help the clinician observe the client's social skills and increase exposure. The study included 24 participants between the ages of 19 and 63 years of age and recruited via community and professional referrals. According to the researchers, participants were not allowed to engage in any other form of therapy for the duration of the study. Participants received weekly 1 hour therapy sessions for 12 weeks and each session consisted of exercises involving exposure through role-play (Yuen et al., 2013). According to Yuen et al. (2013), 95% of the participants were satisfied with the treatment and 91% of the participants no longer met the criteria for the DSM-IV diagnosis of social anxiety disorder (Yuen et al., 2013).

Yuen et al. (2013) also reported that participants indicated ease of treatment, communication, and exposure exercises as the most effective. Participants indicated technological disruptions such as sound quality as a drawback of teletherapy (Yuen et al., 2013). Yuen et al. (2013) highlighted the effectiveness and feasibility of the use of teletherapy in providing exposure therapy to adults with social anxiety. As stated by Yuen et al. (2013), the disadvantage of videoconferencing was the limitation of exposure exercises and reported that participants were not able to participate in in-session exposure exercises such as meeting on the street. In-person therapy does offer the ability to implement live exposure exercises with therapeutic coaching in a real life setting.

Recently videoconferencing telehealth technology has been utilized in adults with a DSM-IV diagnosis of Panic Disorder and Agoraphobia (PDA) and in Adults with Generalized Anxiety Disorder (GAD). Several studies have highlighted the versatility of telehealth modalities in treating various mental health disorders (Bouchard et al., 2020, Watts et al., 2020). Bouchard et al. (2020) utilized the Working Alliance Inventory (WAI), California Psychotherapy Alliance Scale (CALPAS), and The Client Motivation for Therapy Scale to study the difference between face-to-face therapy and videoconferencing. The alliance measures were conducted at the beginning of the treatment, after the first third of the treatment, and at the end of the treatment (Bouchard et al., 2020). Participants received 12 weekly CBT sessions for 60 minutes (Bouchard et al., 2020). Bouchard et al. (2020) concluded that videoconferencing doesn't negatively impact the therapeutic alliance, and the treatment delivered through videoconferencing was as effective as in-person therapy post-treatment and at follow-up. For both conditions, the treatment was effective at post-treatment and continued to be effective at follow-up based on measures of panic disorder, and depression (Bouchard et al., 2020). Bouchard et al. (2020) also pointed out that teletherapy motivation was higher than traditional therapy, which could be due to the ongoing pandemic and the comfort of receiving treatment in the home setting.

Watts et al. (2020) also used the working alliance inventory (WAI) to assess cognitive behavioral therapy's effectiveness for Generalized Anxiety Disorder (GAD). The study consisted of 115 participants with 50 assigned to teletherapy and 65 assigned to face-to-face therapy (Watts et al. 2020). Their conclusions were similar to the PDA study about the efficacy of telehealth and that the use of videoconferencing does not hinder the therapeutic alliance (Bouchard et al., 2020; Watts et al., 2020). Additionally, Watts et al. (2020) noted that from the perspective of clients suffering from GAD, the therapeutic alliance was stronger for the teletherapy group.

#### **Teletherapy and Veterans**

Teletherapy has been widely used in the Veteran population for PTSD, depression, and any other trauma-related disorders (Fortney et al., 2015; Tuerk et al., 2010). According to Fortney et al. (2015), at least half a million veterans in the veterans' health care system had a diagnosis of PTSD. Many veterans cannot access mental health services due to geographical barriers and many are stigmatized for their mental health challenges which can serve as a barrier to seeking treatment (Fortney et al., 2015; Tuerk et al., 2010). With the use of telehealth modalities such as videoconferencing, these barriers can be mitigated, and veterans can be provided with mental health services.

Morland et al. (2004) conducted a pilot study on 20 U.S male veterans using videoconferencing technology and face-to-face therapy to study PTSD coping skills. The goal was to compare the two conditions in terms of client satisfaction, therapist satisfaction, and retention of information (Morland et al., 2004). It was concluded by Morland et al. (2004) that the retention of information was similar for both videoconferencing therapy and face-to-face therapy. Morland et al. (2004) used custom clinical and client satisfaction questionnaires, and the results showed that there were no statistically significant differences in patient satisfaction and clinician satisfaction (Morland et al., 2004). Additionally, the retention rate was 89% for the videoconferencing group and 50% for the in-person group indicating the feasibility and convenience of teletherapy (Moreland et al., 2004).

Tuerk et al. (2010) used a nonexperimental active control group design to study the effectiveness of prolonged exposure (PE) therapy for PTSD using videoconferencing technology. The veterans in the study were responsive and accepting of telehealth and consisted of 47 participants; 67% were white males, 34% were black males and only 6% were females (Tuerk et al., 2010). Of the 47 participants, 35 received PE in-person and 12 received PE via videoconferencing (Tuerk et al., 2010). The participants received weekly 90-minute PE sessions from anywhere between 9 to 15 weeks by a clinical psychologist and received video-conferencing or in-person sessions (Tuerk et al., 2010). Tuerk et al. (2010) collected data every 2 weeks about feasibility, technical challenges, patient safety, treatment outcome, and PTSD and depression symptoms. According to Tuerk et al. (2010), there were technological challenges such as pixelated videos and equipment errors which resulted in brief disruptions of session. However, Tuerk et al. (2010) noted that these challenges did not have an impact on communication or services provided. The results of the study indicated statistically significant differences in PTSD symptoms and depression for veterans receiving teletherapy. Tuerk et al. (2010) stated that many rural veterans who have PTSD refuse to travel long distances due to recurring trauma associated with explosive devices. Therefore, telehealth can serve as an effective way of providing these veterans with mental health services. It can also ease the PTSD symptoms associated with being in a hospital setting or around a large crowd.

14

Fortney et al. (2015) conducted a study on the efficacy of telemental health in veterans diagnosed with PTSD. The researchers recruited 265 patients with severe symptoms of PTSD related to combat and randomly assigned them to the in-person group vs. the teletherapy group (Fortney et al., 2015). Based on the results, at 6 months followup patients in the teletherapy group reported a mean of 5.3 decrease in PTSD symptoms whereas the traditional therapy group reported a mean of 1.07 decrease in symptoms (Fortney et al., 2015). As reported by Fortney et al. (2015), at 12 months follow up the teletherapy group reported a mean of 4.17 decrease in symptoms and the traditional therapy group reported a mean of 1.32 decrease indicating that teletherapy is more effective in reducing symptoms of PTSD and other comorbidities. The authors indicated that the biggest advantage of teletherapy was easy access and routine engagement (Fortney et al., 2015). Fortney et al. (2015) also reported that the distance to the VA center contributed to the poor engagement for in-person sessions and reported that veterans were 8 times more likely to complete at least 8 sessions through teletherapy and 18 times more likely to initiate a session. One disadvantage of the study was that Fortney et al. (2015) administered the PTSD scale virtually and it is not standardized to be administered virtually.

According to Ziemba et al. (2014), patient satisfaction scores were higher for teletherapy as compared to in-person therapy among veterans with PTSD. Ziemba et al. (2014) recruited veterans with a diagnosis of PTSD to compare the two modalities. The participants were assigned randomly to the teletherapy group and the in-person group and received 10 weekly sessions of CBT (Ziemba et al., 2014). Ziemba et al. (2014) collected preintervention and postintervention symptoms data and administered a patient satisfaction survey after the last session. The data showed that there was a reduction in symptoms of PTSD such as depression and anxiety in both the teletherapy group and the in-person group. However, there was a greater reduction in symptoms in the teletherapy group. Additionally, the patient satisfaction scores were higher for the teletherapy group (Ziemba et al., 2014). As reported by Ziemba et al. (2014), the overall patient satisfaction score for teletherapy was 98.1 and 92.1 for in-person sessions. Through their study, Ziemba et al. (2014) were able to highlight both the effectiveness and acceptance of CBT administered through teletherapy.

Acierno et al. (2016), conducted a comparison study of telehealth vs. in-person services for behavioral activation and exposure therapy in veterans diagnosed with PTSD. The authors randomly selected 232 participants, majority of whom were married males with a mean age of 45. The participants were randomly assigned to the teletherapy group or in person group and received weekly eight 1.5-hour sessions; data was collected at baseline, 1 week after treatment in addition to a 3 and 12 months follow-up (Acierno et al., 2016). A clinician administered PTSD scale (CAPS), PTSD checklist military (PCL-M), and a Beck Depression Inventory (BDI-II) were utilized by Acierno et al. (2016) to assess participants. Acierno et al. (2016) concluded no significant differences between teletherapy and in person services in terms of effectiveness. There was no statistically significant difference between the PCL-M scores and the BDI-II scores post-treatment, 3 months or 12 months follow-up for veterans receiving services through teletherapy or inperson (Acierno et al., 2016). Some of the disadvantages of teletherapy as highlighted by Acierno et al. (2016) were lack of privacy and lack of a reliable internet connection. However, these two things didn't impact the attrition rate and both teletherapy and in person therapy had a comparable attrition rate (Acierno et al., 2016).

Morland et al. in 2010 and Morland et al. in 2011 conducted randomized controlled trials (RCT) with veterans living in rural areas to assess if there is a difference in participants ratings of satisfaction, attrition, and therapeutic alliance between teletherapy and traditional in-person therapy. Since RCT studies are able to randomize the population, it can provide a stronger argument for teletherapy (Morland et al., 2010). Specifically, Morland et al. (2010) utilized cognitive behavioral techniques for anger management secondary to PTSD in male veterans through video conferencing and through in-person therapy. The study aimed to measure attrition rates, treatment adherence and expectancy, therapeutic alliance and patient satisfaction (Morland et al., 2010). The researchers also studied the impact that technical issues related to technology had on treatment and discovered that it didn't impact client satisfaction (Morland et al., 2010). At the conclusion of the study, there were no statistically significant differences between anger scores. Both the in-person group and the teletherapy group showed similar improvements (Morland et al., 2010). Morland et al. (2010) noted that there were no statistically significant differences between the groups on attendance and attrition. However, participants rated the in-person sessions higher for overall therapeutic alliance (Morland et al., 2010).

Morland et al. (2011) conducted another study on using cognitive behavior therapy for veterans suffering from PTSD. The aim of this study was to compare the differences between videoconferencing and in-person for group therapy (Morland et al., 2011). It was concluded by Morland et al. (2011) that there were no statistically significant differences between attrition, attendance, satisfaction, and therapeutic alliance between the two conditions. Perhaps, this was due to the group therapy component of this study vs. the one conducted in 2010 (Morland et al., 2011). Regardless, these studies highlight the advantages of teletherapy specifically in reaching a diverse group of rural veterans.

Egede et al. (2015) also utilized RCT to study the effectiveness of delivering behavioral activation therapy through telehealth in veterans diagnosed with major depressive disorder. The outcome studied was the response to treatment using the Geriatric Depression Scale (GDS) and the Beck Depression Inventory (BDI) (Egede et al., 2015). The study results revealed no statistically significant differences in BDI scores and response to treatment for the teletherapy and in-person groups (Egede et al., 2015). Egede et al. (2015) concluded that telepsychotherapy is as effective as in-person therapy and can be utilized to overcome geographical barriers that prevent older adults from seeking treatment.

#### **Teletherapy and Families**

Telehealth is a low-cost medium for training parents to use Applied Behavior Analysis (ABA) in treating challenging behavior in children with ASD (Fisher et al., 2020; Lindgren et al., 2016, Peterson et al., 2017). Lindgren et al. (2016) compared data obtained through in-home therapy, clinic-based telehealth, and home-based telehealth for 107 children diagnosed with ASD or other developmental disability (DD) between the ages of 21 months to 84 months. Each training session was 60 minutes long for approximately 25 weeks (Lindgren et al., 2016). According to Lindgren et al. (2016), in all three settings, parents were taught to conduct functional analysis (FA) and functional communication training (FCT) by trained behavior analysts. The results showed that all three were effective in reducing challenging behavior, but the cost was lowest for homebased telehealth (Lindgren et al., 2016). Additionally, Lindgren et al. (2016) noted that the reduction in challenging behavior was slightly greater for the in-home settings due to generalization of behavior. This is an important study for parents with children diagnosed with ASD. Sometimes, it can be difficult for the parent to take their child to a center or make time for an in-home analyst to come. By utilizing teletherapy, parents can access services that can be difficult to access in-person.

Comer et al. (2017) conducted an RCT study with 40 children between the ages of 3-5 years old with disruptive behavior disorders (DBD). The study's goal was to examine if video conferencing telehealth, specifically internet-delivered parent-child interaction training (PCIT) can effectively deliver behavioral training to parents. Parents were given questionnaires evaluating child diagnostic outcomes, symptoms, barriers to treatment, and treatment satisfaction. Children were randomly assigned to the teletherapy group or the in-person group (Comer et al., 2017). Comer et al. (2017) showed that parents of 70% of the children reported improvement in disorders, and at a 6-month follow-up, 55% continued to show improvement and at 6-months follow-up 50% of the children in the teletherapy group didn't meet the criteria for DBD. Based on Comer et al. (2017) results, treatment satisfaction was high for both groups and parents reported fewer barriers to treatment for the teletherapy group. The study results indicated that telehealth is beneficial in a consultative role and can be utilized to provide parents the resources required to facilitate their children (Comer et al., 2017).

Wade et al. (2020) used rating scales to provide support for parental preference for teletherapy interventions in the pediatric neurological population. Wade et al. (2020) did not address the difference in perception of telepsychotherapy and face-to-face treatment. However, the Wade et al. (2020) stated that teletherapy is feasible and effective in serving a supportive role for parents struggling with acquiring interventions for their children during the COVID-19 pandemic. Additionally, with the implementation of broader telehealth services, the parental burden is reduced both physically and financially (Wade et al., 2020).

#### **Perceptions of Telehealth**

While there have been studies examining the efficacy of telehealth with various treatment populations (e.g., veterans and families), several studies have focused only on client perceptions of telehealth services. For example, Bearss et al. (2018) conducted a survey on rural families of children with Autism Spectrum Disorder (ASD) receiving services through a telehealth training program called Research Unit on Behavioral Interventions- Parent Training (RUBI-PT). The researchers used a 20-item Parent Satisfaction Questionnaire, a 14-item Telehealth Caregiver Satisfaction Survey, and a Telehealth Provider Satisfaction Survey, which was developed by Bearss et al. (2017) for the study. The telehealth satisfaction surveys utilized a 5-point Likert scale. Results from the surveys indicated that the caregivers were satisfied with the telehealth interventions with high rates of engagement and satisfaction (Bearss et al., 2017). However, the small sample size and the fact that the parents' and therapists' ratings of behavior changes were not blinded is a significant limitation (Bearss et al., 2017). Bearss et al. (2017) also stated

the families were paid for participating in the session, which can impact generalizing the data to parents who must pay to receive services.

In 2017, a study was conducted in Jordan on the perceptions of online counseling in university students (Tannous, 2017). Tannous (2017) aimed to study how 210 undergraduate and graduate students perceived online counseling and whether it is a preferred method. According to the results, 72.3% of the participants believed that online counseling is better than in-person counseling and 83.6% of the participants felt more comfortable with online counseling (Tannous, 2017). Tannous (2017) also reported that 85% preferred online counseling over in-person due to ease of use and accessibility, and 75.5% preferred online counseling due to time constraints. According to Tannous (2017), stigma plays an important role in why the university students preferred online counseling. Despite the cultural stigma associated with therapy, teletherapy can be an effective and easy way to receive treatment for mental health. The results from Tannous (2017) indicate the positive attitudes toward teletherapy and indicate that it can be an effective way to gain access to mental health resources.

Peterson et al. (2020) conducted a survey study on college students receiving mental health services through telehealth, and therapists utilize telehealth modalities. A survey was designed explicitly for the study that used a 3-point Likert scale, and clients and therapists were asked questions about interactions, comfort level, perceived advantage of teletherapy, and preference for teletherapy modality (Peterson et al., 2020). The results showed that clients and therapists perceive telehealth as less effective than face-to-face therapy despite other studies indicating the effectiveness of teletherapy (Bouchard et al., 2020; Peterson et al., 2020; Watts et al., 2020). Clients did rate teletherapy higher for ease of use and convenience, and the therapist expressed interest in using email to assist in treatment (Peterson et al., 2019). However, this study is limited to the college student population and cannot be generalized to the pediatric population. With the increase in technology use and distance learning by children in K-12, it has become more pressing to view perceptions of providing telemental health services to young children.

While the efficacy of telemental health generally has been supported through research for groups such as veterans, older adults, and parent consultation, there is still a significant gap in research concerning the perceptions of parents with children receiving telemental health services including due to the COVID-19 pandemic. In order to understand how to improve teletherapy services, it is imperative to gather data on the viewpoints of children and their caregivers on this modality.

#### **CHAPTER 3: METHOD**

#### **Participants**

The participants in this study were parents, guardians, and caregivers of children between the ages of 2-18 who had received both teletherapy and in-person therapy in community outpatient settings and private practices across the US metro area. The number of participants was 206, as shown in Table 1. The duplicate responses were deleted from the data collected. For the purpose of this study, teletherapy includes videoconferencing only and not telephone calls.

#### Measures

Due to the lack of a standardized measure for understanding perceptions and preferences of teletherapy, a questionnaire was designed explicitly for this study. There were two parts to the questionnaire. The first part consisted of demographic questions such as race, gender, and relationship. It also included a referral question, the teletherapy platform used, and the number of sessions. The second part of the questionnaire utilized a Likert scale (strongly agree, agree, neutral, disagree, strongly disagree) to answer several questions about teletherapy. It also included questions about the advantages and disadvantages of teletherapy vs. in-person therapy. Participants were asked about their comfort and concerns with using teletherapy modalities. Specifically, there were questions about teletherapy's advantages, such as ease of use, efficiency, and feasibility. The survey also included a question about the overall preference for treatment. Descriptive statistics were used to analyze the responses and percentages for each question of the survey were calculated.

#### Procedures

Participants were recruited via community mental health email listservs, through organizations that have utilized teletherapy services, and through social media, specifically Facebook. The survey was also posted in local mental health groups for parents of children seeking mental health treatment. The survey was open for respondents from April 2022 to August 2022. All participants were given a link to the study and provided consent on the survey. The email included a brief explanation of the study, informed consent, and a link to the survey. As an incentive for participants were eligible to receive a gift card. The responses were anonymous, and the participants were asked to include their email only if they wanted to qualify for the gift card. The email addresses were only used for eligibility for the gift card, and no identifiable information was included in the survey results. The winners of the \$25 Amazon gift cards were selected in January 2023 and received their gift card in February 2023.

#### **CHAPTER 4: RESULTS**

#### **Data Analysis**

The demographic characteristics of the sample are listed in Table 1. It can be observed that 91% of the survey respondents were parents, and the remainder were other caregivers who did not specify their relationship to the children. In terms of the children, 62.23% were males, and 28.19% were females. Additionally, the parents reported that 24.75% of the children were between the ages of 1-5, 49.51% were between the ages of 6-10, 16.02% were between the ages of 11-15, and only 0.97% were between the ages of 16-18.

#### Table 1

#### Distribution of the Study Participants

Demographic Variables	Percentage	
Relationship to the child	Parent (mother or father)	91%
	Unknown/not reported	8.70%
Gender of the child	Male	62.23%
	Female	28.19%
	Unknown/not reported	9.57%
Age of the child	Ages 1-5	24.75%
	Ages 6-10	49.51%
	Ages 11-15	16.02%
	Ages 16-18	0.97%

	Unknown/not reported	8.73%
Race/Ethnicity	American Indian	0.97%
	Asian	5.33%
	Black or African American	5.33%
	Hispanic	5.33%
	White	70.87%
	Unknown/not reported	12.13%

Participant answers about the length of therapy for their child or children were examined below for therapy sessions conducted both in person and via telehealth. Based on the data collected, the majority of respondents who had received in-person therapy (47.03%) reported attending therapy for 3-5 sessions. This was followed by 31.68% of the participants attending 5-10 sessions, 12.87% attending 1-2 sessions, and 10.98% attending more than 10 sessions. For the teletherapy services, the majority of respondents reported also having 3-5 sessions (39.41%), followed by 5-10 sessions (34.98%) and then >10 sessions (14.29%). The least number of sessions attended were 1-2 sessions as listed in Table 2.

#### Table 2

Length of Services

# of sessions	% of participants In-person	% of participants Teletherapy	
1-2 sessions	12.87%	13.30%	
3-5 sessions	47.03%	39.41%	

#### PARENTS PERCEPTION OF TELETHERAPY

5-10 sessions	31.68%	34.98%	
>10 sessions	10.89%	14.29%	

Respondents were asked about the referral issues which led them to seek treatment for their child/children, and the majority of the children were referred for depression (43.35%), followed by anxiety (41.38%), and 31.35% of the treatment referral was a developmental disorder such as Autism Spectrum Disorder (ASD). For 20.20% of the participants, the treatment was for trauma, 20.69% for attention issues, 12.81% for disruptive/aggressive behaviors, and 26.11% for family-related challenges. It is important to note that more than half of the participants were referred for mood disorders such as depression followed by anxiety.

#### Table 3

Treatment Referral	Percentage	
Anxiety	41.38%	
Depression	43.35%	
Developmental Disorder/Autism Spectrum Disorder (ASD)	31.35%	
Trauma (Coping with loss)	20.20%	
Attention	20.69%	
Disruptive/Aggressive Behaviors	12.81%	
Family Issues	26.11%	
Other	1.97%	

#### Treatment Referral Concern

Participants were also asked about the teletherapy platform that was utilized during therapy sessions. More than half of the participants (66.34%) selected "google meets", 35.65% utilized "zoom," and 13.37% utilized "blue jeans". Other participants also indicated using "doxy.me" and "Vsee" as teletherapy platforms. When asked about the ease of telehealth platforms, the majority (88.12%) of the participants reported being able to speak easily to the clinician during a teletherapy visit with 32.67% strongly agreeing and 55.45% of the participants agreeing to the statement. When asked about being able to speak easily to a clinician, 9.41% of the participants were neutral and only 2.48% reported having difficulty being able to speak to the clinician during a teletherapy session easily.

Participants were also asked if their child could hear the clinician clearly during teletherapy and the majority seemed to indicate that they could, with 43.56% indicating that they strongly agreed, and 48.02% agreed with this statement. In response to the statement that their child could hear the clinician easily, 7.43% of the participants were neutral, and only 0.99% reported being unable to hear the clinician clearly. Participants were also asked about video quality and how well the child could see the clinician. The majority (92.11%) of the parents reported that their child could see the clinician during teletherapy as well as they could during an in-person session, with only 1.48% of respondents reporting that their child could not see the clinician properly. This information is outlined in Table 4.

When asked about the ease of use of the platform, the majority (90.15%) of the parents reported that the teletherapy platform used by the clinician was simple and easy to use. However, it is essential to note that 78.33% of the survey respondents indicated

that they experienced technical difficulties during a recent teletherapy session. Table 5

provides these results.

## Table 4

## Methods of Communication for Teletherapy

Platform used	Percentage of participants
Google Meet	66.34%
Zoom	35.64%
Blue Jeans	13.37%
Other (Doxy.me, VSee)	1.98%

#### Table 5

## Technological Challenges in Teletherapy

Question		Percentage of Participants			
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
My child was able to easily speak to the clinician during the teletherapy visit.	32.67%	55.45%	9.41%	2.58%	0%
My child could hear the clinician clearly during the teletherapy session.	43.56%	48.02%	7.43%	0.99%	0%
During the teletherapy session, my child could see the clinician as well as during an in-person session.	44.33%	47.78%	6.40%	1.48%	0%
Teletherapy platform used by my child's clinician was simple and easy to use.	38.92%	51.23%	7.88%	1.48%	0.49%
During the most recent teletherapy experience, there were many technical difficulties.	36.95%	41.38%	10.34%	8.87%	2.46%

Parents were also asked several questions about teletherapy's advantages, such as ease of use and convenience. The majority seemed to endorse that it saves time: according to the data, 32.51% of the parents strongly believe that teletherapy saves travel time, and 58.62% agree that teletherapy saves time. Whereas only 1.97% of the parents disagreed with the statement that teletherapy saves travel time. Six point nine percent (6.90%) of the parents neither agree nor disagree with the statement that teletherapy saves travel time. Parents were also asked about the ease of access when using teletherapy services. The majority of the parents (54.68%) agreed that teletherapy improves their child's access to telehealth services, and 36.95% strongly agreed. About thirteen parents were neutral, and only four indicated that they disagreed. See Table 6 for these specifics.

#### Table 6

Question	Percentage of Participants				
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I believe teletherapy saves travel time.	32.51%	58.62%	6.90%	0.49%	1.48%
I believe teletherapy improves my child's access to mental health services.	36.95%	54.68%	6.40%	1.97%	0%

#### Advantages of Teletherapy

Participants were asked several questions related to the disadvantages of teletherapy. When asked if their child was easily distracted during teletherapy sessions, 48.76% of the parents reported that their child was easily distracted with 33.33% of the participants strongly agreeing while 11.94% were neutral. Only 4.98% of the parents

disagreed that their child was distracted, and only 1% strongly disagreed. Additionally, parents were asked about the therapeutic relationship in telehealth versus in-person therapy. The majority of parents (47.03%) agreed with the statement that their child was able to develop a stronger connection with the therapist during in-person sessions, and 37.13% of the parents strongly agreed with this statement. About 12.87% of the parents didn't believe there was a difference in therapeutic alliance between in-person and teletherapy sessions. Only 2.97% of the participants disagreed with the statement that developing a therapeutic relationship is better during in-person sessions. Table 7 displays the disadvantages of teletherapy that were just discussed.

#### Table 7

Question		Per			
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
My child was easily distracted during teletherapy sessions.	33.33%	48.76%	11.94%	4.98%	1%
My child was able to develop a stronger connection to the therapist during in-person sessions compared to teletherapy sessions.	37.13%	47.03%	12.87%	2.97%	0%

#### Disadvantages of Teletherapy

Lastly, parents were asked several questions about their preferences and perceptions of teletherapy vs. in-person sessions. As noted in Table 8, the results indicated that the majority (87.06%) of the participants believed teletherapy is as effective as in-person therapy. Of this majority, 39.30% of the participants strongly agreed that teletherapy is as effective as in-person therapy, and 47.76% agreed. Eight

point four six percent (8.46%) of the participants were neutral, and 3.98% disagreed with the statement that teletherapy is as effective as in person, whereas only 0.50% strongly disagreed. Most participants also felt comfortable using teletherapy to meet their child's mental health needs, with 45.54% strongly agreeing and 42.57% agreeing. Only 2.97% disagreed that teletherapy meets their child's mental health needs, and 0.99% strongly disagreed.

Additionally, 87.69% of the participants reported that they would recommend teletherapy to other families and parents, 4.93% reported that they wouldn't recommend it, and 7.39% remained neutral. However, when asked if parents prefer in-person therapy for their child, the vast majority (78.33%) agreed; 50.74% agreed, and 27.59% strongly agreed. Based on the data collected, 6.90% disagreed that they prefer in-person therapy for their child and 2.46% strongly disagreed, whereas 12.32% were neutral.

## Table 8

Question	Percentage of Participants				
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I believe teletherapy is as effective as in-person therapy	39.30%	47.76%	8.46%	3.98%	0.50%
I feel comfortable using teletherapy for my child's mental health needs.	45.54%	42.57%	7.92%	2.97%	0.99%
I would recommend teletherapy to other parents and families.	31.53%	56.16%	7.39%	3.94%	0.99%
My child was able to develop a stronger connection with the therapist during in-person	37.13%	47.03%	12.87%	2.97%	0%

# In-person vs. Teletherapy

sessions compared to teletherapy.

I prefer in-person therapy for my	27.59%	50.74%	12.32%	6.90%	2.46%
child.					

#### **CHAPTER 5: DISCUSSION**

### **Interpretation and Implications**

While previous studies related to the effectiveness and client satisfaction with teletherapy have yielded positive results, the majority of studies have included veterans, adults with various mental health challenges and training parents to support their children with developmental disabilities (Acierno et al., 2016; Bearss et al., 2018; Comer et al., 2017; Fortney et al., 2015; Germain et al., 2010; Morland et al., 2004; Morland et al., 2010; Ziemba et al., 2014). This study provided data to show the perceived effectiveness of teletherapy in children and to highlight advantages and disadvantages of teletherapy. Based on the findings, there is support for the hypothesis that parents find teletherapy to be as effective as in-person therapy for young children. The results show that the majority (approximately 87%) of the parents agreed that the effectiveness of teletherapy matched that of in-person therapy. Whereas only 3.98% disagreed and 0.50% strongly disagreed that the effectiveness was equal between teletherapy and in-person. Additionally, 88.11% of the parents felt they could use teletherapy for their children.

A recent study conducted in the Philippines about parent and therapist perspectives on teletherapy had similar findings (Eguia & Capio, 2022). Eguia and Capio (2022) used a satisfaction survey to assess communication, technology, and overall delivery for teletherapy and the study results indicated that parents reported high satisfaction with teletherapy. Specifically, the study results indicated that most parents felt that their children's needs were addressed through teletherapy when compared to inperson sessions (Eguia & Capio, 2022). Parents of children with a greater number of teletherapy sessions were more satisfied showing that more exposure to teletherapy can increase satisfaction and it may take clients a few sessions to become comfortable (Equia & Capio, 2022).

Another survey study by Meininger et al. (2022) assessed the satisfaction of teletherapy and also reported that parents expressed high treatment satisfaction. The survey was completed by parents of 277 children and assessed treatment satisfaction, technology concerns, and whether the parents would continue to use teletherapy after the pandemic. The study results revealed that 82% of the parents were satisfied with teletherapy and reported a high intention of using teletherapy for future care. In addition, parents reported that receiving teletherapy versus in-person sessions didn't negatively impact the therapeutic relationship. Approximately 87% of the participants felt that teletherapy helped meet their child's needs and would recommend it to others (Meininger at al, 2022). The studies by Eguia and Capio (2022) and Meininger et al. (2022) found similar results compared to this study highlighting parent's perceived effectiveness for teletherapy in providing care to youth and young children. For example Meininger et al. (2022) found that the majority of parents would continue to use teletherapy and Equia and Capio (2022) discovered that the flexibility of clinicians during teletherapy to be beneficial and indicative of continued use.

As teletherapy is becoming increasingly popular, studies similar to the present study can provide concrete data about the benefits of technology applied to the delivery of mental health services. Through telehealth, therapeutic services can be accessed anywhere and at any time. With many young children participating in extracurricular activities, weekly therapy appointments can be challenging to fit into the schedule. In the current study, parents rated teletherapy high for ease of use and convenience, with 32.51% agreeing strongly and 58.62% agreeing with the statement that teletherapy saves travel time. Additionally, 91.63% of parents agreed that teletherapy improves their child's access to mental health services. This data supports earlier perception studies signifying that participants often perceive teletherapy as more favorable in terms of distance and convenience (Peterson et al., 2020; Tannous, 2017). For example, Sikka (2022) found that parents considered teletherapy more convenient, cost-efficient, and just as satisfactory as in-person sessions. Specifically, 90% of the parents indicated that teletherapy was cost-efficient, 92% reported an improvement in their child's symptoms, and 96% reported that it was convenient and easy to use (Sikka, 2022.)

These results align with the current study hypothesis that parents will rate teletherapy high for convenience and practicality, also indicating that teletherapy is considered easily accessible and can help reduce the shortage of mental health care needs. Hourigan et al. (2019) reported that teletherapy allowed fewer missed sessions than inperson therapy. Parents often avoid treatment due to scheduling conflicts and transportation issues. With the use of a teletherapy platform, this can be mitigated and provide mental health resources for children and adolescents.

Johnsson and Bulkley (2021) discovered that some parents viewed teletherapy to be more engaging and comforting and this was especially true for clients that were anxious about receiving therapy. Additionally, clinicians received positive feedback about the results of teletherapy sessions and 82% of the clients expressed the wish to continue using teletherapy (Johnsson & Bulkley, 2021). MacEvilly and Brosnan (2022) described teletherapy modality as a low cost and efficient way to continue providing care in remote areas and for families that may be unable to utilize in-person services. Additionally, teletherapy is beneficial for equitable access and safety for individuals that are cautious about COVID or are at a high risk for negative COVID outcomes in addition to individuals with disabilities. Shah et al. (2022) reported that from March 2020 to February 2021, the number of telehealth visits among underrepresented minority groups, individuals above the age of sixty-five, and Medicare and Medicaid patients increased significantly suggesting telehealth can improve barriers associated with in-person services. The encounter data was collected from January 2019 to February 2020 and then compared to March 2020 to February 2021 (Shah et al., 2022). The authors noted that there was a 15.2% increase in visits for Hispanic patients, 19% increase in visits from African American patients, and 6.8% increase in visits from Caucasian patients (Shah et al., 2022). This provides evidence for telehealth being a feasible and equitable option for accessing care.

Several teletherapy disadvantages were revealed from the data collected in this study, specifically in terms of technical difficulties, with 78.33% of respondents reporting this issue. Most respondents reported that their child could speak, hear, and see the clinician well. However, 78.33% of the parents reported that during a recent teletherapy session, there were many technical difficulties. Perhaps the technical difficulties were not significant and did not interfere with the effectiveness of the sessions.

Technical difficulties were also reported in a study conducted by Wooton et al. (2020). Wooton et al. (2020) discovered that while teletherapy is promising, technical challenges need to be addressed before it can be implemented with fidelity. It was conducted on 50 adults and based on 500 video conferencing sessions and some of the challenges discovered were finding the right platform, connection issues, managing patient expectations, incompatible devices, poor internet connection, and difficulties with video access (Wooton et al., 2020).

Additionally, Burgoyne and Cohn (2020) discovered that sound-related technical difficulties impact the therapeutic alliance and make it difficult for the therapist to ascertain the client's well-being. Burgoyne and Cohn (2020) noted that verbal feedback can be impacted by certain video conferencing platforms such as Zoom which amplifies the speaker therefore creating a communication barrier and negatively affecting the therapeutic alliance. Similarly, Lin et al. (2021) discovered that early career pre-licensed clinicians using teletherapy had higher client attrition rates and experienced significant challenges with creating a strong therapeutic relationship. However, for licensed clinicians, there was no difference in attrition rates between in-person and teletherapy (Lin et al., 2021). Perhaps, the more experienced clinicians are accustomed to high stress situations and possess the skills necessary to help their clients adapt to a high stress situation.

There are ways to mitigate the challenges associated with teletherapy in order to create a strong therapeutic relationship. McCord et al. (2022) suggested specialized training to help clinicians navigate the differences between teletherapy and in-person therapy. This may be especially true for pre-licensed clinicians who according to Lin et al. (2021) need support with translating their training to teletherapy. It will also be important to consider focusing on the therapeutic alliance by making sure that clients feel safe and supported, establish confidentiality, and become culturally competent (McCord et al., 2022).

Several authors have offered ways to overcome the technical difficulties associated with teletherapy ("Preparing for a virtual visit", 2022; Wooton et al., 2020). For example, Wooton et al. (2020) offered some general recommendations for technology-related challenges. It was suggested that clinicians conduct mock sessions and have extensive troubleshooting knowledge before initiating the first session (Wooton et al., 2020). Wooton et al. (2020) also suggested that clients should be coached and prepared for technological challenges, and explicitly have a plan in place in case they are disconnected, such as a backup device or platform. It is also essential to go over initial expectations and help the clients understand that teletherapy is different from in-person therapy (Wooton et al., 2020). Additionally, Wooton et al. (2020) indicated that clinicians should prepare their clients for handling technical difficulties by emphasizing the importance and need of a test call and a stable internet connection. Clients may have anxiety over recurring technical issues; therefore, a follow-up before and after a session is the key to fostering a positive connection and strengthening the therapeutic alliance (Wooton et al, 2020).

Furthermore, there are additional ways to mitigate technology-based concerns during teletherapy visits. The United States Government has a website dedicated to telehealth stating the importance of testing the technology platform before a new visit. Therefore, if there are concerns the clinician can help address them prior to a session ("Preparing for a virtual visit", 2022). The US Department of Health and Human Services (HHS) ("Preparing for virtual visit", 2022) also lists basic troubleshooting tips to teach clients such as restarting the device, checking the internet connection, closing all background applications, upgrading the internet browser, connecting with a different device, and keeping the number for the clinician on hand to get assistance ("Preparing for a virtual visit, 2022).

Lastly, the data from the current study highlights another disadvantage of teletherapy related to distractions and attentional challenges. Specifically, 82.09% of the participants reported that their child was easily distracted during a session, and 84.16% believe that in-person sessions yield a stronger therapeutic alliance. Similarly, Burgoyne and Cohn (2020) stated that the child's attention and concentration abilities were disadvantages reported by clinicians and parents (Burgoyne & Cohn, 2020). Specifically, Burgoyne and Cohn (2020) pointed out that clinicians may have to alter their treatment plan or develop a more potent therapeutic alliance in order for teletherapy to be effective for children that experience attentional challenges.

In terms of mitigating attentional challenges, Baker et al. (2023) suggested that the clinician and parents may need to anticipate it and work together to create an environment that limits these challenges. There are several ways to increase a child's attention span similar to an in-person interaction. Children should be given choices, offered to work in short intervals with positive rewards, and offered activities that are engaging (Baker et al., 2023). Additionally, Wilhelm (2020) recommends offering an increased number of instructions and verbalizing more and exaggerating facial expressions or nonverbal cues.

Overall, it appears that while teletherapy is a satisfactory means of delivery, specific technology-related challenges, attention and concentration issues need to be addressed before it can become mainstream. Despite these struggles and challenges, many parents reported that they perceived teletherapy to be feasible, convenient, and effective and will continue to utilize the services. Even though service delivery is not impacted as significantly by the COVID-19 pandemic as it was in the first year or so of the pandemic's arrival, teletherapy will continue to remain an avenue to receive mental health services. Perhaps, teletherapy is difficult for a certain population of children such as those with ADHD or other behavioral disorders. It may be better suited for children who don't have concentration and attention issues. Additionally, with improved clinician training and awareness, teletherapy can be adapted to suit everyone's needs. With an increase in the number of children experiencing mental health challenges, it is imperative that the issue of mental health service shortage be addressed and one way of doing that is by continuing to provide services remotely and in-person and give parents the choice to choose the modality best suited for them and their children.

### Limitations

A major limitation of this study was that parental perceptions surrounding teletherapy may be different than children's perceptions. Parents might think that teletherapy isn't effective, but their child might disagree. This can be especially true for children who have social anxiety, as children with social anxiety want to avoid in-person interactions and prefer to do things remotely. Furthermore, other children may prefer therapy in an in-person setting in the home or clinic. For example, some children with Autism often don't like changes in their routine and present with particular difficulty generalizing skills to natural environments (Hao, 2020). Thus, some Autistic children may not prefer telehealth as an option if they have received prior in-person sessions. Therefore, it would be important to gather satisfaction data from children and adolescents receiving teletherapy services to consider their preferences including perceived advantages, disadvantages, and to assess their buy-in.

Another limitation encountered during this study was the inability to control for order effects. Since teletherapy is a relatively new model, most if not all participants will have experienced in-person therapy sessions followed by teletherapy. It may be that results of this study would be different if teletherapy was the initial mode used and the impact that this had on the therapeutic alliance. It might also change the perceived advantages and disadvantages of teletherapy.

The majority of the children in the present study were receiving treatment for internalizing mood disorders. Thus, parent satisfaction with telehealth services could differ for children who present with more externalizing behavioral disorders. As noted in the literature, it is more challenging for children with attentional challenges to focus during teletherapy sessions (Baker at al., 2023). However, would the data be different and parent satisfaction lower if the treatment referral was a behavior disorder such as Oppositional Defiant Disorder (ODD) or Attention Deficit Hyperactivity Disorder (ADHD)?

Lastly, the majority of the sample consisted of Caucasian (70.87%) male (62.23%) children while only 16.96% of the sample consisted of minoritized population in the United States. This could suggest that individuals from minoritized backgrounds don't readily have access to teletherapy or they are not utilizing the services. If so, it would be important to explore what the barriers are and how to mitigate these barriers. Thus, the findings from this study are generalizable mostly to the male Caucasian population. As discovered by Shah et al. (2022) since the implementation of telehealth, there has been an increase in visits for Hispanics and African Americans. Additional data from other groups would help determine the perception and effectiveness of teletherapy and would provide an understanding of how to implement teletherapy services effectively to benefit everyone.

#### **Future Directions**

There is limited research on the long-term efficacy of teletherapy in the pediatric population (Shah & Badawy, 2021). Therefore, future efficacy studies should be conducted to determine the long-term impact of teletherapy and the long-term differences between in-person therapy and teletherapy. They should also focus on specific perceptions of teletherapy for children with behavioral challenges. Additionally, studies focused on therapeutic alliance during teletherapy will help provide information on how clinicians can develop a stronger therapeutic bond to foster a connection that leads to positive results. It will also be essential to assess the differences in therapeutic alliance specifically for children during teletherapy vs. in-person therapy. In addition, there are only about three to four studies related to perceptions of teletherapy for children, therefore, more studies should be conducted to gather perception data. Perception and efficacy studies can also be conducted on teletherapy implementation in high levels of care such as a partial hospitalization setting (PHP), and intensive outpatient setting (IOP). Currently, there is a lack of a standardized measure to assess satisfaction, perception, and efficacy of teletherapy. A standardized measure should be created specifically for use for mental health. This can help clinicians and other professionals understand and improve their delivery of services and provide professionals with a universal measure.

Additional data that considers equity challenges will be beneficial in informing decisions about using teletherapy. For example, what role do demographics and ethnicity play in the perceptions of teletherapy in young children? Do individuals from low income, economically marginalized (LIEM) backgrounds have equal access to technology, the internet, and other resources to utilize teletherapy services? McCord et al. (2022) pointed out that inequity in the mental health care system cannot be simply addressed through teletherapy. In addition to a shortage of mental health clinicians, many do not accept insurance and therefore, oftentimes serve clients that can afford to pay out of pocket (McCord et al., 2022). Perhaps, that is the reason for a lack of data from ethnic minorities in this study. What are the differences and perceptions of teletherapy for individuals using private insurers, Medicare, Medicaid or paying out of pocket?

Finally, future studies should also examine the clinician's perceptions of teletherapy use in the pediatric population. What barriers do clinicians face, and how can these barriers be addressed? Most graduate programs do not have telehealth training and given the likelihood of teletherapy remaining a population option for clients, it may benefit graduate training programs to implement it into the programs. McCord et al. (2022) stated while organizations such as American Psychological Association (APA) have guidelines for teletherapy, these guidelines are adapted from in-person practices. The authors argue that teletherapy specific competencies, guidelines, and standards of care should be promoted to ensure that all clinicians can effectively implement teletherapy interventions and understand that it is different from in-person therapy (McCord et al., 2022). The most important thing this study highlighted is online therapy's technical difficulties and other technological challenges. Future studies can focus on further exploring these challenges so that stakeholders and researchers can figure out novel ways to address them.

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## PARENTS PERCEPTION OF TELETHERAPY

## APPENDIX

## Survey

Length of in-person services: °1-2 sessions °3-5 sessions °5-10 sessions °>10 sessions

Length of teletherapy services: °1-2 sessions °3-5 sessions °5-10 sessions °>10 sessions

Treatment referral: <sup>°</sup> Anxiety <sup>°</sup> Depression <sup>°</sup> Developmental Disorder/Autism Spectrum Disorder (ASD) <sup>°</sup> Trauma/coping with loss <sup>°</sup> Attention issues <sup>°</sup> Disruptive/Aggressive behaviors <sup>°</sup> Family issues <sup>°</sup> Other please specify:

Teletherapy platform used: Google Meet <sup>°</sup> Zoom <sup>°</sup> Bluejeans <sup>°</sup> Other please specify\_\_\_\_\_

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>.</b>					

I believe teletherapy is as effective as in-person therapy.

I feel comfortable using teletherapy for my child's mental health needs.

I would recommend teletherapy to other parents and families.

My child was able to easily speak to the clinician during the teletherapy visit.

## PARENTS PERCEPTION OF TELETHERAPY

My child could hear the clinician clearly during the teletherapy session.

During the teletherapy session, my child could see the clinician as well as in-person session.

I believe teletherapy saves travel time.

I believe teletherapy improves my child's access to mental health services.

Teletherapy platform used by child's clinician was simple and easy to use.

During the most recent teletherapy experience, there were many technical difficulties.

I prefer in-person therapy for my child.

My child was able to develop a stronger connection with the therapist during in-person sessions compared to teletherapy My child was easily distracted during teletherapy sessions.

Additional Comments/concerns: