

UNIVERSITY OF **INDIANAPOLIS**

SCHOOL OF OCCUPATIONAL THERAPY

Examining Occupational Therapists' Perception of Efficacy in Telehealth During the COVID-19 Pandemic

Lauren Gandhi, Samantha Rich, Alexandria Dattilo, Karlie Hamilton, Kirstin Krause, Eric
Meyers, Brynn Shallenberger

December, 2023



A research project submitted in partial fulfillment for the requirements of the Doctor of
Occupational Therapy degree from the University of Indianapolis, School of Occupational
Therapy.

Under the direction of the research advisor: Lori Breeden, EdD., OTR

A Research Project Entitled

Examining Occupational Therapists' Perception of Efficacy in Telehealth During the
COVID-19 Pandemic

Submitted to the School of Occupational Therapy at University of Indianapolis in partial
fulfillment for the requirements of the Doctor of Occupational Therapy degree.

By

Lauren Gandhi, Samantha Rich, Alexandria Dattilo, Karlie Hamilton, Kirstin Krause,

Eric Meyers, Brynn Shallenberger

Doctor of Occupational Therapy Students

Accepted on this date by the OTD Program Director:



Alison Nichols, OTR, OTD
OTD Program Director
Associate Professor of Occupational Therapy

12/7/23

Date

Examining the Occupational Therapy Perception of Efficacy in Telehealth During the COVID-19
Pandemic

Lauren Gandhi, Samantha Rich, Alexandria Dattilo, Karlie Hamilton, Kirstin Krause, Eric
Meyers, Brynn Shallenberger

School of Occupational Therapy, University of Indianapolis

Author Note

Lauren Gandhi, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0002-7104-5084>

Samantha Rich, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0002-5513-5100>

Alexandria Dattilo, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0001-7847-2460>

Karlie Hamilton, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0002-5072-3720>

Kirstin Krause, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0003-2775-6599>

Eric Meyers, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0001-8905-4037>

Brynn Shallenberger, School of Occupational Therapy, University of Indianapolis,

<https://orcid.org/0000-0001-6645-6607>

Abstract

Background: During the COVID-19 pandemic, clients relied on telehealth to gain access to health care services. As telehealth continues to be used it is important to understand how to implement quality sessions. This study aimed to identify practitioner needs related to the development of telehealth skills.

Methods: Participants included occupational therapy practitioners who used telehealth in practice. Snowball sampling was used to recruit participants for semi-structured interviews. Thematic analysis of the interview transcription resulted in categories which were a focus of discussion during interviews.

Findings: Data analysis led to five thematic categories. These were: Telehealth barriers and benefits, Telehealth value on a scale, Logistics of the telehealth transition, Client readiness for telehealth participation, and Educating caregivers and supporting their participation via telehealth.

Conclusion: The information revealed through this study supports occupational therapy practitioners in their understanding of how service delivery can change with telehealth. Considering ways to modify occupational therapy practice could make telehealth an effective tool instead of an inadequate alternative to in person delivery.

Examining the Occupational Therapy Perception of Efficacy in Telehealth During the COVID-19 Pandemic

During the COVID-19 pandemic, telehealth was an option for individuals to gain access to health care services without risking exposure to the virus. In Indiana, OT practitioners had no history using telehealth until Governor Eric Holcomb issued an executive order, authorizing its use (Exec. Order No. 20-13, 2020). The American Occupational Therapy Association (AOTA) identified telehealth as a valid delivery method of occupational therapy services and provides occupational therapists with resources for telehealth (Cason et al., 2013).

As healthcare systems continue making adjustments to practice during a pandemic occupational therapists may continue to use telehealth as it allows flexible scheduling and practitioner satisfaction with interventions (Hoel et al., 2021). Traditionally, the physical engagement of occupational therapists with their clients was viewed as essential to providing occupational therapy services (Dahl-poplizio et al., 2020); during the pandemic, in-person interventions were less possible, which forced many practitioners to learn to adapt their strategies using trial and error rather than a traditional evidence based approach (Dahl-poplizio et al., 2020). OT practitioners expressed frustration with the use of telehealth as a delivery method during the pandemic and many experienced barriers to providing effective interventions (Breedon et al., 2023). The COVID-19 pandemic created an emergency use situation and practitioners felt under-prepared to perform well using telehealth as a means of service delivery (Hoel et al., 2021).

Our methodology is based on a phenomenological approach, however, the adoption of telehealth by practitioners was examined through the lens of social constructivism (Amineh & Asl, 2015). Social constructivism explains the ways individuals create meaning from their

experiences based on interactions with other people and the environment around them (Amineh & Asl, 2015). The meaning practitioners derive from their experiences with telehealth as a rehabilitation tool can be influenced by their positive and negative interactions.

The purpose of this qualitative study was to examine occupational therapists' perceptions of using telehealth during the COVID-19 pandemic. This study aimed to identify occupational therapy practitioner needs related to the development of telehealth skills. This study aimed to make recommendations about the direction of continuing education for telehealth to allow practitioners a smoother transition into OT service delivery in the virtual world.

Key Words: *Telehealth, Occupational Therapy, COVID-19*

Telehealth is the use of audio and video equipment to provide healthcare-related services over a virtual platform ("What is telehealth", n.d.).

Occupational therapy is the use of rehabilitative services to increase participation in daily living, often through the physical manipulation of the environment and/or the client during treatment sessions ("Definition of occupational therapy practice for the aota model practice act", n.d.).

Literature Review

Between 2012-2019, prior to the COVID-19 pandemic, most telehealth users were those who lived in rural populations (Chu et al., 2021). Although people in rural populations increased their use of telehealth during the COVID-19 pandemic, the greatest increase during this time was found in urban populations (Chu et al., 2021). Telehealth use increased in all age categories since 2019, but the biggest increase was seen in older adults aged 65+, likely due to restrictions during the COVID-19 pandemic for this high risk age group (Chu et al., 2021).

There were many perceived barriers to the switch to telehealth use. According to Iacono et al. (2016), the majority of OT practitioners surveyed were hesitant to use telehealth due to the risk of poor client-therapist relationships. Difficulties were also identified with supervising patients and privacy concerns (Rortvedt, 2019). Technical difficulties, lack of physical contact, caregiver involvement, and lack of universality for all patients were reported as perceived barriers of the use of telehealth (Dahl-popolizio et al., 2020). Abbott-Gaffney & Jacobs (2020) found internet reliability, lack of physical contact, lack of licensure portability across states, and inappropriate referrals as barriers. Additionally, client factors such as finances and caregiver assistance, and workplace needs associated with updated technology and tech support were identified as barriers to using telehealth (Goel et al., 2022). Access to technology and funding were also identified as perceived barriers (Hoel et al., 2021).

Although there were many barriers identified, there were also benefits that came with the use of telehealth. Worboys et al. (2017) found that the majority of occupational therapists surveyed were satisfied with telehealth services and found ease of equipment use and appropriate audio quality. Of the occupational therapists surveyed, 83% expressed that they were able to satisfactorily and competently assess patients (Worboys et al., 2017). Schedule flexibility was also identified as a perceived benefit (Rortvedt, 2019). Proffitt et al. (2021) reported that occupational therapists perceived the lack of traveling out to clients as a benefit of telehealth. Occupational therapists perceived an increased correlation between telehealth use and safety as well as reasonable employer expectations as benefits (Hoel et al., 2021). Abbott-Gaffney & Jacobs (2020) reported efficiency, student engagement, and comfort as perceived benefits to telehealth. Goel et al. (2022) identified that for patients with spinal cord injuries, telehealth was

beneficial for access to care, safety, carryover of care, and patient education in activities of daily living and instrumental activities of daily living.

Occupational therapists have identified several diagnostic groups that have benefitted from telehealth during the pandemic. These included: patients with hand injuries (Worboys et al., 2017), patients with spinal cord injuries (Goel et al., 2022), pediatric settings (Dahl-popolizio et al., 2020), patients with developmental delays (Dahl-popolizio et al., 2020), and school settings (Abbott-Gaffney & Jacobs, 2020).

Based on the perceived benefits and barriers to the efficacy of telehealth, this type of practice delivery is perceived as a productive tool for specific populations. More research is needed on individual capabilities of clients in order to determine if using telehealth is appropriate for treatment. Although perceptions of benefits and barriers to telehealth have been examined, there are no clear conclusions of efficacy. There is a gap in the literature that prevents us from moving beyond the general mechanics of telehealth practice and examining how OT practitioners manage the challenges. This study examined the experience of success and failure within telehealth practice to identify practitioner needs and better prepare future practitioners for this method of service delivery.

Methods

Study Approach/Design

The study was guided by a phenomenological approach, which gathers individuals' experiences of the same phenomenon and the meaning of those experiences to the individuals (Creswell & Poth, 2018). The phenomenological approach seeks out key elements common in most, or all, of the individuals' experiences of a phenomenon (Creswell & Poth, 2018). This

study aimed to analyze the data by looking at the interactions the participants had with their environment, employers, peers, and clients, through telehealth.

The data was viewed through the lens of social constructivism. Social constructivism was used to analyze qualitative data by theorizing that people make meaning in their reality by interacting with their environment and the people around them (Amenineh, R. & Asl, H., 2015). We demonstrated trustworthiness through member checking, analysis of reflexivity journals, and the use of an audit trail (Krefting, 1991).

Participants

Six occupational therapy practitioners were interviewed as participants in this study. An occupational therapy practitioner was an occupational therapist or an occupational therapy assistant with no minimum of practice experience in the field. The occupational therapy practitioners were required to have used telehealth at least once. Participants were recruited using social media and snowball sampling (Patrick, et al., 1998). We placed recruitment posts on CommunOT and other OT discussion boards, OT Hub and groups on Facebook, as well as local professional association meetings.

Procedures

Six participants from multiple occupational therapy settings were interviewed in-depth regarding their experiences in telehealth. We used field notes, member checking, and reflexivity journals from their interviews to insure trustworthiness (Krefting, 1991).

Data Collection

Researchers used semi-structured interviews to obtain in-depth information from each participant (Alshenqeeti, 2014). The interviews allowed participants to explain topics in their own voice, as well as for the interviewer to ask clarifying questions and access complete

answers; semi-structured interviews also allowed for the interviewer to dig deep into topics that a structured interview cannot (Alshenqeeti, 2014). A second researcher was present during interviews to manage the audio recording and take field notes (Krefting, 1991).

The study was determined to be exempt by the institutional review board at the University of Indianapolis. Informed consent documents were not signed by participants as it would have been the only identifying information connecting the participants to the study. Prospective participants were informed that their participation was voluntary, and they were free to end their participation at any time. Data from the interview (recordings and transcription) were stored in a password protected computer in a locked office. Recordings were deleted after transcription was completed. Any identifying information from the recordings was given an alias during transcription.

Each member of the research team reflected on and disclosed any bias they had for telehealth, the participants, and the project in general through reflexivity journaling. An audit trail was maintained during transcription and data analysis. Both measures were taken to increase trustworthiness.

Data Analysis

To guide our qualitative thematic analysis, we used the phases laid out by Braun & Clark (2006). The phases are as follows:

- familiarizing yourself with your data
- generating initial codes
- searching for themes
- reviewing themes
- defining and naming themes

- producing the report (Braun & Clarke, 2006)

Transcription occurred by two members of the research team who were not present during the interview. This transcription occurred within 24 hours, and analysis of the transcript, adequate to allow member checking, began within one week (Alshenqeeti, H., 2014). Working in pairs, researchers began coding interview transcripts and came to an agreement on codes. Following, the entire team cross compared codes for consistency. Groups of two from the research team individually coded transcripts and then compared codes together. Finally, the team came together and collaborated on a final code for the transcripts (member checking) (Krefting, 1991). Once coding was complete, memoing focused on the coded quotes as representation of action within the experience being shared. Using a dry erase board, concept maps of memos provided a visualization of participants' telehealth experiences.

Findings

Thematic analysis of interview transcripts led to five thematic categories regarding the use of telehealth during the COVID-19 pandemic:

- telehealth barriers and benefits
- telehealth value on a scale
- logistics of the telehealth transition
- client readiness for telehealth participation
- caregiver education and participation

Telehealth Barriers and Benefits

The interviews yielded patterns of reported barriers and benefits of telehealth practice among participants. As a benefit, Participant 5 (P5) reported experiencing professional growth while practicing “Am I grateful for the things I have learned from ... experiences it brought?

Yeah. I do. I think I'm a better therapist" (P5). Additionally, another benefit that participants expressed was telehealth promoted occupation-based treatments, which was useful for functional task carryover. P5 discussed that they used more occupation-based treatment during telehealth use when they were required to go "bagless" and rely on what the patient had in their home to perform interventions. P5 said, "I would've probably tried bagless sooner...it kind of forces you to [be more flexible]." Participant 6 (P6) shared an example of their use of occupation-based treatment and explained that during the holidays, a patient needed to switch from an in-person session to telehealth due to poor weather. P6 shared their experience of providing occupation-based care by building their session around wrapping holiday gifts:

It was really great because it was something [the patient] got to do for his grandkids and something he had always kind of done where he actually got to participate more that year...it was great 'cause it allowed me to see a whole bunch of different functions at the same time and really really be a purposeful activity, and that was... not a mimic of something.

Participants noted barriers to accomplishing a successful telehealth session. Participant 2 (P2) reported that a lack of hands-on access contributed to patients becoming distracted by other family members who were present during sessions. Often during the lockdown period parents were managing multiple children in the homes during a telehealth OT session. The same participant stated, "...during COVID their kids couldn't go anywhere else, cause daycares were closed, schools were closed. And so they're trying their best to pay attention... they were doing the best they could." These types of recurring distractions for clients and caregivers led to practitioners feeling that they could not control the treatment environment well enough to provide effective treatment. Another barrier discussed throughout the interviews was that using

telehealth led to increased time for the evaluation process. P6 stated, “I have yet to figure out how to do an assessment verbally.” Furthermore, some evaluations were deemed by participants as a poor fit for virtual practice. P6 shared:

[It] takes... a skilled eye to then do it over camera...how can I have them do a nine hole peg test, to stack some blocks, the dynamometer, the pinch gauge, you know those things, the range of motion, that stuff I can’t fill out remotely.

These identified benefits and barriers left participants presenting their telehealth experience as inferior to traditional treatment but better than clients receiving no treatment at all.

Telehealth value on a scale

Patterns surfaced across participants including preparation, skepticism, and success or a lack thereof when utilizing telehealth. The patterns revealed a perception that telehealth was a better alternative for clients to receive services versus not at all. As pandemic protocols evolved, healthcare practitioners developed an awareness that virtual sessions needed to be intentionally managed. Participant 3 (P3) offered, “I don’t think zoom will ever go away now, it’s here to stay... you have to adapt.” P2 suggested that the abrupt shift to telehealth during the pandemic left them feeling “like a new practitioner or student again.” However, P5 was “grateful for the experiences telehealth brought,” and believes that they are “a better therapist because of it.” P6 explained that although building rapport is difficult over the computer, it is “getting better and people are getting more comfortable.” P6 also noted that the home environment is a “safer space for the client” and “may give more insight into actual functioning than what is seen in the clinic.”

Some participants are still skeptical of virtual delivery and they do not see telehealth as productive as in-person care. P2 states “...I’m assuming though if I were doing real techniques with them then after a few [telehealth] visits, we would get it, whereas maybe it would’ve only

taken me one [visit] in person.” P6 explained their reasoning for patients that are well vs. poorly suited for telehealth: “As we weigh modalities and other things, they’ve all got pieces and roles and have parts where it’s more appropriate than others.” They closed with this statement:

As long as I think we keep the patient at the center, so patient-centered care, and you take a look at it as a way of, *is this a tool that helps them or doesn’t help them and how can we modify and adjust it?* Then that’ll serve us fine with any kind of new technology that comes through. So you keep that at your center and the center of what you do and, you know, being an OT, and the rest falls into place.

Based on their experiences with using telehealth, practitioners feel that telehealth visits were better than patients not receiving care, but traditional in-person occupational therapy is better than telehealth.

Logistics of the Transition

Some participants shared the idea that a lack of leadership during this telehealth transition revealed a stagnation in their organizations which limited care overall. In this case systemic stagnation refers to their healthcare system experiencing a bottleneck in the flow of providing occupational therapy services after evaluations were conducted. The inability of the healthcare system to transition quickly and keep up with the demands of an unexpected healthcare crises was limiting to the provision of care. This became evident during the pandemic as healthcare providers quickly transitioned to online care. Participant 1 (P1) stated, “It was just like we’re closing Friday and we’re starting telehealth, you know?” For some, leadership stepped in and made this transition easier. P2 stated:

Yeah they're really great about giving us such training about changing stuff. Of course, everybody has pitfalls and things get forgotten, and things like that. But this is definitely,

the company is on top of it. And they're sending things out ahead of time, which is really nice.

Leadership from companies during the transition to telehealth was crucial for practitioners to provide quality care to patients. Participants who experienced a lack of leadership from their companies felt limited in providing care. An OT practitioner working in early intervention described ample use of telehealth for evaluation, but insufficient care providers to provide interventions. P5 described their experience:

You know, an assessment team can see— if you see four families a day for five days a week, you've seen 20 families. But then it's 20 different families, and it's another 20 families the next week, and another 20 families the next week. Where if you're seeing them ongoing, you may have those 20 slots but only 20 families. So in a month, I'm seeing 20, they're seeing, you know, what, 80.

Transitioning to telehealth exacerbated this organization's disparity between evaluating and providing interventions for an exponentially growing list of clients. They expressed frustration with healthcare leadership to appropriately balance staffing allowing the provision of care to stagnate.

Client Readiness

The interviews also produced patterns that considered the clients' readiness or lack thereof as influencing the success of telehealth sessions. Participants reported better outcomes with preparation of the client prior to the session either by the occupational therapist or through the client's engagement. P1 mentioned that they would drop things off on client porches, and their advice to the caregiver was to “come up with as many, like, generic activities [to keep] in your toolkit as possible.” P1 also mentioned the workload that goes into planning virtual sessions

may have slowed productivity, saying, “I was only really seeing initially I would say two or three kids a day because besides their 45 minute treatment session, there was so much work going into the planning processes.” Participants reported that parents began creating toolkits of things that could be beneficial for therapy sessions for their kids. P5 stated:

I had one mom I was working with in person that got really excited about some of the stuff we were doing and then she would be at dollar tree or she would be at Walmart and see something and she would be like ‘I wanna try this one!’

OT practitioners were forced to take a more active role in preparing their clients prior to treatment through the physical delivery of materials and through communication with caregivers.

Caregiver Education and Participation

Caregiver education and participation came up a number of times during practitioner interviews. Analysis revealed that when an occupational therapist did not have the ability to work hands-on with their clients, it seemed to create a sense of pressure for the caregiver to take on the therapist role during sessions. P3 noted, “It is a lot more work for [caregivers].” P1 discussed how clients did not want to listen to their caregivers during sessions, saying, “If the kid needed the parental support during their session...the kid doesn’t really want to listen to the parent. That was, that was difficult.” Participants noted they felt that telehealth supported caregiver education and impacted client progress. One participant discussed how caregiver education was completed during their sessions:

I had a baby doll that I could use. Um it’s a training baby doll that we use for training clinicians, um, but I had one that I could kind of show them what I wanted them to do as well... but yeah there’s a lot of showing, a lot of— a lot of tries. And then sometimes it just didn’t go well.

P5 noted, “Requiring [caregivers] to be more involved, I think, has been a benefit as well in terms of carryover.” Furthermore, “The parents who are getting down and dirty getting with the kid are the ones who make the best progress.” When caregivers were properly educated, the participants reported that it increased the opportunity for them to be involved with the client’s treatment which supported the client’s overall progress.

After analyzing the participant’s experiences using telehealth, five themes were identified. Benefits to telehealth were that it promoted professional growth and occupation-based treatments, which was useful for functional task carryover outside of therapy sessions. Barriers to telehealth were that a lack of hands-on access contributed to patients becoming distracted during treatment sessions. Telehealth was seen as better than nothing, but in-person was still preferred; some contributing factors were feelings of skepticism, preparedness, and success or not. Company leadership made a difference to our participants on whether telehealth was perceived as successful or not. The participants that had a supportive leadership team that provided them with structure and guidelines had a smoother transition into telehealth. For others, there was a stagnation in care due to a lack of leadership. Clients’ readiness or lack thereof influenced the success of telehealth sessions. Furthermore, when practitioners felt they had a strong company leadership they were able to prepare the client for sessions better. When an occupational therapist did not have the ability to work hands-on with their clients, it seemed to create a sense of pressure for the caregiver to take on the therapist role during sessions. Additionally, telehealth was found to support caregiver education and increase caregiver participation which impacts client progress and carryover in the home.

Discussion

Findings consisted of five themes regarding telehealth use throughout peak COVID-19 pandemic. In comparing our themes to the current literature, we found additional support for many of our findings with a few exceptions.

Telehealth Barriers and Benefits

Data analysis revealed barriers and benefits to practicing telehealth secondary to COVID. One of the barriers practitioners identified was the lack of ability to physically guide clients during an intervention, which led to practitioners feeling they could not adequately control the treatment environment. Lack of physical contact with clients is reported as a barrier to treatment due to the information physical contact provides during evaluations, like joint end feel with range of motion (Rortvedt & Jacobs, 2019; Wittmeier et al., 2022). Our findings are supported by Rortvedt & Jacobs (2019) as participants reported they saw hands-on evaluation as the best way to assess a client's physical characteristics. Not having hands-on evaluations with patients, therapists were challenged to go outside of their normal practices in order to provide the most effective care.

Another barrier identified by our participants was inefficiency with telehealth evaluations, which influenced overall productivity. Practitioners explained that evaluations took much longer during telehealth use if the evaluations were deemed valuable at all (Wittmeier, et al., 2022). Researchers reported athletic trainers did not find evaluations via telehealth as a useful practice due to their reliance on hands-on access to clients (Winklemann et al., 2020). Difficulty conducting evaluations over telehealth is a barrier supported by the current literature and our participants' responses.

The final barrier our participants identified was the increased distractions to clients coming from family members. This barrier was influenced by the lack of hands-on access to clients, as it led to practitioners feeling ineffective without physical intervention. This theme is not supported or refuted by literature as a barrier, but participants' reports suggest a relationship between distractions to clients and the lack of hands-on access to clients that practitioners experienced.

Participants identified professional growth as a benefit of using telehealth. This idea is supported in the literature through reported challenges of using telehealth, which led to professional growth through expanding practitioners' creativity and critical thinking (Wittmeier et al., 2022). Researchers found that therapists experienced professional growth through learning new skills and improved on existing skills, like coaching and teaching, especially with families of clients (Wittmeier et al., 2022).

Through the opportunities telehealth provided for occupation-based care, our participants found better functional skill carryover as a benefit as well. Wittmeier et al. (2022) reported OT and physical therapy (PT) practitioners appreciated the benefit of seeing clients interact with their home environments. Some therapists reported it was easier to make recommendations based on what families had available in their homes (Wittmeier et al., 2022). Though therapists experienced professional growth through the use of telehealth and appreciated an increased use of occupation-based intervention, the lack of hands-on access, client susceptibility to distractions, and increased evaluation efficiency left participants concluding that while telehealth is better than receiving no treatment at all, it is inferior to traditional treatment.

Telehealth value on a scale

Participants offered that while telehealth sessions were better than nothing, in-person sessions were preferred. Findings in this study are consistent with previous research. Physicians expressed skepticism with the lack of in-person evaluations; their main concern was the lack of in-person evaluation increasing the chance of missing symptoms and negatively affecting treatment (Goldberg et al., 2022). The reduced in-person treatment session had physicians concerned with missed signs and symptoms (Goldberg et al., 2022). This is consistent with our findings where the concern of reduced in-person care altered the treatment and intervention strategies. A second study that interviewed orthopedic physicians and athletic trainers also identified skepticism with the success of telehealth (Winkleman et al., 2020). Researchers found that the lack of hands on and in-person interaction increased skepticism of successful sessions (Winkleman et al., 2020). Researchers found that physicians expressed concern with telehealth not providing comparable care to patients virtually (Alqahtani et al., 2022). Clinicians in a mental health setting were skeptical when starting to use telehealth, finding a preference for in-person interactions with their clients over telehealth (Lynch et al., 2021). Despite overarching skepticism of the use of telehealth in practice, many providers agree the role of telehealth is beneficial in reaching clients although find it better than no contact for care at all. Overall, the current research confirms that clinicians prefer telehealth over clients not receiving treatment, but not as much as they prefer in-person sessions.

Logistics of the Transition

Participants in this study identified logistics of telehealth and organizational leadership regarding the telehealth transition as directly impacting service delivery. Hoel et al. (2021) found that for many providers, successful use of technology was hindered by limited knowledge of online platforms and procedures to organize telehealth delivery. Hoel et al. conducted a similar

study in which many respondents stated that they did not receive proper guidance during the urgent transition to virtual therapy. This supports the finding that organizational leadership was seen as making a difference when it came to the quality of services. In a qualitative study by Lynch et al. (2021), participants noted there was good conservation of care and they were able to successfully adapt the sessions to the individual client to produce better flexibility of the session time and duration. To maintain continuity of care and maintain HIPAA compliance, the administration developed resources and provided training to the clinicians (Lynch et al., 2021). The perception of leadership effectiveness, and its relationship to the transition to a telehealth platform is an opportunity for further research; however both topics were meaningful to participants in this study.

Client Readiness

Participants believed their sessions were more effective when they prepared the client prior to the occupational therapy telehealth session. The literature reflects that while some researchers found that preparation of the client led to more personalized care, others suggested that having the client prepare prior to the session might not be very effective (Goldberg et al., 2022; Hughes et al., 2020). Participants receiving telehealth cognitive-behavioral therapy (CBT) felt better about doing telehealth therapy when the clinician communicated the purpose of the activities (Hughes et al., 2020). In the current study the theme of preparing the client for the session is consistent with this previous literature. Goldberg et al. (2022) interviewed physicians who worked with the geriatric population who reported the need to retrain staff, or rely on volunteers to provide more pre-visit preparation and orientation to patients. Furthermore, physicians found no changes in digital literacy for older adults in use of telehealth (Goldberg et

al., 2022). Preparation of the client was identified by occupational therapy practitioners in this study as an important part of a successful session.

Clinicians noted issues they faced when using telehealth included technology issues, human error with technology, changes in the environments of those involved with the session, how to transition techniques to be used virtually, and how to maintain regulations virtually (Waller et al., 2020). Some of the ways clinicians found they were able to alleviate issues with telehealth was having the client prepare by: having the equipment to write down information ready, preparing the device the client will use for the session, checking their ability to connect through their internet, having a safe space to participate in that is private, limiting distractions, and sending information prior to the session (Waller et al., 2020).

Caregiver Education and Participation

Caregiver education and participation in telehealth has been studied in previous research. Karlsen et al. (2018) examined the experiences of older adults and affirmed the theme regarding increasing pressure on caregivers:

Family caregivers reported that [telehealth] eased their concern for a time. However, they felt increased responsibility which led to ambivalent feelings between wanting to comply with the older adults' desire to live at home and the stress and concern this caused (p. 1300).

Although caregivers were able to check in on the older adults during telehealth sessions, telehealth ended up increasing their stress. When an occupational therapist does not have the ability to be hands-on with their clients, it seemed to create a sense of pressure for the caregiver(s).

Another theme that was affirmed through the research was that caregiver participation increased progress for the client: “active participation of the caregivers was considered critical to the success of the telehealth experience” (Fergus et al., 2021, p. 162). Furthermore, “the telehealth delivery of service seems to enhance the empowerment and buy-in of the patient/caregiver resulting in improved outcomes and carryover for PT” (Fergus et al., 2021, p. 159). Previous research supports the importance of caregiver participation and education based on it supporting the client’s overall progress.

Conclusion

Findings of this study provide insight into occupational therapy practitioners’ perceptions of telehealth use during the COVID-19 pandemic. This study identified practitioner needs related to the development of telehealth skills. Recommendations for practice include that employers develop and integrate training for practitioners to create consistent telehealth guidelines to support virtual practice. Additionally, this study identified that there may be a lack of efficacious evaluations suitable for virtual practice. Practitioners interviewed for this study were unaware of existing literature about evaluations in virtual practice. Furthermore, practitioners should prepare themselves for telehealth practice through existing evidence, continuing education, and understanding the practice guidelines that affect the provision of telehealth. Future research should include examining the psychometric properties of assessment tools when implemented virtually, as well as the design of interventions that better fit the virtual practice realm. Additionally, telehealth-specific training should be developed to ensure therapist competency in practice via telehealth.

Acknowledgements

We thank the participants for their time and for providing stories of their experiences using telehealth during the COVID-19 pandemic. We also acknowledge Dr. Penelope Moyers for her support and encouragement during the early stages of our study.

References

- Abbott-Gaffney, C., & Jacobs, K. (2020). Telehealth in school-based practice: Perceived viability to bridge global ot practitioner shortages prior to COVID-19 global health emergency. *Work*, 67(1), 29–35. <https://doi.org/10.3233/wor-203240>
- Alqahtani, S. S., Alraqi, A. D., & Alageel, A. A. (2022). Physicians' satisfaction with telehealth services among family physicians in Cluster 1 Hospitals. *Journal of Family Medicine and Primary Care*, 11(9), 5563. <https://doi.org/10.4103/jfmpe.jfmpe 920 22>
- Alshenqeeti, H. (2014). Interviewing as a data collection method: A critical review. *English Linguistics Research*, 3(1). <https://doi.org/10.5430/elr.v3n1p39>
- Amineh, R. J., & Asl, H. D. (2015). Review of Constructivism and Social Constructivism. *Journal of Social Sciences, Literature, and Languages*, 1, 9-16.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Breeden, L. E., Tyger, H., Reckers, A. M., Johnson, M., Morales, A. M., Ober, L., & Williams, M. A. (2023). An Examination of Occupational Therapy Telehealth Service Delivery Among Novice Users During the COVID -19 Pandemic. *International Journal of Telerehabilitation*, 15(1). <https://doi.org/10.5195/ijt.2023.6544>
- Cason, J., Hartmann, K., Jacobs, K., & Richmond, T. (2013). Telehealth. *The American Journal of Occupational Therapy*, 67(6_Supplement). <https://doi.org/10.5014/ajot.2013.67s69>

- Chu, C., Cram, P., Pang, A., Stamenova, V., Tadrous, M., & Bhatia, R. S. (2021). Rural telemedicine use before and during the COVID-19 pandemic: Repeated cross-sectional study. *Journal of Medical Internet Research*, 23(4). <https://doi.org/10.2196/26960>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry & Research Design: Choosing among Five approaches*. SAGE.
- Dahl-Popolizio, S., Carpenter, H., Coronado, M., Popolizio, N. J., & Swanson, C. (2020). Telehealth for the provision of occupational therapy: Reflections on experiences during the COVID-19 pandemic. *International Journal of Telerehabilitation*, 12(2), 77–92. <https://doi.org/10.5195/ijt.2020.6328>
- Definition of occupational therapy practice for the Aota Model Practice Act*. (n.d.). AOTA. Retrieved April 24, 2023, from <https://www.aota.org/-/media/Corporate/Files/Advocacy/State/Resources/PracticeAct/OT-Definition-for-AOTA-Model-Practice-Act.pdf>
- Exec. Order No. 20-13, 3 C.F.R. 4 (1-5), (2020). <https://www.in.gov/gov/files/Executive%20Order%2020-13%20Medical%20Surge.pdf>
- Fergus, A., Hartsook, K., Smith, J., Hale, M., & Kellar, D. (2021). A novel physical therapy learning experience in pediatrics via Telehealth: A qualitative case analysis. *Journal of Physical Therapy Education*, 35(2), 159–167. <https://doi.org/10.1097/jte.000000000000184>

- Goel, R., Santurri, L., Fruth, S., Abzug, J. M., & Geigle, P. R. (2022). Telerehabilitation use with Spinal Cord Injury: Occupational therapists' perspective. *The American Journal of Occupational Therapy*, 76(2). <https://doi.org/10.5014/ajot.2022.045831>
- Goldberg, E. M., Lin, M. P., Burke, L. G., Jiménez, F. N., Davoodi, N. M., & Merchant, R. C. (2022). Perspectives on telehealth for older adults during the COVID-19 pandemic using the quadruple aim: Interviews with 48 physicians. *BMC Geriatrics*, 22(1). <https://doi.org/10.1186/s12877-022-02860-8>
- Hoel, V., von Zweck, C., & Ledgerd, R. (2021). Was a global pandemic needed to adopt the use of telehealth in occupational therapy? *Work*, 68(1), 13–20. <https://doi.org/10.3233/wor-205268>
- Hughes, S., Sibelli, A., Everitt, H. A., Moss-Morris, R., Chalder, T., Harvey, J. M., Vas Falcao, A., Landau, S., O'Reilly, G., Windgassen, S., Holland, R., Little, P., McCrone, P., Goldsmith, K., Coleman, N., Logan, R., & Bishop, F. L. (2020). Patients' experiences of telephone-based and web-based cognitive behavioral therapy for Irritable bowel syndrome: Longitudinal qualitative study. *Journal of Medical Internet Research*, 22(11). <https://doi.org/10.2196/18691>
- Iacono, T., Stagg, K., Pearce, N., & Hulme Chambers, A. (2016). A scoping review of Australian Allied Health Research in ehealth. *BMC Health Services Research*, 16(1). <https://doi.org/10.1186/s12913-016-1791-x>

- Karlsen, C., Moe, C. E., Haraldstad, K., & Thygesen, E. (2018). Caring by Telecare? A hermeneutic study of experiences among older adults and their family caregivers. *Journal of Clinical Nursing*. <https://doi.org/10.1111/jocn.14744>
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214–222. <https://doi.org/10.5014/ajot.45.3.214>
- Lynch, D. A., Stefancic, A., Cabassa, L. J., & Medalia, A. (2021). Client, clinician, and administrator factors associated with the successful acceptance of a telehealth comprehensive recovery service: A mixed methods study. *Psychiatry Research*, 300, 113871. <https://doi.org/10.1016/j.psychres.2021.113871>
- Manen, M.V. (2016). *Phenomenology of Practice*. Routledge.
- Patrick, J. H., Pruchno, R. A., & Rose, M. S. (1998). Recruiting research participants: A comparison of the costs and effectiveness of five recruitment strategies. *The Gerontologist*, 38(3), 295–302. <https://doi.org/10.1093/geront/38.3.295>
- Proffitt, R., Cason, J., Little, L., & Pickett, K. A. (2021). Stimulating research to advance evidence-based applications of telehealth in occupational therapy. *OTJR: Occupation, Participation and Health*, 41(3), 153–162. <https://doi.org/10.1177/15394492211011433>
- Rortvedt, D., & Jacobs, K. (2019). Perspectives on the use of a telehealth service-delivery model as a component of school-based Occupational Therapy Practice: Designing a user-experience. *Work*, 62(1), 125–131. <https://doi.org/10.3233/wor-182847>

- Waller, G., Pugh, M., Mulkens, S., Moore, E., Mountford, V. A., Carter, J., Wicksteed, A., Maharaj, A., Wade, T. D., Wisniewski, L., Farrell, N. R., Raykos, B., Jorgensen, S., Evans, J., Thomas, J. J., Osenk, I., Paddock, C., Bohrer, B., Anderson, K., ... Smit, V. (2020). Cognitive-behavioral therapy in the time of coronavirus: Clinician tips for working with eating disorders via telehealth when face-to-face meetings are not possible. *International Journal of Eating Disorders*, 53(7), 1132–1141. <https://doi.org/10.1002/eat.23289>
- What is telehealth?* (n.d.). Telehealth.hhs.gov. Retrieved April 24, 2023, from <https://telehealth.hhs.gov/patients/understanding-telehealth>
- Winkelmann, Z. K., Eberman, L. E., & Games, K. E. (2020). Telemedicine experiences of athletic trainers and orthopaedic physicians for patients with musculoskeletal conditions. *Journal of Athletic Training*, 55(8), 768–779. <https://doi.org/10.4085/1062-6050-388-19>
- Wittmeier, K. D., Hammond, E., Tymko, K., Burnham, K., Janssen, T., Pablo, A. J., Russell, K., Pierce, S., Costello, C., & Protudjer, J. L. (2022). “Another tool in your toolkit”: Pediatric occupational and physical therapists’ perspectives of initiating telehealth during the covid-19 pandemic. *Physical & Occupational Therapy In Pediatrics*, 42(5), 465–481. <https://doi.org/10.1080/01942638.2022.2065898>
- Worboys, T., Brassington, M., Ward, E. C., & Cornwell, P. L. (2017). Delivering occupational therapy hand assessment and treatment sessions via Telehealth. *Journal of Telemedicine and Telecare*, 24(3), 185–192. <https://doi.org/10.1177/1357633x17691861>