

Chapter 18

Distance Education in Speech– Language Therapy: Telepractice With Children With Speech and Language Disorders

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ABSTRACT

Speech-language pathologists/therapists have been using a different service delivery model known for almost 40 years as telepractice, so they can meet the growing demand for assessment, intervention, consultancy, and also distance learning in their scope of practice. As far as the authors could review, the literature highlights a number of benefits for students, teachers, parents, and stakeholders, as well as evidence for the delivery of professional services at a distance within the clinical and educational settings. There are few studies regarding the effectiveness of telepractice intervention in this field. To their knowledge, there are no European Portuguese studies. The chapter illustrates up to date international applications of telepractice and distance learning in speech-language therapy services. It has currently increased in order to respond to the world crisis related to COVID-19 in which social self-isolation and personal dislocations are being implemented, forcing this professional to adapt to this new reality.

DOI: 10.4018/978-1-7998-4769-4.ch018

INTRODUCTION

Communication disorders are widespread and regarded as a significant educational and public health issue (Overby & Baft-Neff, 2017). Hearing loss and cognitive decline levels, associated with increased lifespans, are expected to grow in coming years. Equally, improvements in medical management of conditions typically associated with speech/or language disorders (e.g., traumatic brain injury, high-risk pregnancies) will see an increment. With the ongoing advance of internet access, speed and bandwidth, there has been an expansion in the ability to adopt/utilize improved communication technologies (such as webinars, web-conferencing, etc.). This has facilitated an increase in demand for speech-language pathologists/therapists (SLPs and SLTs) to use these technologies in a professional context within both healthcare and educational settings. This service delivery model is known as ‘telepractice’ by the American Speech-Language-Hearing Association (ASHA) (Overby & Baft-Neff, 2017).

Consequently, telepractice has developed as an alternative form of service delivery, which allows for effective services to those clients who have communication disorders (Keck & Doarn, 2014). ASHA (2005) defines telepractice as “the application of telecommunications technology to deliver professional services at a distance by linking clinician to patient, or clinician to clinician for assessment, intervention, and/or consultation” (Association, 2005). Telepractice includes the use of technologies such as computer-based videoconferencing software, allowing the clinician to convey services by distance (Dudding, 2009).

The clinical application for the provision of speech language pathology/therapy services over a distance is known as Tele Speech-Language-Pathology (TeleSLP) (Parmanto & Saptono, 2009). There are typically two primary modes to deliver TeleSLP, which can be combined in a hybrid application: synchronously (also referred to as real-time delivery) between the SLP/T and the patient, or asynchronously (also known as store and forward), whereby data is recorded and then transmitted between SLP/T and patient (Rao & Yashaswini, 2018). Whilst ‘real-time interaction’ is used to identify facial gestures and expressions, ‘store and forward’ is used to send numerical data to the therapist. Higher quality video recordings can also be ‘store and forwarded’ thus eliminating the need for high bandwidth (Hill et al., 2006). ‘Store and forward’ methodology results in the ability for metrics of data to be aggregated/analysed, thereby delivering a personalised service for the client (Parmanto & Saptono, 2009).

Speech language pathology/therapy utilizing telepractice is reported as very acceptable to patients (Hines, Lincoln, Ramsden, Martinovich, & Fairweather, 2015; D. Theodoros, 2012; Valentine, 2014). Evidence of comparable telepractice services to face-to-face speech language pathology/therapy in several communication disorders interventions was found in a systematic review (Regina Molini-Avejonas, Rondon-Melo, de La Higuera Amato, & Samelli, 2015).

Important benefits of telepractice include, but are not limited to, improving access to speech language pathology/therapy services to all patients, including those with linguistic and cultural diversity (Mohan, Anjum, & Rao, 2017). Communication disorders intervention in distant areas and among clients who cannot be physically present at face-to-face therapy are examples of telepractice being recommended as a form of service delivery (Rao & Yashaswini, 2018).

Telepractice has been used to deliver speech language pathology/therapy by SLP/Ts in those settings and populations (Regina Molini-Avejonas et al., 2015). Speech language pathology/therapy service delivery in schools has seen a growing base of evidence demonstrating the success of telepractice (Grogan-Johnson, S., Alvares, R., Rowan, L., & Creaghead, 2010; Raman et al., 2019; Waite, Theodoros, Russell, & Cahill, 2010a, 2010b; Wales, Skinner, & Hayman, 2017), and also with various communication, voice and swallowing disorders (Carey, O’Brian, Lowe, & Onslow, 2014; Cassel, 2016; Fu, Theodoros, &

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