

## How Important is Language?

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In a recently released issue of *Pediatrics*, Philip Curtis and colleagues report on their meta-analysis of studies examining the association between language disorders and childhood problem behaviors. While a large number of studies have demonstrated that children with developmental language disorders have higher rates of problematic behaviors, methodological differences have made comparison and consensus difficult – this meta-analysis aims to address this “apples versus oranges” comparison issue.

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In a recently released issue of *Pediatrics*, Philip Curtis and colleagues ([10.1542/peds.2017-3551](https://doi.org/10.1542/peds.2017-3551)) report on their meta-analysis of studies examining the association between language disorders and childhood problem behaviors. While a large number of studies have demonstrated that children with developmental language disorders have higher rates of problematic behaviors, methodological differences have made comparison and consensus difficult – this meta-analysis aims to

address this “apples versus oranges” comparison issue. The authors have limited their analysis to studies including children with developmental language disorders, which comprises a group of children with delayed or disordered speech development associated with normal cognitive abilities and not linked to specific genetic, auditory or neurodevelopmental disorders such as autism. Children with developmental language disorders have a relatively inscrutable inability to speak, and often appear about to say something which then does not get vocalized; their verbal efforts may initially be misinterpreted by the adults around them as obstinacy or laziness, which of course are not causes of language delay. Anecdotally, speech therapy is immensely helpful for developmental language disorders, though Cochrane reviews point to the need for additional well done studies. (1-3)

The authors compare a heterogeneous group of 47 articles which met inclusion criteria, and carefully walk non-experts through the process of meta-analysis using plain English to explain technical considerations. For example, how does one compare studies with one outcome measure, for example a summary of the Child Behavior Checklist, with studies using two outcomes measures, for example subscales related to so-called “internalizing” behaviors (such as depression and anxiety) and “externalizing” behaviors (such as aggressive behaviors)?

Readers can easily see from the Abstract that indeed the authors verified that children with developmental language disorders have a significantly higher rate of problem behaviors, both internalizing and externalizing, than typically developing children. One particularly interesting finding is that as children grow older, each additional year of age is associated with a 0.06 standard deviation increase in the difference in problem behavior scores between those with language disorder and those without. In other words, growing older exacerbates rather than blurs the difference in problem behaviors between the groups. Why is this? There are not ready answers (and the study was not designed to answer this question) but the authors make note of the importance of language to both recognizing and regulating emotion. Children who cannot express their feelings, needs and wants verbally to caregivers, and later on, to teachers and peers, are likely at increasing risk for meaningful frustration. Repeated frustration can easily lead to non-adaptive problem behaviors. The great clinical importance of this key study finding regarding age is that it focuses attention on the need for earlier treatment interventions that partner speech therapy for language delay with preventive management and assessment of problematic behaviors. Simple strategies, such as teaching Sign Language for basic needs and wants while speech is slowly beginning to develop, are relevant. By seeing the child as a whole person with a complex inner life, we have an increased opportunity to give each a better chance at success.

## References

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- [One-Year Language Outcomes in Toddlers With Language Delays: An RCT Follow-up](#)
- [Developmental Trajectory of Language From 2 to 13 Years in Children Born Very Preterm](#)
- [Language Matters: Identifying Medically Complex Children in Foster Care](#)
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