

Using Multiple Baseline Designs to Demonstrate the Efficacy of Using Behavior Therapy to Teach Children Vocal Imitation

Jeffrey R. Miller, Katie M. Wiskow, Kathryn R. Haugle, & Kevin P. Klatt
Psychology Department, University of Wisconsin-Eau Claire



Program Overview

The number of autism diagnoses has increased dramatically in the past decade (Association for Science in Autism Treatment). There are a variety of therapies that claim to be effective for treating autism. All clinicians providing treatment should demonstrate treatment efficacy in order to make ethical decisions regarding the treatment being provided. One type of therapy that has demonstrated treatment efficacy for children with autism is behavioral therapy (Lovaas, 1987).

Clinicians providing behavioral therapy utilize experimental designs to demonstrate the efficacy of clinical treatments. One of several experimental designs that can be used is a multiple baseline design. Clinicians can use a multiple baseline design when there are several targets that need treatment in one behavioral repertoire (i.e., teaching a child to imitate vocals). Clinicians utilizing a multiple baseline design stagger treatment temporally across these multiple targets (Baer, Wolf, Risley, 1968). Treatment efficacy is demonstrated only when progress is seen for the target in which the treatment has been implemented and not for any of the other targets where treatment has not been implemented (Cooper, Heron, & Heward, 2007).

At the Campus Autism Program in the Psychology Department students are providing behavior therapy to young children with autism and using experimental designs to demonstrate treatment effectiveness. The current project demonstrates the implementation of a multiple baseline design to demonstrate treatment effectiveness while teaching children with autism to answer questions.

Method

Participants: Three children receiving services through the Campus Autism Program participated in this project. The Participants were 2, 2 ½, and 3 ½ years old.

Targets: The targets for all participants were selected based on the child's performance on the Early Echoic Skills Assessment (EESA).

Treatment: A package treatment was implemented that consisted of using echoic prompts to facilitate correct responding. The therapist gave praise and preferred items contingent on independent correct answers. There were three primary methods that were used to prompt each target.

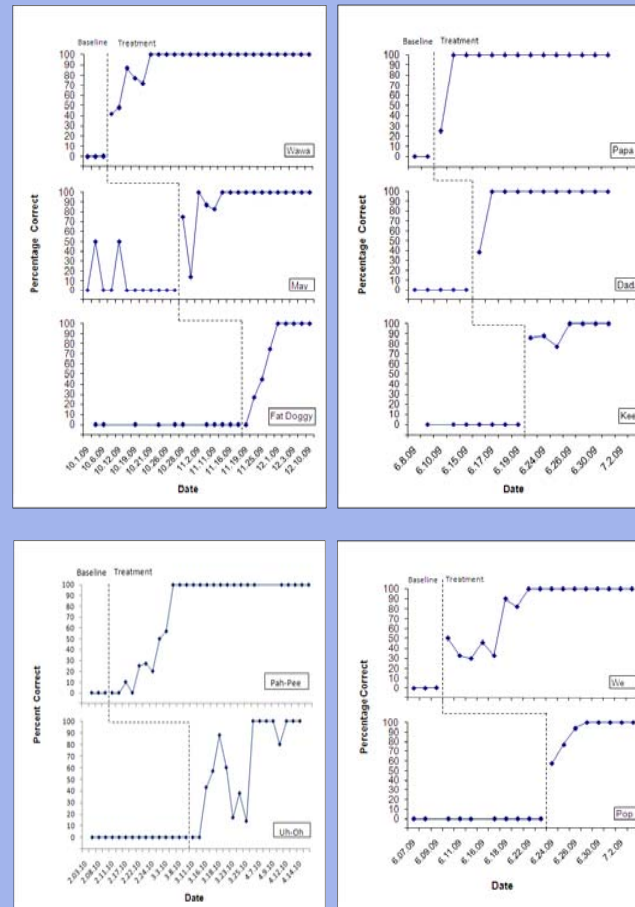
Elongating: Therapists extended the length of each sound of the target vocal without breaks between the sounds.

Separating: Therapists broke down the target vocal into smaller parts.

Embedding: Therapists delivered several similar and previously mastered vocals and then immediately delivered the target vocal to facilitate a correct response.

A special thank you to all of the therapists at the Campus Autism Program, the parents, and the children that participated.

Designs



Discussion

All figures display the use of a multiple baseline design in order to demonstrate clinical effectiveness. All figures display a clear relationship between the behavioral treatment implemented and the percentage correct of answers to various questions. The treatment for the targets for all four figures was staggered temporally across the targets, and progress was demonstrated only when the behavioral treatment was implemented for all targets.