# Not Just Clumsiness— Recognizing Developmental Coordination Disorder

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## **Key Points:**

- Developmental coordination disorder is a lifelong motor disorder that that causes significant difficulty with daily and academic tasks.
- Allied health professionals should be aware of potential signs of this disorder to aid in earlier identification and treatment.
- Familiarity with age-appropriate expectations for motor skills can aid in identifying children at risk for developmental coordination disorder.

Developmental coordination disorder (DCD) is a neuro-developmental motor disorder that occurs in the absence of an identifiable neurological condition (e.g., cerebral palsy, developmental delay), and interferes with children's ability to perform daily tasks and academic functioning  $^{1}$ <sup>2</sup>. This disorder affects 5-6% of school-age children, yet, as of 2013, less than one-half of pediatricians had knowledge of DCD  $^{13}$ . Research from the past 25 years has led to an increasing consensus that DCD is not outgrown, and often causes lifelong motor and psychosocial difficulties (e.g., anxiety, low self-esteem, poor self-efficacy)  $^{4.5}$ . Additionally, as motor difficulties limit participation across a range of everyday tasks and physical activities, DCD is often associated with poor fitness and compromised physical health  $^{6.78}$ .

Compared to other neurodevelopmental disorders, DCD falls behind in early detection, thereby delaying crucial treatment that can help minimize long-term motor difficulties  $\frac{43}{2}$ . As suggested by Missiuna and colleagues  $\frac{9}{2}$ , to improve the identification of preschool children with DCD, allied health professionals should be aware of the potential signs. Speech-language pathologists are in a particularly great position to help detect young children at risk for DCD due to its high co-occurrence with other neurodevelopmental disorders that they treat (e.g. developmental language disorder, specific learning disabilities, and childhood apraxia of speech)  $\frac{41011}{2}$ .

So, what are some potential signs of developmental coordination disorder? Despite there being no clearly defined diagnostic markers for DCD, some common behaviors include clumsiness, difficulty sitting for prolonged periods of time without squirming or falling out of the chair, difficulty writing neatly and quickly as required for effective notetaking, difficulty transitioning between tasks, poor bimanual coordination, and finally, challenges or frustration with tasks that require good fine or gross motor competence <sup>9</sup> <sup>12</sup>. As this list is not exhaustive, it's crucial that SLPs and other allied health professionals are aware of age-appropriate expectations for motor skills so referrals can be made where appropriate— by doing this, we will ensure we are supporting the whole child and their multiple needs.

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### **Preschool**

- •Has trouble holding and using utensils
- Has trouble throwing a ball
- •Plays too roughly or often bumps into other kids by accident
- Has difficulty sitting upright or still

#### Grades K-2

- •Has trouble holding and using a crayon, a pencil, or scissors
- Doesn't form or space letters correctly
- •Struggles with going up and down stairs
- •Frequently bumps into people by accident
- •Has trouble with self-care, like brushing teeth

### Grades 3–7

- •Takes a long time to write
- Has trouble cutting foods
- Has difficulty with basic routines like getting dressed
- •Struggles to line up columns when doing math problems

### Tweens and teens

- Avoids or struggles with typing and texting
- •Struggles with visual-spatial aspects of math, like working with shapes in geometry
- •Struggles with opening the latch on a locker
- Has difficulty learning to drive

Figure 1: Potential signs of DCD at specific ages. Information from: (Understood.org, 2021)

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