

Innovative Practices in Psychology

An Interview with Dr. Paulene Kamps on Developmental Coordination Disorder (DCD)

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Always curious and wanting to solve the mysterious links between social skills and motor skills, Dr. Paulene Kamps first heard about and became very interested in DCD after she had completed her PhD.

What are the hallmarks of Developmental Coordination Disorder (DCD) and in which types of circumstances do children usually happen to get diagnosed with this condition?

The initial hallmarks of DCD are observable in one's early years. Children with average intelligence often trip, stumble, and fall. They may be slower to learn skills such walking, running, climbing stairs, riding a bike, eating neatly, getting dressed, tying shoelaces, managing knife and fork properly, etc. Many have weak balance and cannot easily keep up with others during play times. Young students with DCD struggle to perform printing, colouring, and cutting activities in the classroom. They may not do well in art, music and/or physical education classes, and because it is difficult to hide clumsiness, they are very often mocked and bullied at recess and playtimes. Consequently, they are seldom included in group games. When uncoordinated children experience frequent peer ridicule and adults do not understand what is causing their difficulties and/or how to support them socially or at play times, these students eventually pull away and choose to isolate as a form of self-protection. It follows that an outcome of DCD is weak social integration.

Youth and adults not only have reduced participation in physical activity, but they also struggle to perform and/or keep up with tasks in vocational training and employment settings. Many adults with DCD struggle to learn to drive a car and manage multiple daily tasks at once.

What are comorbidities associated with DCD?

There is much more to DCD than simply incoordination. Although incoordination is typically evidenced via difficulties and delays with fine- and/or gross-motor skills, DCD can also impact other neuro-biological-developmental systems (e.g., one's ocular- and/or oral-motor control/functioning, sensory integration, executive functioning, emotional regulation, certain aspects of cognitive processing, social interactions, and even bodily systems). As it pertains to one's mental state and intellectual functioning, most individuals who have DCD struggle to coordinate complex tasks that involve working memory, processing speed,

planning, organization, task-monitoring, and the filtering out of all other unnecessary stimuli prior to executing a well-thought out and controlled response. In other words, for people with DCD, there are simply too many thoughts, requirements, intra- and inter-personal processes, physical and other things to 'coordinate' all at once. They cannot get their mind, emotions, and body to work in a harmonized manner. In this and other ways, DCD is far more than a motor skills disorder.

What circumstances result in a DCD diagnosis?

This is difficult to answer. Indeed, although the 2022 DSM states this and researchers report the prevalence rate of DCD in Canada to be 7 to 8 per cent, very few people with DCD are correctly diagnosed. Because DCD is seldom taught in graduate programs (or offered as professional development for psychologists), and there are no comprehensive assessment tools published for psychologists who may consider diagnosing DCD, very few clinicians feel competent/qualified to diagnose DCD. Moreover, because the signs and symptoms of DCD are often mistaken for ADHD, ASD, specific learning disorders, different communication disorders and/or forms of anxiety, DCD is often overlooked. According to the APA, comorbid conditions associated with DCD are most other neurodevelopmental conditions. Interestingly, the DCD and PDD/ASD co-occurrence has NOT been applied consistently in the last 37 years.

What are the consequences of unidentified and untreated DCD?

The consequences of unidentified and untreated DCD are serious and all encompassing – including problems with activities of daily living at home, at school and in the community; lower self-esteem and self-worth; reduced participation in team sports and recreational pursuits; and emotional and behavioral difficulties. Because people with DCD cannot easily keep up, perform in ways they want to, and they cannot understand why peers are being unkind to them and others often dismiss their concerns; they often feel very confused, frustrated and distressed. This almost always results in emotional dysregulation, under-developed social skills, and weak academic performances. A sedentary lifestyle can result in obesity and other physical health problems.

What are the treatment options for DCD?

Typical treatment options for DCD include having frequent and regular access to a speech-occupational- and/or physical-therapist. However, treating DCD properly involves a 'coordinated' approach. Along with motor-learning opportunities, psychologists have a key role in offering educational strategies and psycho-social support using a meta-cognitive approach with clients. But also, consultations with/for parents and other stakeholders.