

Developmental Coordination Disorder

Key facts:

Occupational therapists in children's community services have a long history of involvement with children and young people presenting with difficulties consistent with a diagnosis of Developmental Coordination Disorder (DCD). DCD is recognised by the American Psychiatric Association (2013) within their Diagnostic and Statistical Manual (DSM-5), whilst the World Health Organisation (1992), in the ICD-10 Classification of Mental and Behavioural Disorders, uses 'Specific Developmental Disorder of Motor Function' (F82). The European Academy of Childhood Disability (EACD) has made recommendations regarding the definition and diagnosis of DCD, and about assessment and intervention approaches (Blank et al 2012). UK based population studies have shown a prevalence of 1.8% with a further 3.2% of children considered as having a "probable Developmental Coordination Disorder" diagnosis, suggesting a likely incidence of 4.9% (Lingam et al 2009). Given an estimated United Kingdom population of children aged under 16 years of approximately 12 million, it can be inferred that there are approximately 588,000 children with DCD in the United Kingdom.

Occupational therapists, within the context of a multidisciplinary pathway, have a key role to play in the diagnosis of DCD and in providing interventions to support children, young people and their families, particularly with regard to impact on activities of daily living, which is amongst the DSM-5 diagnostic criteria (College of Occupational Therapists 2013). An assessment will consider the impact of the child/young person's coordination difficulties on their everyday life.

Occupational therapy intervention can include:

- Helping the child/young person, and those around them (for example parents and teachers), to understand the nature of their difficulties (Cambell et al 2012, Jasmin et al 2014).
- Addressing difficulties identified during assessment (such as with regard to getting dressed, playing sport or undertaking school work tasks). Occupational therapists can consider the inter-relationship between the child/young person's skills and needs, the demands of the activity and the environmental context (Poulsen et al 2007).
- Offering individualised task orientated approaches focused on goals determined by the child/young person, family and school, to produce meaningful outcomes for the child/young person. The European Academy of Childhood Disability recommends use of task orientated approaches based on goal setting to improve performance in motor tasks and selected activities (Blank et al 2012).
- Using cognitive, task-orientated, approaches such as the Cognitive Orientation to Daily Occupational Performance (Chan 2007, Blank et al 2012) to enhance the problem solving skills of a child/young person in relation to their ability to do everyday activities.
- Working with the child/young person, their families, teachers and others within their community to promote participation (Poulsen et al 2007). This could include enabling performance of activities that are important to them within various environments, for example: at home (such as looking after themselves, doing chores, playing); at nursery, school, college or university (such as writing stories/essays, socialising, organising themselves); or in the community (such as going to the playground, attending clubs, using public transport).



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Key benefits:

- Occupational therapists play a significant role in the diagnosis of DCD as part of a multidisciplinary pathway (Missiuna et al 2008).
- Receiving a diagnosis can have a positive effect on children and young people, through self-understanding and the increased understanding of those around them (Missiuna et al 2008).
- There is evidence that intervention by occupational therapists can enable children and young people with DCD to develop strategies to manage and/or overcome the difficulties they experience with every day activities that are important to them (Dunford 2011).
- Cognitive, task orientated intervention approaches that are child and family centred can help children and young people with DCD to master the everyday activities that are important to them (Polatajko and Cantin 2005, Sugden and Henderson 2007).
- When goals are set by the children and young people themselves, task orientated occupational therapy intervention is more effective in helping them to participate and develop skills in their chosen activity (Dunford 2011).
- Interventions for children with developmental coordination disorder that address social factors and participation in everyday occupations have been found to be highly valued by families. (Morgan and Long, 2012).
- Evidence supports occupational therapy intervention within nurseries (Kennedy-Behr et al 2013) and schools (Cambell et al 2012, Jasmin et al 2014), in creating supportive environments, coaching parents and teachers and teaching skills (for example handwriting, scissor skills), and increasing participation in sport and playground activities.

Cost Benefit:

Cost savings are not necessarily immediate but the evidence shows that in the long term DCD, if not addressed, can have a negative impact on education and social participation (Stephenson and Chesson 2008), mental health (Hill and Brown 2013), participation in daily life activities (at home and work) and quality of life/life satisfaction (Tal-Saban et al 2014)

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Library catalogue date 2012. Updated April 2015.

