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## A randomised controlled trial comparing the efficacy of preschool language interventions: Building Early Sentences Therapy and an Adapted Derbyshire Language Scheme

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## **Abstract**

The provision of language enriching early years environments in early childhood education and care (ECEC) is vital to children's language development. Ensuring all children have access to such experiences has the potential to narrow inequalities in language outcomes associated with families' socio-economic circumstances.

Building Early Sentences Therapy (BEST) and the Derbyshire Language Scheme (DLS) are effective in improving children's use and/or understanding of simple sentences. BEST is based on 'usage-based' theory: the systematic manipulation of the nature and quantity of language a child hears, promotes abstract, flexible knowledge and use of a range of sentence structures, accelerating future language learning. DLS incrementally increases the information carrying words children are asked to understand and produce. The adapted version of DLS (A-DLS) used in this study follows the principles of traditional DLS but delivers the programme more rapidly. This project aimed to determine whether BEST and A-DLS differ in their efficacy.

Comparisons of effective interventions enable informed choices to be made regarding which work best for a given child, context, or family preference. Comparing interventions delivered with the same dosage, delivery context, and treatment fidelity tests whether it is the specific learning mechanisms exploited by the interventions which promote change.

Twenty schools were independently randomised to receive BEST or A-DLS. Measures were collected at baseline, outcome, and follow-up. Children aged 3;06–4;06, identified by teachers as monolingual English speakers, and not meeting age-related expectations in their language development, were assessed and included if they: Scored ≤16th centile on the New Reynell Developmental Language Scales (NRDLS) comprehension and/or production subscales and had no sensorineural hearing impairment, severe visual impairment or learning disability.

Interventions were delivered, with high fidelity, through  $\sim 15$ -minute group sessions delivered twice weekly for eight weeks in preschool settings by qualified Speech and Language Therapist researchers. Measures were completed blind to intervention arm.

One-hundred-and-two children participated. There were no differences in NRDLS comprehension or production standard scores at outcome but children receiving BEST had higher comprehension and production standard scores at follow-up. Both interventions were associated with large clinically meaningful changes in communicative participation.