

Behavioral Treatment through In-Home Telehealth for Young Children with Autism

University of Iowa Children's Hospital Autism Center Center for Disabilities and Development, Division of Pediatric Psychology, and Child Health Specialty Clinics

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A Treatment Research Opportunity

We are currently in the second year of a research study entitled, "Behavioral Treatment through In-Home Telehealth for Young Children with Autism," which is funded by the Maternal and Child Health Bureau of the Health Resources and Services Administration. Scott Lindgren and David Wacker, faculty members in the Department of Pediatrics at the University of Iowa, are the principal investigators for this study. Todd Kopelman, Kelly Pelzel, and Debra Waldron are co-investigators. The project is a partnership among the Center for Disabilities and Development, the Division of Pediatric Psychology, and the Child Health Specialty Clinics.

Purpose of the Research

The primary purpose of this research study is to evaluate the effectiveness of functional analysis and functional communication training, which are applied behavior analysis (ABA) procedures, in decreasing problem behaviors displayed by young children (ages 18 months to 6 years) with an autism spectrum disorder (ASD). All behavioral assessment and treatment procedures will be conducted through telehealth coaching using internet links to the child's home.

Study Procedures

We plan to include 50 children over the course of this 3-year project. All children who participate in this research study will be displaying problem behaviors (e.g., tantrums, non-compliance, aggression, self-injurious behaviors) at the time of their inclusion. Each child is evaluated by research staff at the UI Children's Hospital in Iowa City to confirm that they meet the diagnostic criteria for an ASD. As part of this evaluation, parents are interviewed for information about their child and asked to complete checklists about their child's behavior and about their own levels of stress and mood.

Following confirmation of an ASD diagnosis, a behavioral evaluation (functional analysis) is conducted in the child's home. Parents receive coaching on procedures via a

video call from project staff located at the UI Children's Hospital. A parent consultant from a regional Child Health Specialty Clinic goes out to the home to assist the family during the initial functional analysis session.

Following the evaluation, we then train parents to conduct a treatment called functional communication training (FCT), which has been reported in the scientific literature to be effective for many children. Some families are asked to start treatment right away, while others will need to wait a few months before starting treatment. The behavioral evaluation and treatment typically lasts between six to nine months for each child, depending on how soon treatment is started. We also check back with each family 6 months after treatment has been completed to see how the child and parents are doing. Families are be reimbursed for the cost of travel to attend the initial evaluation in Iowa City at the start of the study. There are no costs to families in the study other than their time to participate.

Data Collection

Video recordings are made of all observation sessions. These recordings are stored on a password-protected server and will be erased at the end of the project. Parents are asked to complete several checklists during the study. All information collected as part of this research project is kept confidential.