

Title: Testing the Feasibility of a Telehealth Intervention for Children with Autism

Principal Investigator: Roseann C. Schaaf, PhD., OTR/L, FAOTA

Professor, College of Rehabilitation Sciences, Department of Occupational Therapy, Farber Institute for Neurosciences, Director, Jefferson Autism Center of Excellence:

<https://www.jefferson.edu/academics/colleges-schools-institutes/rehabilitation-sciences/departments/autism-center-of-excellence.html>

**Overview:** Autism Spectrum Disorder (ASD) is one of the most frequently occurring childhood-onset neurodevelopmental disorders, affecting 1 in every 54 children. As a lifelong condition, individuals with ASD experience a range of intellectual, behavioral, sensory, motor, and functional challenges that impact successful participation in daily life activities and tasks. The current project will adapt an evidence-based, manualized intervention, “occupational therapy (OT) for children with Autism Spectrum Disorder” (OT4ASD) that targets the sensory motor factors that impact behavior and participation in life activities and tasks. This project is significant in that it will address the need for evidence-based OT services for children with ASD using remote technology.

**Abstract:** Autism Spectrum Disorder (ASD) is one of the most frequently occurring childhood-onset neurodevelopmental disorders, affecting 1 in every 54 children. As a lifelong condition, individuals with ASD experience a range of intellectual, behavioral, sensory, motor, and functional challenges that impact successful participation in daily life activities and tasks. As a result, occupational therapy (OT) intervention is a frequently requested and utilized service in ASD, and clinically validated OT approaches are needed. The COVID-19 global pandemic created a call to action for healthcare providers to design unique and innovative methods for therapeutic service delivery. This shift creates an urgent need for remote solutions so that therapeutic services can be delivered in safely and effectively. Since the onset of the COVID-19 pandemic, families have reported regression in adaptive functioning in addition to a negative impact on social skills and increased anxiety, and an impact to daily routines of children with ASD. In a recent survey of families with children with ASD, 95% of the parents reported that disruptions in services/therapies negatively impacted their child’s behaviors and only 35% of families were receiving telehealth services/therapies. In a series of studies funded by the NIH and autism foundations, our team manualized and studied an OT intervention that targets the sensory and motor factors impacting participation in daily life activities and tasks and showed significant improvements in those that received the intervention in comparison to controls. To address these increased needs for children with ASD and to meet the need of manualized telehealth intervention, we will adapt our existing intervention to a telehealth delivery model. This intervention, termed occupational therapy for children with Autism Spectrum Disorder (OT4ASD) targets the sensory motor factors that impact behavior and participation in life activities and tasks. This project is significant in that it will address the need for evidence-based OT services for children with ASD using remote technology. Given that many children with ASD require treatment for the sensory and motor symptoms that impact their optimal participation in a range of daily life activities and tasks, and that the current COVID 19 pandemic has compromised access to this therapy, this project is meets a critical and currently unmet therapeutic need.