

Research Evidence Fact Sheet

The Early Start Denver Model (ESDM)

The following articles are just some of the current peer-reviewed research supporting the effectiveness of the ESDM Early Intervention approach. We have mainly included studies that represent the most robust and reliable evidence, being Randomised Controlled Trials (RCTs) and Systematic Reviews. Follow the links to view the actual research report.

Randomised Controlled Trials (RCTs)

1. Dawson, G., Rogers, S., Munson, J., Smith, M., Winter, J., Greenson, J., ... & Varley, J. (2010). "Randomized, Controlled Trial of an Intervention for Toddlers with Autism: The Early Start Denver Model." *Pediatrics*, 125(1), e17-e23. <https://doi.org/10.1542/peds.2009-0958>

Summary: This foundational RCT evaluated ESDM's effectiveness, showing significant improvements in IQ, adaptive behaviour, and autism symptom severity in toddlers with ASD.

2. Vivanti, G., Dissanayake, C., Zierhut, C., Rogers, S., & Victorian ASELCC Team. (2016). "Brief Report: Predictors of Outcomes in the Early Start Denver Model Delivered in a Group Setting." *Journal of Autism and Developmental Disorders*, 46(5), 1717-1724. <https://doi.org/10.1007/s10803-012-1705-7>

Summary: This study evaluates predictors of positive outcomes in children receiving ESDM in a group format, demonstrating significant gains in social and communication skills.

3. Vivanti, G., Paynter, J., Duncan, E., Fothergill, H., Dissanayake, C., Rogers, S., & Victorian ASELCC Team. (2014). "Effectiveness and Feasibility of the Early Start Denver Model Implemented in a Group-Based Community Childcare Setting." *Journal of Autism and Developmental Disorders*, 44(12), 3140-3153. <https://pubmed.ncbi.nlm.nih.gov/24974255/>

Summary: This RCT highlights the effectiveness of ESDM in group settings, confirming its adaptability and positive outcomes across diverse settings.

4. Rogers, S., Vismara, L., Wagner, A., McCormick, C., Young, G., & Ozonoff, S. (2014). "Autism Treatment in the First Year of Life: A Pilot Study of Infant Start, a Parent-Implemented Intervention for Symptomatic Infants." *Journal of Autism and Developmental Disorders*, 44(12), 2981-2995. <https://doi.org/10.1007/s10803-014-2202-y>

Summary: This pilot study demonstrates early intervention efficacy for infants showing early autism signs, supporting ESDM's developmental and preventive potential.

5. Vismara, L., McCormick, C., Shields, R., & Hessel, D. (2019). "Extending the Parent-Delivered Early Start Denver Model to Young Children at Risk for Autism Spectrum Disorder." *Journal of Autism and Developmental Disorders*, 49(3), 1250-1260. <https://pubmed.ncbi.nlm.nih.gov/30499037/>



Summary: This study shows that parents can successfully implement ESDM principles at home, leading to gains in social communication and engagement skills.

Systematic Reviews

1. **Waddington, H., van der Meer, L., & Sigafos, J. (2016).** *“Effectiveness of the Early Start Denver Model: A Systematic Review.”* Review Journal of Autism and Developmental Disorders, 3(2), 93-106. <https://doi.org/10.1007/s40489-015-0068-3>

Summary: This review consolidates evidence of ESDM’s effectiveness, citing positive outcomes in cognitive, social, and language development in young children with ASD.

2. **Fuller, E. A., Oliver, K., Vejnaska, S. F., & Rogers, S. J. (2020).** *“The Effects of the Early Start Denver Model for Children with Autism Spectrum Disorder: A Meta-Analysis.”* Brain Sciences, 10(6), 368. <https://doi.org/10.3390/brainsci10060368>

Summary: This meta-analysis evaluates multiple studies on ESDM, confirming its positive impact on cognitive and language development in children with ASD.

3. **Ryberg, K. H. (2015).** *“Evidence for the Implementation of the Early Start Denver Model for Young Children with Autism Spectrum Disorder.”* Journal of the American Psychiatric Nurses Association, 21(5), 327-337. <https://doi.org/10.1177/1078390315608165>

Summary: This review assesses ESDM’s practical application, supporting its effectiveness as an evidence-based intervention for autism in young children.

4. **Liu, H. X., Chiang, Y. C., & Marsh, C. (2020).** *“Early Intervention for Young Children with Autism Spectrum Disorder: A Review of the Early Start Denver Model.”* Psychology Research and Behavior Management, 13, 297-310. <https://doi.org/10.2147/PRBM.S233226>

Summary: A comprehensive review of ESDM’s developmental framework and evidence, underscoring its impact on social, cognitive, and adaptive skills.

5. **French, L., & Kennedy, E. M. (2018).** *“Treatment of Autism Spectrum Disorder in Young Children: Behavioral Interventions and the Use of ESDM.”* Psychiatric Clinics of North America, 41(4), 861-875. <https://doi.org/10.1016/j.psc.2018.07.001>

Summary: This review covers behavioural interventions, including ESDM, emphasising its scientific basis and demonstrated benefits in early autism treatment for young children.