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Published version of the article is available at:

http://journals.sagepub.com/doi/abs/10.1177/1357633X15604555

Speech Pathologists' Perspectives on Transitioning to Telepractice: What Factors Promote Acceptance?

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Summary

Little is understood about factors that influence speech-language pathologists' (SLPs')
acceptance of telepractice. The aim of this study was to investigate SLPs' perceptions and
experiences of transitioning to a school-based telepractice service to identify factors that
contributed to positive clinician attitudes. In-depth interviews were conducted with 15 SLPs who
recently commenced providing school-based telepractice services. Interviews were recorded and
transcribed verbatim, and thematic analysis was used to interpret interviews, with themes
compared and contrasted across the group. Results indicated that although SLPs reported initially
having mixed feelings towards telepractice, they later evaluated telepractice positively and
viewed it as a legitimate service delivery mode. The overarching theme was that positive beliefs
about telepractice were associated with perceptions of its consistency with the underlying
principles of face-to-face therapy. In evaluating telepractice, SLPs considered: (a) therapeutic
relationships with children; (b) collaboration with parents and teachers; (c) adequacy of
technology and resources; and (d) access to support for learning telepractice. Therapy assistants
and specific clinician attributes emerged as key strategies used to manage threats to acceptability.
Preparation of SLPs transitioning to telepractice should address factors that support positive
experiences with, and attitudes towards, telepractice to ensure that training achieves the greatest,
most sustained change.

Introduction
Given the critical workforce shortages of speech-language pathologists (SLPs) in many countries, the innovative use of technology has emerged as a potential solution to addressing unmet need for therapy services.[1] Speech pathology services delivered via telepractice have been found to be highly acceptable to consumers,[2, 3] and clients make similar progress when services are delivered via telepractice and in face-to-face settings.[4, 5]

Despite these promising findings, adoption of telepractice by allied health clinicians including SLPs has been slow.[6] A range of contributing factors have been proposed, including inadequacy of technology and infrastructure, lack of professional standards for telehealth, lack of adequate training, and negative clinician beliefs about telepractice.[7-10] In the wider literature, clinician acceptance has been suggested as a key factor that supports or impedes widespread uptake and long term sustainability of telehealth services.[11] SLPs' attitudes appear to improve with experience and exposure to telepractice,[9] however little is known about the factors that influence SLPs' acceptance of telepractice. The current study sought to investigate SLPs' experiences and perceptions of transitioning to a school-based telepractice service. Our specific aim was to identify factors that contributed to development of positive clinician attitudes towards telepractice.

Methods
The study was approved by The University of Sydney Human Ethics Research Committee.

Participants
SLPs were recruited from a non-government children's health service based in Sydney, Australia. Participants were (a) qualified, practicing SLPs, with (b) recent experience (< 1 year) delivering school-based telepractice services to children. A total of 15 SLPs were recruited to the study, at which point data saturation was achieved. Participants' ages ranged from under 24 years to 45-54 years. Nine participants had less than 5 years of postgraduate clinical experience.

Procedure
Interviews were conducted by the first author in-person or via telephone and audio recorded for later transcription. A semi-structured question guide was used to ensure a range of issues were discussed, including participants' perspectives on the benefits and disadvantages of telepractice service delivery, implementation processes, and workplace training and support.

Interviews were transcribed verbatim, de-identified, and analysed qualitatively. Thematic analysis was used to inductively identify key patterns and topics related to participants' perceptions of telepractice within each transcript. These were compared and contrasted within and across transcripts, which facilitated the synthesis of concepts identified during initial coding into broader themes. Consensus between the first two authors was used to identify core meanings or patterns in the text. Identified themes were verified with two participants, who indicated that the results and interpretation were consistent with their experiences.

Results
The transition to telepractice was characterised by a process that shifted, and ultimately strengthened participants' beliefs in its legitimacy as a mode of service delivery. Participants

initially had mixed feelings towards telepractice; they were excited about its potential, but also uncertain about its effectiveness, and unsure how to conduct telepractice. SLPs described telepractice as an "unknown" and completely foreign to previous clinical experiences. However, as clinicians started practicing and saw evidence of children's progress, their attitudes changed. Constant comparison of telepractice with their beliefs about, and experiences with face-to-face therapy emerged as the overarching theme that underpinned this change. By reflecting on the degree to which their experiences with telepractice were consistent with principles of face-to-face therapy, clinicians confirmed the legitimacy of telepractice. This overarching theme was summed up by one participant who stated, *"I'm amazed how something so different is so similar at the same time."*

Consequently, SLPs saw telepractice as one of a range of valid service delivery models with potential to address barriers to accessing services for children across a wide range of settings and disorder types. Ultimately, the process of confirming telepractice legitimacy saw some SLPs able to move beyond constant comparison and translation of "normal" face-to-face therapy to an online context. Instead, they were aware of the potential for the creative adoption of telepractice in providing new ways to practice.

Key domains that SLPs' reflected on when comparing telepractice with face-to-face therapy and contributed to the development of positive attitudes included: (a) therapeutic relationships with children; (b) working collaboratively with parents and teachers; (c) the adequacy of technology and resources; and (d) access to support for learning telepractice.

Therapeutic relationships with children
Many participants initially had major concerns about the ability to develop effective therapeutic relationships with children via videoconferencing. However, SLPs described their surprise at the ease with which children were engaged in therapy, even with children with reported behaviour problems or autism. One participant stated:

> *I thought the children would be more distracted maybe. But I find they're quite focused and it doesn't feel like they're watching TV… It does feel like you're actually there with them and its very much 'I'm a person.' 'They're a person.' And the computer becomes invisible.*

Participants believed that therapeutic relationships were assisted by children's enthusiastic response to technology that facilitated their focused attention. SLPs actively facilitated rapport by incorporating children's interests and opportunities for interaction into therapy tasks, and chatting informally with children. SLPs said they found themselves being more animated during telepractice sessions in order to keep children engaged, which contributed to feeling more exhausted than usual at the end of the workday. When working with children who were difficult to engage, participants tailored therapy approaches, for example by using physical activities or tangible therapy resources in therapy according to children's needs. Therapy assistant (TA) involvement was central to SLPs' management of this threat to acceptability. TAs, for instance, printed resources emailed by clinicians for children to manipulate during sessions, set up physical activities suggested by SLPs, supported behaviour management, and provided positive reinforcement in physical or tangible ways, such as giving 'high fives'. With regards to working with children with additional needs, one SLP noted:

> *For it to be successful they would need to have a really strong support person who's able to work as in a consultative sort of fashion or who's able to work alongside them during the teletherapy to direct them and to provide additional reinforcement and focus... I wouldn't rule out the possibility of working with kids that are more challenging. They just need a little bit of additional structure and support.*

Participants believed that clinician attributes of flexibility, willingness to try new things, and acceptance that at times things won't work helped them manage threats to developing therapeutic relationships. One SLP stated, *"It's okay if it doesn't work or if a child hasn't taken to something. There's always another way around it. You can always try something else."* However, participants said that flexibility was facilitated by being very organized and prepared for each session. Hence, clinicians had resources on-hand and available when a change of approach was needed during therapy sessions. For some clinicians, this was a change in their usual way of working.

Working collaboratively with parents and teachers
Participants said that planned and deliberate collaboration with parents and schools was essential for telepractice and believed it directly influenced therapy outcomes. One SLP stated, *"I think it takes some really important things from an organisational perspective to support collaboration with families and schools which is very crucial for the outcomes."* Collaboration allowed clinicians to maintain a child-centred approach to intervention while working remotely. Families and teachers provided information on the child's background and their community, feedback on their progress and functioning in natural environments, and input into therapy goals. Some participants believed that telepractice actually supported collaboration as it enabled the involvement of a broader team including teachers, regardless of their location.

SLPs faced a range of challenges to collaboration, including those that are not unique to telepractice. Some said it was difficult to establish strategies for the involvement of all parties, including clear lines of communication. Some parents and teachers did not always appear to understand their role in supporting the therapy program. Participants said that more time and effort was needed to develop relationships with parents and teachers than was usually required with face-to-face therapy. It was also difficult at times to identify someone to follow up on children's therapy goals outside of sessions by completing homework activities. SLPs reported that TAs were often central to their management of threats to effective collaboration. Some TAs shared information on therapy progress with parents and teachers and facilitated communication with SLPs. One SLP said:
> *[The TA] attended all of the sessions. Not only did she do that, she also provided therapy in the off-week. She also then was able to relay to the teachers and give them my detailed structure and modify their classroom environment to better support these kids. And then any emails I would email her about child progress, she would forward them onto the principal and to the parents and do that link.*

When direct communication with parents or teachers was unattainable, TAs provided clinicians with background information that assisted their clinical decision making. One SLP commented:
> *I just found out that a kid's parents had split up and he'd been living with grandma. It's like, "Okay, so his behaviour was much worse than usual, and it makes sense." So*

someone who knows the child and knows what we've been doing so far and can kind of give me extra information.

The adequacy of technology and resources

Acceptability of telepractice to SLPs was influenced by their evaluation of the reliability and quality of the technology. Good internet connectivity was vital, yet participants conceded that it was inevitable that problems would be encountered. Difficulties in distinguishing high frequency speech sounds over videoconferencing interfered with SLPs' ability to conduct speech therapy tasks. Others found it difficult to perceive children's subtle behavioural cues or the wider therapy environment during sessions, given the camera's focus on a child's head and shoulders.

Participants predominantly relied on TAs to overcome these limitations. Some TAs verified children's speech sounds, and helped troubleshoot technology difficulties. Participants accepted that the only strategy to deal with internet connectivity difficulties was to cancel and reschedule sessions, which required flexibility. One participant stated, *"On the clinician side it's being a bit more flexible with the services that you're providing and the time and it's not always going to run 100% smoothly...You've just got to go with it."*

The availability of therapy resources for use in telepractice, or having the skills to create them contributed to acceptability. SLPs wanted resources that (a) translated activities and resources that they typically used in face-to-face sessions for telepractice and (b) engaged children and promoted therapeutic relationships. One SLP said, *"What would make it work? Having a wealth of resources that you can use flexibly... Just something that resembles as closely as possible to pictures that you would use face-to-face."*

Where clinicians did not have access to existing resources, they said that developing resources was often stressful. One SLP said, *"The biggest pressure on me as a clinician was making resources available to be used and the medium that we were given, which was Adobe® Connect^{TM}. That was the biggest time pressure and that was the hardest thing."* However, access to a shared repository of resources alleviated anxiety. Where resources were not readily available, clinicians said they not only required skills to create them, but also needed attributes such as adaptability, creativity and willingness to trial different strategies. One participant said, *"It's the same kind of base skills that every clinician would have in terms of just catering for the child. I think it's just the thinking outside the box and being creative with what you can use."*

Access to support for learning telepractice

Participants described the ease with which they learned how to deliver telepractice. Although concerns about learning technology initially contributed to mixed feelings about telepractice, participants were surprised at how fast they were able to learn how to use platforms and create resources. Participants described a range of methods used to learn telepractice, including informal training in technology platforms and software, practice using platforms, observations of telepractice sessions, and discussion with experienced SLPs. Of these, the latter appeared to be the preferred support strategy.

Despite such preparation, many SLPs still felt unsure of their ability to deliver telepractice. Participants said being open-minded and willing to experiment and take risks helped them to

start practicing despite reservations. As one participant stated, *"I think every job you've got to just jump in there and do it eventually without knowing everything, so you learn on the job."*

Discussion
In this study, SLPs described the transition to telepractice as a journey, mediated by a sizing up of telepractice through constant comparison with face-to-face therapy that culminated in confidence in the legitimacy of telepractice. Acceptability of telepractice was supported by SLPs' ability to form therapeutic relationships with children and work collaboratively with parents and teachers, and their perceptions of the adequacy of technology and resources and access to learning support.

These results provide insights for the implementation of speech pathology telepractice programs. Access to ongoing support for learning telepractice is essential for addressing clinicians' uncertainty and/or negative attitudes.[10] In facilitating SLPs' transition to telepractice, training may need to directly address issues that promote acceptance, including how principles of face-to-face therapy are realized via telepractice. Our results suggest that training may need to incorporate the development of therapeutic relationships, working collaboratively from a distance, and development of skills for creating resources to promote acceptability to clinicians.

The role of TAs emerged as a critical way in which SLPs managed threats to acceptability. TAs supported development of therapeutic relationships by enabling use of physical activities and tangible therapy resources, collaborative relationships with parents and teachers, and overcoming limitations of technology. TAs may be an important feature of telepractice programs that not only support positive clinician attitudes towards telepractice, but may also enhance therapy outcomes for children. In order to realize these benefits, it is important that TAs have a clear understanding of their role and are trained in technology and speech pathology techniques. Working with TAs also requires specific skills of SLPs, including coaching and delegation of therapy tasks, which need to be addressed through workplace preparation. Additional research is required to understand in which situations TAs are essential for promoting outcomes for children. Children whose parents attend telepractice sessions with them may not, for example, require additional TA support. However, in order to make informed decisions, information about the comparative cost-effectiveness of different telepractice service delivery models is required.

Clinician attributes such as adaptability, preparedness, willingness to try new things, and acceptance that at times things won't go to plan were also important in promoting acceptance. However, not all SLPs transitioning to telepractice may naturally exhibit these qualities and attitudes. In such situations, workplace support that assists clinicians to address threats to acceptability will be particularly important. There is therefore a need for research about the competencies, including the specific skills, knowledge and attitudes, required for telepractice. This information may better equip organisations to provide targeted support and training to SLPs that not only may promote clinician acceptance,[11] but may help organisations be better placed to achieve the greatest, most sustained change.

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