Candidate: Joseph Shane  
For the degree of: Doctor of Philosophy  
Department: Psychology  

Title: Increasing Vocal Behavior and Establishing Echoic Stimulus Control in Children with Autism

Committee: Dr. Richard Malott, Chair  
Dr. Carmen Jonaitis  
Dr. Stephanie Peterson  
Dr. Steven Ragotzy  
Dr. Ron Van Houten

Time/Place: Monday, January 25, 2016  
10 a.m. to noon  
2734 Wood Hall

Many children with autism fail to demonstrate vocal-verbal behavior, including echoic behavior, as early as their typically developing peers. Some also make very limited vocal sounds in general, remaining mostly mute aside from crying or engaging in stereotypy. Echoic behavior involves auditory discrimination and matching, and functions as a beneficial, if not necessary, prerequisite for many other vocal-verbal skills. The purpose of this study was to develop and implement an echoic training procedure for primarily non-vocal children who did not demonstrate auditory discrimination in baseline. The intervention consisted initially of sessions in which any vocal sounds were reinforced. Then differential reinforcement and shaping were used to increase the variety of sounds made. This was followed by a simplified echoic protocol to establish auditory stimulus control. The echoic protocol first targeted only the highest rate sound from previous phases in isolation, and introduced other high rates sounds in subsequent sessions. Echoic skills were tested prior to and throughout the intervention. This procedure produced an echoic repertoire in two out of three children.