

Developmental Coordination Disorder (DCD) and Motor Planning

Developmental Coordination Disorder is often referred to as DCD. It has been known as dyspraxia but in Australia the term Developmental Coordination Disorder is the preferred name.

DCD is a neurological and developmental condition. There isn't anything wrong with the muscles it's just that the brain can't get the body to do what it wants. (Child Mind Institute, 2023). DCD does not affect a person's level of intelligence, however their movement difficulties could have an impact on their progress in school (DCD Australia).

DCD is a lifelong condition and not something that you can grow out of. It's usually identified in early childhood but often not diagnosed until after the age of 5 as motor development before this age is quite variable. It is estimated to affect 5% of school-aged children in Australia (Telethon Kids Institute, 2019). People with DCD have problems learning and doing movement skills, which are skills that involve using our muscles. This difficulty, using their muscles, has a significant impact on the way these children carry out everyday tasks.

DCD can occur in isolation but it is common in children with Autism and ADHD and children who are born preterm.



Signs of Developmental Coordination Disorder (DCD)

- Awkward or clumsy movement
- Bumping into things or people
- Difficulty learning new movement tasks
- Difficulty using movement in a new or different way
- Difficulty with small movements (or fine motor tasks), such as handwriting, buttoning clothing or tying shoelaces
- Difficulty with larger movements (or gross motor tasks), such as running, catching and jumping
- Difficulty planning movement sequences, such as dance routines
- Difficulty getting dressed and putting on shoes
- Difficulty using cutlery or eating without making a mess
- Tiring more easily than others when moving
- Avoiding tasks that require movement and therefore they find difficult

Some parents are probably wondering, when does their child being uncoordinated become a disorder. The answer is "when it interferes with their ability to do age-appropriate things like dressing, grooming, play and schoolwork" (Child Mind Institute, 2024).

The Effects of Developmental Coordination Disorder (DCD) in School

- DCD can have effects in a number of areas of the child's life. One of these areas is at school.
 Children with DCD often have poor handwriting skills and may write slower than the other kids in their class, this can have negative impacts on their schooling, especially in areas that require a lot of writing. When these kids are asked to write faster, often their handwriting becomes illegible.
- These kids can have troubles with their fine motor, so this will affect their ability to use pens and pencils and therefore write and draw, use scissors, glue objects and even when collecting resources for a class activity.
- They often bump into things in class, including desks and other students.
- Performing physical and cognitive tasks can leave kids with DCD fatigued (both mentally and physically).
- In sports classes and in the playground children with DCD can find many of the skills difficult and they may get tired quicker than their peers. These kids can often find themselves being left out of play or being picked last in teams.
- Sometimes children with DCD can be labelled as "lazy" as well as uncooperative or difficult. That can be because the teacher does not understand the reason for this child's behaviour. They can be slow to complete written tasks or copying from the board, they can become fatigued or drained both physically and cognitively and therefore not have the energy to focus and they may miss teacher instructions. These kids can act out in order to distract from areas they may be having troubles with and to prevent other kids from noticing their troubles.
- Kids with DCD can have lower levels of muscle tone and can find even just sitting upright and support their posture and movements hard work. They can get quite exhausted and can need rest breaks throughout the day.

Motor Planning

Motor planning is "the process of figuring out how to carry out the movement you need to accomplish something" (Child Mind Institute, 2024). So put into more simple language motor planning is the body's ability to remember the small steps that when we put them together or combine them together, they allow us to carry out a specific task or activity.

Signs of Motor Planning Difficulties

These kids usually appear clumsy or need extra time to complete tasks. It may be the case you've ask the child to do something they have done 20 times before but they still forget how to do it (or the steps involved in how to do it).

Motor planning is required for so many actions children complete every day from brushing their teeth, brushing their hair, getting dressed, putting their school bag on, walking around school, walking up and down stairs, holding a pencil, writing with the pencil, riding a bike, running, climbing, doing a cartwheel and playing sports.

Children with motor planning difficulties will be those that find it difficult to complete physical tasks, they may take small steps, they can be slow to complete tasks, they might pause to think through their actions, seem clumsy, have poor coordination and show areas of weakness.

What to do if your child has difficulties with their motor planning skills, fine and gross motor skills, balance or coordination

The best things you can do is see a doctor or paediatrician. Your child should work with an occupational therapist, who can help identify the tasks your child is having difficulties with and work with them to improve these skills. Children with DCD can also work with a physiotherapist to help improve their gross motor skills and muscle strength and coordination.

Support for families:

Having a child with additional needs can be hard! Remember to always look after yourself too and if it's becoming overwhelming then make sure you reach out and find support for yourself.

Website link

You can find some amazing resource sheets on DCD for parents & caregivers, teachers and medical & allied health professionals on the DCD Australia website.

https://dcdaustralia.org.au/resources/

References

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