

# STRONG CHILDREN'S RESEARCH CENTER

## Summer Research Scholar

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### ABSTRACT

**Title: Comparing the Number of Opportunities to Respond for Two Minimally Verbal Children with Autism Who Received a Discrete Trial Teaching Intervention**

#### Background:

Discrete Trial Teaching (DTT) is a commonly used instructional approach for autistic children. DTT is conducted one-on-one with the child and an adult. It involves breaking skills down into small, teachable steps, consisting of brief, structured learning trials (i.e., opportunities to respond). These trials are individualized, delivered rapidly and consistently, and provide the learner with multiple opportunities to respond (Smith, 2001). Research suggests understanding intervention variations may help tailor approaches more effectively for minimally verbal learners (McKinney et al., 2021).

#### Objective:

Examine trends in the number of trials conducted during multiple DTT sessions for two minimally verbal children with autism. Consider additional factors that may have impacted each participant's response to intervention, such as interventionist fidelity and behavioral engagement.

**Methods:** Participants were enrolled in a multi-site clinical trial examining language outcomes based on enrollment in one of two interventions. Both participants were randomly assigned to DTT and, per study protocol, were determined to be responders to the intervention over time. Both participants received weekly DTT sessions (up to 2 hours per week) over the course of 20 weeks. For the current project, one video-recorded session per week was selected for each participant. For each video, the number of trials conducted was tallied. Behavior observations were also noted. For each video, the interventionist's fidelity rating was also reviewed.

#### Results:

Participant 1 received an average of 145 trials per session. Participant 2 received an average of 147 trials per session. Over 20 weeks, both participants showed an upward trend in average number of trials per session. Behavior observations during video review noted different behavioral profiles for each participant. The interventionist's DTT implementation fidelity remained high throughout the twenty weeks.

**Conclusion:** Both participants received a similar number of trials, on average, over time.

Individual differences such as baseline communication ability, responsiveness to prompting, and behavior during sessions may have played a role in the intervention's effectiveness for each participant. Behavior observations highlight that there was variability from week to week, but overall, there was great similarity in the average number of trials and responsiveness to the intervention. High fidelity in DTT implementation further supports the conclusion that variability in outcomes was driven by participant-specific factors rather than inconsistencies in

instruction. This underscores the importance of individualized approaches in behavioral interventions, as what works for one individual may not yield the same results for another.

Reference:

McKinney, A., Weisblatt, E. J., Hotson, K. L., Bilal Ahmed, Z., Dias, C., Ben Shalom, D., Foster, J., Murphy, S., Villar, S. S., & Belmonte, M. K. (2021). Overcoming hurdles to intervention studies with autistic children with profound communication difficulties and their families. *Autism*, 25(6), 1627–1639. <https://doi.org/10.1177/1362361321998916>

Smith, T. (2001). Discrete trial training in the treatment of autism. *Focus on Autism and Other Developmental Disabilities*, 16(2), 86–92. <https://doi.org/10.1177/108835760101600204>