

High prevalence of developmental coordination disorder risk in childhood apraxia of speech

Key terms

Developmental coordination disorder, childhood apraxia of speech

What this research is about

Developmental coordination disorder (DCD) is a condition that makes it hard for children to learn and perform coordinated movements. Children with DCD are often described as 'clumsy' and may struggle with balance and fine motor tasks. This can make everyday activities—like handwriting, tying shoelaces, or riding a bike—much more challenging and can limit their participation at home, school, and with friends.

What the researchers did

In our study, we looked at motor skills in 105 children aged 5-15 years who were diagnosed with Childhood Apraxia of Speech (CAS).

What the researchers found

We found that motor difficulties are widespread in these children and these challenges go far beyond just their speech.

- 82% of children had problems with different types of movement.
- 63% were at high risk for DCD.
- 71% struggled with using their eyes and hands together, making tasks like drawing, writing, or catching a ball much harder than for other kids.
- Motor problems were not linked to how smart the children were; kids with high, average, or lower IQs all faced similar challenges with coordination.
- We also discovered that a commonly used test, the Vineland-3 Motor Domain, often misses children who are at risk for DCD.

What this research means

- Having trouble with movement in CAS is not just about intelligence, it's a separate issue that needs attention.
- To truly support these kids, more specific motor assessments are needed, not just the standard tools.

Our results add to growing evidence that CAS often affects much more including balance, coordination, and the ability to use vision and movement together.

By routinely checking for movement problems in children with CAS, we can help identify those who need extra support early, giving them a better chance to succeed at home, in school, and with their friends.

Learn more here: Tükel, Ş., Baker, E. K., Tütüncü, G. Y., O'Donnell, L., Lauretta, M., Brenchley, C., Amor, D. J. & Morgan, A. T. (2026). High prevalence of developmental coordination disorder risk in childhood apraxia of speech. *Developmental Medicine & Child Neurology*, 68(7), 925-937 doi.org/10.1111/dmcn.70099