This meta-analytic review demonstrates that language interventions can improve oral language in children with neurodevelopmental disorders. However, this result should be interpreted with caution because of poor reporting in many studies and publication bias: selective reporting of research results in this field, based on their positive findings.

What is this review about?

We assessed interventions that target language skills in children with neurodevelopmental disorders. The interventions had to use techniques ranging from explicit and structured activities (explicit instruction of vocabulary, narrative structure or grammatical rules) to implicit and broad activities (shared book reading, general language stimulation).

We examined whether the interventions had an impact on language in general, or on more specific aspects of language in both receptive and expressive modalities.

What studies are included?

We evaluated the effects of oral language interventions in children with neurodevelopmental disorders at post-test (38 studies with 46 group comparisons and 108 effects) and at follow-up (eight studies with 12 group comparisons and 21 effects).

Most of the interventions targeted children with language disorders and children with autism, and only a few involved children with Down syndrome, Fragile X syndrome, or mixed samples.

The studies spanned the period 1993 to 2022 and were mostly carried out in the USA and UK.

Do oral language interventions help to reduce language problems in children across different neurodevelopmental disorders?

Oral language interventions yield moderate effects on language skills in favour of the treatment groups at post-test, and smaller effects at follow-up. Importantly, the quality of evidence and risk of bias are unclear because of poor reporting in many studies and publication bias: selective reporting of research results in this field, based on their positive findings.

The evidence suggests moderate effects on language skills in favour of the treatment groups at post-test, and smaller effects at follow-up.
reporting of critical aspects of the study design, such as recruitment and randomisation.

Overall, the analyses indicate potential publication bias, with small positive studies tending to yield larger treatment effects.

**What factors affect how well oral language interventions work?**

From pre- to post-test, participants’ characteristics and treatment components and implementation of the language interventions were not significant moderators.

(Participants’ characteristics: children’s diagnosis, diagnostic status, age, sex, and non-verbal cognitive ability and severity of language impairment. Treatment components and implementation: intervention content, setting, delivery agent, session structure of the intervention or total number of sessions.)

However, smaller effects emerged for receptive vocabulary and multi-component receptive measures compared to expressive vocabulary, grammar, expressive and receptive discourse, and multi-component expressive tests.

Longer sessions conducted over a longer period were more beneficial than brief sessions and short-term interventions.

**What do the findings of the review mean?**

The current evidence base is promising but inconclusive. To drive evidence-based practice and policy, we need pre-registration and replication of more robust and adequately powered trials. Studies should include a wider range of diagnostic conditions. Further research should also report on long-term follow-up.

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**How up-to-date is this review?**

The review authors searched for studies up to April 2022.

**What is the Campbell Collaboration?**

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**About this summary**


Financial support from the American Institutes for Research for the production of this summary is gratefully acknowledged.