Research

Our primary purpose for conducting research at The New England Center for Children® (NECC®) is to ensure we provide our students with the best practices available for teaching skills and managing challenging behavior, toward the goal of maximizing independence of each individual. However, we also share research findings with colleagues around the world through conference presentations and publications in peer-reviewed journals.

NECC's research projects are conducted in controlled settings, while other studies take place within the classroom, the residences, or at worksites.

While much of NECC's research is conducted independently, we also work closely with some of the most prominent researchers and clinicians in our field.

BY THE NUMBERS



CURRENT AREAS OF RESEARCH

Increasing Physical Activity

To maximize health and wellness, children with an autism spectrum disorder (ASD) can greatly benefit from daily physical activity. However, some children do not readily engage in physical activity. Therefore, it is important to identify methods for increasing physical activity among children with ASD. We are currently conducting two studies related to this goal. Study 1 involves using heart rate measures to identify appropriate forms of physical activity to target during treatment. Study 2 involves a treatment for increasing exercise that includes the following components alone or in combination: prompting, non-contingent reinforcement (NCR), and differential reinforcement.

Assessment and Treatment of Problem Behavior During Dental Exams

Over the years, we have evaluated numerous approaches to helping our students more successfully tolerate and participate in dental exams. To that end, a series of projects on graduated exposure to dental exams ("dental desensitization") was initiated. In these studies, we have evaluated the role of brief breaks during practice dental exams, the role of rewards during practice dental exams, the timing of practice dental exams, and the extent to which we can practice dental exam components in a more familiar and convenient environment.

Persistence of Responding Following DRA

Behavioral momentum theory research has demonstrated that differential reinforcement of alternative behavior (DRA)-based interventions, while decreasing the rate of a target response (i.e., problem behavior), may in fact increase the persistence of target responses when reinforcement for the alternative response is disrupted. One of NECC's studies is aimed at demonstrating the effects of reinforcement histories on persistence of targeted responses across multiple phases of reinforcement and extinction conditions.



RECENT PUBLICATIONS

Farber, R.S., Dickson, C.A., & Dube, W.V. (2017). Reducing overselective stimulus control with differential observing responses. *Journal of Applied Behavior Analysis*, 50, 87-105.

Ahearn, W.H. (2016). What is best practice for treating automatically reinforced stereotypic behavior? *APBA Reporter*, 56. http://www.apbahome.net/newsletter.php?nid=56&aid=1903

Ahearn, W.H. (2016). The New England Center for Children: Applied behavior analysis for treating all levels of ASD severity. In R.G. Romanczyk & J. McEachin (Eds), Comprehensive Models of Autism Spectrum Disorder. New York: Springer.

Cividini-Motta, C., Scharrer, N., & Ahearn, W.H. (2016). An assessment of procedures to teach echoic responding. *The Analysis of Verbal Behavior,* (), 1-23. doi:10.1007/s40616-016-0069-z

Farber, R.S., Dube, W.V., & Dickson, C.A. (2016). A sorting-to-matching method to teach compound matching to sample. *Journal of Applied Behavior Analysis*, 49, 294-307.

Verriden, A.L., & Roscoe, E.M. (2016). A comparison of preference assessment methods. *Journal of Applied Behavior Analysis*, 49, 265-281.

Learn more about NECC research at www.necc.org.



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