

A quick guide for occupational therapists: **Diagnosis of developmental coordination disorder in children and adults**

Context

Developmental coordination disorder (DCD) is a neurodevelopmental disorder that affects 2–5% of schoolaged children in the UK (Lingam et al 2009), with difficulties continuing into adulthood in many cases (Blank et al 2019). DCD is diagnosed across the lifespan and occurs across cultures, races and socio-economic groups (Blank et al 2019). DCD is recognised by the World Health Organisation (2001) where it is listed as a 'Specific Developmental Disorder of Motor Function'. In the UK, criteria published by the American Psychiatric Association (DSM-V, 2013) are usually used for the diagnosis of DCD.

There is emerging evidence of the long-term impact of DCD on mental and physical health, social participation, educational achievement and employment (Kirby et al 2013), despite this people with DCD have a range of strengths and the potential to achieve their life goals.

Developmental coordination disorder (DCD) is the term that is used to describe individuals who fulfil the diagnostic criteria for DCD. The terms DCD and dyspraxia are sometimes used interchangeably. Whilst dyspraxia is not a formal diagnosis, RCOT respects people's right to use the terms 'dyspraxic' and 'dyspraxia' to describe themselves and the difficulties they experience in their daily lives.

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Occupational therapists are the health professionals most likely to be involved with children with DCD (Cleaton et al 2020) and are key professionals in the assessment and support of neurodiverse adults, including those with DCD. Occupational therapists' skills and expertise mean they play an essential role in the assessment, diagnosis and support of people whose difficulties managing everyday activities are (or may be) due to DCD.



1. The role of occupational therapy in assessment and diagnosis of DCD

- 1.1. Occupational therapy support should be available according to a person's occupational need (RCOT 2021) and should not be dependent on a diagnosis. However, timely access to a person-centred diagnostic assessment delivered in a way that respects a person's personal, spiritual, religious and cultural needs or choices is important, and an occupational therapy assessment can be a key part of the diagnostic process. Having a diagnosis can assist a person's occupational performance, engagement and participation by:
 - **1.1.1.** Providing an explanation for the difficulties they experience in their daily lives.
 - **1.1.2.** Leading them to trusted, relevant sources of information and support.
 - **1.1.3.** Enabling access to treatment and services (for example, in education and employment).
- **1.2.** A medical doctor should be involved in the assessment and diagnosis of DCD.
 - **1.2.1.** Diagnosis is made by applying the DSM-V diagnostic criteria (American Psychiatric Association 2013). Occupational therapists have the skills, knowledge, and expertise to provide evidence for:
 - Criterion A: the acquisition and execution of coordinated motor skills is substantially below that expected given a person's age and opportunities for skill learning.
 - Criterion B: motor difficulties significantly and persistently interfere with a person's ability to carry out age-appropriate activities of daily living.
 - Criterion C: symptoms have been present from an early age and did not develop following an illness or injury.
 - **1.2.2.** The involvement of a medical doctor is necessary to assess Criterion D i.e., to consider other possible explanations for a person's movement difficulties and to identify any co-occurring conditions.
 - **1.2.3.** Where there is no local access to medical assessment and an individual meets all other criteria, the occupational therapist should state that the person meets criteria A, B and C for diagnosis of DCD, but a medical examination is required to assess Criterion D. Referral to a paediatrician or the person's GP is recommended.
 - **1.2.4.** If a person's coordination skills have deteriorated and/or there are indications they may have another disorder/condition e.g., attention deficit hyperactivity disorder (ADHD) or autism, they should be referred to a relevant service for further investigation.
- **1.3.** Occupational therapists have the skills to administer standardised movement assessments to determine whether a person fulfils DCD diagnostic Criterion A (American Psychiatric Association 2013).



- **1.3.1.** Movement assessments can be used by a range of professionals including occupational therapists. Local pathways should ensure people have access to a movement assessment administered by an appropriate and competent practitioner as part of the diagnostic process.
- **1.3.2.** While standardised movement assessments exist for children, there is a lack of standardised movement assessments for adults. When working with adults, occupational therapists should take a developmental history and use self-report questionnaires and observations of an individual performing motor tasks as evidence for Criterion A.
- **1.3.3.** Diagnosis of DCD should not be made based on the results of a standardised movement assessment alone.
- 1.4. Occupational therapists should gather information from multiple sources (including the individual, families/partners, teachers and employers) using interviews, questionnaires and observations to determine the onset of movement difficulties (Criterion C) and assess the impact of motor coordination difficulties on a person's daily life (Criterion B). Use of these tools as part of the history-taking process is consistent with the professional focus on occupational performance and participation.
- **1.5.** Occupational therapy assessments should be person-centred and consider the influence of environmental factors and a person's values, culture, background and opportunities for skill-learning on their performance (including on standardised movement assessments) and participation.
- **1.6.** Although DCD is defined as a motor skills disorder, occupational therapists should consider associated non-motor factors that impact on occupational performance during their assessment, including executive functions (e.g., working memory), social participation and mental health issues (including anxiety and depression).

2. Wider role of occupational therapy in facilitating diagnosis of DCD

- **2.1.** Occupational therapists should contribute to the design and promotion of clearly defined local pathways for the diagnosis of DCD for children and adults.
- 2.2. Occupational therapists can help reduce the risk of secondary consequences due to delayed diagnosis of DCD by building the capacity of people working in education, employment and other settings to recognise signs of DCD and encourage those affected to seek help. This will enable a person to access help so that reasonable adjustments can be embedded into their daily life.

Summary

While people do not need a diagnosis of DCD to benefit from occupational therapy, an assessment can promote self-awareness, knowledge and insight. This facilitates self-management and the identification of reasonable adjustments to support performance and participation.



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