

Two treatments for autism found to help toddlers equally

July 8 2021



Credit: CC0 Public Domain

A study in the *Journal of the American Academy of Child and Adolescent Psychiatry* (JAACAP), published by Elsevier, reports that the type of one-on-one treatment plans delivered to toddlers, aged 12-30 months,

diagnosed with autism spectrum disorder (ASD) did not lead to any significantly different outcomes. Neither the type of evidence-based intervention provided, nor the number of hours of therapy were shown to have an impact.

The treatments, or [intervention methods](#), delivered by specialized staff to the very young, during the study were either the Early Intensive Behavioral Intervention (EIBI) or Early Start Denver Model (ESDM). The researchers found negligible overall effects on receptive or expressive language development, nonverbal abilities, or autism symptom severity after one year of direct intervention, which also included twice-monthly parental coaching.

"Our results should reassure parents who do not have access to the exact treatment type or the number of treatment hours that they would ideally like their recently diagnosed toddlers to receive," said Sally Rogers, Ph.D., lead author of the study and Professor Emeritus at the UC Davis Department of Psychiatry and Behavioral Sciences, and the MIND Institute. "Given the lack of differences across these four groups, it may well be that it's the common elements rather than the differences that are resulting in children's similar progress."

Eighty-seven toddlers with ASD, aged between 12-30 months, were enrolled and randomized into one of four groups: Early Intensive behavioral intervention (EIBI) for 15 hours per week; EIBI for 25 hours per week; Early Start Denver Model (ESDM) for 15 hours per week; or ESDM for 25 hours per week. The children's overall developmental skills and autism severity were assessed at enrollment, and their expressive and receptive language skills, nonverbal abilities, and autism symptoms were examined three more times, at 6- and 12-months after enrollment (at which point intervention ended). Only three children dropped out of the study. The analyses included data from all enrolled children at all four time points regardless of the extent to which they

participated in the study after enrollment—an intent-to-treat design—that adds additional rigor to the design and the findings.

Children also received intervention at home (or in other care settings) by a highly-trained team of paraprofessionals monitored and supervised by professional experts in the interventions and overseen by intervention developers. The researchers measured staff performance regularly to assure the quality of intervention. They also measured the extent to which the treatment delivery was modified over time in ways that varied from the core nature of the intervention.

"We found that all four groups of children made significant gains in language and nonverbal abilities, and significant improvements in autism symptom severity, over the two years of the study," Dr. Rogers added. "We also found that intervention style—EIBI or ESDM—had no significant effects on a child's progress in language, nonverbal abilities and autism severity over time. And, contrary to what we expected, a child's initial severity of developmental delay and autism symptoms did not differentially affect their progress in EIBI compared to ESDM in terms of language, nonverbal abilities, or improved autism symptoms over the year."

The findings are based on the multisite TADPOLE study, conducted from 2012-2019 by research teams at the MIND Institute, University of California Davis, Vanderbilt University, University of Washington, and supported by an independent data coordinating center at the University of California Los Angeles.

Why were the outcomes so similar? While there are widespread public (and professional) opinions about the number of intervention hours and the styles of intervention that are best for young children with ASD, there have been no studies conducted previously that tested the number of hours experimentally. Even though the two interventions seem so

different, there are many commonalities that may explain their effects.

Several commonalities in the interventions:

- They used tested, evidence-based, comprehensive interventions.
- Children's learning targets addressed both developmental and behavioral progress.
- Interventions were delivered consistently in terms of total hours and the model being followed.
- There was ongoing frequent review, supervision and training of the interventionists by well trained professional supervisors.
- Parents received ongoing coaching by the supervisors, allowing them to incorporate child learning into everyday activities at home and across multiple environments, materials, and adults.
- Attention was paid to the quality of the child's experience, including a focus on positive relationships with interventionists and their ability to engage in activities they enjoyed, either in learning activities (ESDM) and/or in breaks during their sessions (EIBI).

"These commonalities, and the child's progress, may be why the parents in our study were so pleased with the intervention they received, regardless of the group to which they were assigned," said Dr. Rogers.

The researchers note that there is still much to learn about the core mechanisms which support child growth and change. "I firmly believe that ongoing, one-on-one caregiver coaching should be part of all early interventions for children with ASD, regardless of style or intensity. We have demonstrated effects on [family support](#), self-efficacy, and family endorsement of the benefits of ongoing coaching as well as direct child [intervention](#)," said Rogers.

More information: Sally J. Rogers et al, A Multisite Randomized

Controlled Trial Comparing the Effects of Intervention Intensity and Intervention Style on Outcomes for Young Children With Autism, *Journal of the American Academy of Child & Adolescent Psychiatry* (2020). [DOI: 10.1016/j.jaac.2020.06.013](https://doi.org/10.1016/j.jaac.2020.06.013)

Provided by Elsevier

Citation: Two treatments for autism found to help toddlers equally (2021, July 8) retrieved 25 April 2024 from <https://medicalxpress.com/news/2021-07-treatments-autism-toddlers-equally.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.