

Longitudinal Study of Language Acquisition in Children with Autism

University of Connecticut

We are currently in the process of recruiting children for an NIH-funded longitudinal study of language acquisition in children with autism who are receiving Applied Behavior Analysis treatment. We would be following the children's language development every four months for a period of two years. With this commitment, parents and therapists will benefit from the test results. These tests will give an objective measure of the child's progress that will examine what the child is able to understand as well as what he/she is able to say. This information will give parents and ABA therapists feedback about the child's developing language competence and may help pinpoint areas that need more intensive remediation.

We are looking for children who are at or near the beginning of their ABA programs (less than 6 months). Children should be between twenty-four and forty-two months as they enter the study. We would be traveling to their homes for each session at a time that was convenient for them. There will be six to eight sessions over a period of two years. At each session, children will be evaluated using the Mullen Scales of Early Learning, the MacArthur Communicative Development Inventory (CDI), and the Vineland Adaptive Behavior Scales (a parent interview). The child will also be given the Autism Diagnostic Observation Schedule (ADOS) and the Childhood Autism Rating Scale (CARS) at the initial session. Each session will take approximately two hours.

The general theoretical question that guides this research is whether or not children with autism learn language in the same manner as typically developing children and if they progress through the same stages in language acquisition. We will also be looking at the ways children with autism generalize, and whether they can comprehend more than they produce.

Several measures of language will be taken at each visit, including spontaneous language between mother and child, parent surveys about what words their child knows, standardized language tests for comprehension (as described above), and the use of the Preferential Looking Paradigm for comprehension measures. With the preferential looking paradigm, we present the child with two simultaneous videos of up

to six minutes each, paired with a single sound track, and investigate whether the child looks longer at the video that matches the audio that s/he hears. We will be using this method to look at several areas of language acquisition including whether these children exhibit the “shape bias” in word learning that is seen in typically developing children (i.e., when they hear a new word for an object they assume it applies to the object’s shape rather than some other property), whether overgeneralization errors are made, when understanding of word order emerges (i.e. the boy tickles the girls vs. the girl tickles the boy), and, eventually, when understanding of more complex grammatical structures emerges.

Parents and (with parent consent) therapists will be given feedback after each session from the standardized tests, that will help the adults track the growth of the child’s comprehension, vocabulary, and adaptive skills.

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