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## **Effects of Parent-Implemented Early Start Denver Model Intervention on Chinese Toddlers with Autism Spectrum Disorder: A Non-Randomized Controlled Trial**

### **Abstract**

To evaluate the effects of a 26-week, high-intensity, parent-implemented Early Start Denver Model (P-ESDM) intervention on developmental outcomes, severity of autism spectrum disorder (ASD), and parental stress of ASD toddlers in China. Subjects in P-ESDM group (n = 23) were recruited from 1.5- to 2.5-year-old toddlers who were screened positive in Xuhui and Minhang Districts and were diagnosed with ASD. A community (comparison) group of age-matched toddlers with ASD (n = 20) was recruited from other areas. Subjects of the P-ESDM group attended 1.5-hr parent coaching per week for 26 weeks, and those in the community group received interventions available from communities. Assessments were conducted at baseline (T1) and 26 weeks later (T2). After adjusting for baseline differences between the two groups, P-ESDM group demonstrated greater improvement than the community group in general development, especially in Language domain. Neither group demonstrated significant change in ASD severity, but the P-ESDM group showed greater improvement in social affect, parent-reported social communication and symbolic play than community group did. Finally, parents in P-ESDM group experienced decreased parenting stress while those in community group showed an opposite trend, though the differences did not reach significant association with the P-ESDM intervention. Chinese toddlers with ASD receiving 26 weeks of P-ESDM via regular coaching sessions showed significant greater improvement than those receiving community interventions in multiple aspects of development including social communications. These findings add support to the importance of providing early screening, diagnosis, and immediate referral for evidence-based interventions to improve outcome of young children with ASD.