

Developmental Co-ordination Disorder (DCD)

Introduction

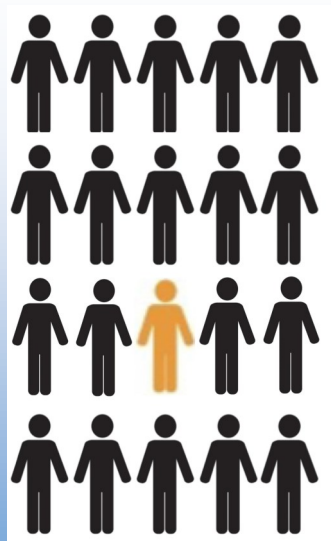
DCD refers to the way that the brain works in a different and less precise way, where the organization of planned movement is impaired (Brookes, 2007). The University of Edinburgh (2021a) states that everyone with DCD is different, but their fine motor and often their gross motor skills are impacted, and their ability to organise and remember information may also be impacted. Klein et al. (2023) states that DCD is a neurodevelopmental disorder, that is characterised by significant difficulty in learning motor skills and performing tasks. According to Gibbs et al. (2006) boys are four times as likely to have DCD than girls. The exact cause of DCD is not known, but a child's likelihood of developing DCD is increased if they are born prematurely, born with a low birth weight, have a family history of DCD, or if the mother drinks alcohol or uses illegal drugs during pregnancy (NHS, 2023a,, Gibbs et al., 2006).

What are the signs and symptoms of DCD?

The first indication of DCD is often apparent in infancy with delays in reaching developmental milestones, such as taking longer to sit, crawl or walk. As children get older, they may develop more noticeable physical symptoms, such as having difficulty running, handling a ball, or writing (NHS, 2023b). This is when DCD may first be suspected. Children may be described as 'clumsy' or 'awkward' (Gibbs et al., 2006,, NHS, 2023b). DCD can negatively affect a child's social and emotional development (Blank et al., 2019,, Farmer et al., 2017,, Klein et al., 2023). It is essential for practitioners and parents to avoid terms that may cause a child to feel negatively about themselves. Children may also have difficulties beyond motor skill difficulties, such as speaking, staying focussed, following instructions, sitting still, or completing tasks (University of Edinburgh, 2021a).

Diagnosis of DCD

According to Gibbs et al. (2006) early intervention is more likely to improve the coordination and motor skills of children with DCD, and this improvement is more likely to be sustained. Practitioners should discuss concerns with parents and the setting's SENDCO and seek parental consent to make a referral. When a referral is made, the child will be seen by a specialist paediatrician, who will examine the child's medical history, and consider if the child's mental ability is within typical range for their age, to discount other potential conditions. A paediatric physiotherapist will then assess the child's physical capabilities through a 'norm-referenced assessment of their motor skills'. The assessment often used is called the 'Movement ABC' (NHS 2023c). According to NHS Wales (2025), the Movement Assessment Battery for Children requires a child to perform a series of motor tasks, which either test manual dexterity, aiming and catching, or balance. This generates a score, that will indicate the level of motor difficulty that the child faces. If the child's motor skills are significantly below the level expected for their age, and this significantly affects their ability to carry out day-day activities, a diagnosis of DCD will be made (NHS, 2023c).



Source: Llewellyn-Jones (2025)

Barriers faced by children with DCD

Children with DCD can face many potential barriers and it is vital that these are recognised, so that strategies can be sought to ensure that the child is enabled to achieve the best possible outcomes as they are entitled to do so (SEND code of Practice , 2015; UNCRC, 1989).

A significant barrier is with the recognition and diagnosis of DCD. According to Licari et al. (2021) children with DCD often face an extensive wait for a diagnosis and for therapy. Klein et al. (2023) agrees that parents can struggle to access support. Once support is sought, another potential barrier is that there is not a single agreed test (Crawford et al. (2001). Another difficulty with the process of diagnosis is that a definite diagnosis of DCD is not usually possible before a child is aged 5 (NHS, 2023c). If a child with DCD has not been diagnosed they may not be receiving the support that they need. According to the NHS (2023b) children with DCD may have difficulties with poor attention, struggle with organisational skills and have difficulty following instructions. Children may be wrongly assumed to have other conditions or labelled negatively, which may affect their mental health and well-being.

Physical barriers may also affect a child with DCD. Gibbs et al. (2006) state that children with DCD can have difficulty in all aspects of daily living.

Children may find it hard to feed themselves, get dressed independently, manage their own personal care, and playground activities can be tricky, such as having difficulty with throwing, catching or kicking a ball. As well as jumping, climbing, or even running (NHS, 2023b).

Children with DCD can also find academic life more challenging. Holding a pencil, forming letters and numbers, cutting with scissors, painting, removing and replacing lids from pens and glue sticks, and copying from the board, can all pose a challenge for a child with DCD, who has motor skills difficulties.

Continually finding tasks more difficult than their peers, and producing drawings or writing that is less precise and looks immature in comparison to their peers can have a detrimental effect on a child's self esteem.

Strategies to support children with DCD

Strategies to support children with DCD include:

- * **The task-oriented approach**, where specific activities that cause difficulty are identified and strategies are then implemented to help.
- * **The body-function or process-oriented approach**, where activities that are aimed at improving general motor skills are undertaken.
- * **Alternative therapies**, such as supplements of fatty acids, vitamin E, or methylphenidate.

There is evidence to suggest that **the task-oriented approach is a more beneficial approach** with little evidence to demonstrate the effectiveness of the other approaches (Engelsman and Verbecque, 2021; NHS, 2023d; Nikechi et al. ,2016 ; Shoemaker and Smits-Engelsman, 2015; Smits-Engelsman et al. ,2012.) There is however, general agreement that further research is much needed. An example of the task-oriented approach is **breaking a task that a child has difficulty with into segments**, to practice each part individually first, with encouragement. Once the child has mastered each part, the sequence can gradually be brought together. **Adapting tasks to a child's skill level** will lead to positive engagement (Engelsman and Verbecque ,2021).

A practitioner could also **modify equipment** or **adapt activities** to support children with DCD.

Conclusion

DCD can be difficult to recognise and the process of diagnosis can be tenuous, but with the right support, children with DCD can flourish.