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SASC guidance document available:
<https://sasc.org.uk/SASC/documents/SASC%20-%20Guidance%20DCD%20Dyspraxia%20March%202020.pdf>

Working with the new SASC guidance on assessing for DCD/dyspraxia



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Aims of the webinar

- What is DCD/dyspraxia?
- Labels and terminology
- Research evidence
- DCD in children (5-15 years)
- DCD in adults (16+ years)
- Evidence to identify DCD in adults
- Intervention, recommendations, reasonable adjustments
- Who can assess
- Q&A

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The real world



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What is DCD/dyspraxia



DSM-5 (APA, 2013): developmental coordination disorder
A lifelong condition

1. Acquisition and execution of coordinated motor skills substantially below expected given chronological age and opportunity for skill learning and use
2. Motor skills deficits significantly and persistently interferes with activities of daily living and impacts on academic/school productivity, prevocational and vocational activities, leisure and play
3. Onset of symptoms in early developmental period
4. Motor skills deficits not better explained by intellectual disability or visual impairment and not attributable to a neurological condition affecting movement

American Psychiatric Association (2013)



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Labels & terminology

- DSM-5 (APA, 2013): developmental coordination disorder
- ICD-11 (WHO, 2018): developmental motor coordination disorder
- International consensus statement: DCD
 - Blank et al. (2012; 2019) – Recommendations on assessment, diagnosis, intervention
- Dyspraxia: UK -- personal preference?



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Narrative description (UK; 2018)

- Developmental Coordination Disorder (DCD), also known as Dyspraxia in the UK, is a common disorder affecting movement and coordination in children, young people and adults with symptoms present since childhood.
- DCD is distinct from other motor disorders such as cerebral palsy and stroke and occurs across the range of intellectual abilities. This lifelong condition is recognised by international organisations including the World Health Organisation.
- A person's coordination difficulties affect their functioning of everyday skills and participation in education, work, and leisure activities. Difficulties may vary in their presentation and these may also change over time depending on environmental demands, life experience, and the support given. There may be difficulties learning new skills.
- The movement and coordination difficulties often persist in adulthood, although non-motor difficulties may become more prominent as expectations and demands change over time.
- A range of co-occurring difficulties can have a substantial adverse impact on life including mental and physical health, and difficulties with time management, planning, personal organisation, and social skills.
- With appropriate recognition, reasonable adjustments, support, and strategies in place people with DCD can be very successful in their lives.



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Research evidence

- Quantitative and qualitative
- Experiences, causes, consequences
- Cognition, behaviour, biology, environmental impacts
- Child / adults / families etc
- Assessment, diagnosis, intervention
- Co-occurring symptoms including dyslexia, autism

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DCD in children (5-15 years)

- Assessors should not attempt to identify DCD in children under 16 – refer to medical practitioner:
 - To rule out other illnesses/diseases with similar symptoms eg cerebral palsy, muscular dystrophy, visual impairment
 - For referral for full assessment of motor coordination difficulties
- Diagnosis **MUST** be made with a motor assessment, to show motor skills out of keeping with child's age, eg:
 - Movement ABC (Henderson et al. 2007)
 - Bruininks-Osteretsky Test of Motor Proficiency (Bruininks & Bruininks 2005)

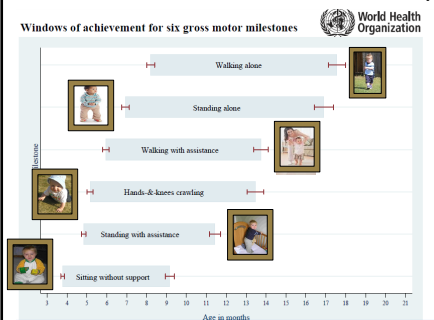
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- Recognise typical trajectories in motor skills development and their variation within age ranges

WHO Multicentre Growth Reference Study (2006)



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- Recognise typical trajectories in motor skills development and their variation within age ranges
- Consider opportunity for practice and nature of environment around a child as these will affect typical developmental norms

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- Substantial difficulties with fine and/or gross motor coordination skills including:
 - Posture control / balance eg jumping, hopping
 - Hand-eye coordination eg ball skills
 - Sequencing actions eg running, riding a bike
 - Object manipulation / tool use eg handwriting, typing, scissor use
 - Precision tasks eg dressing, eating
 - Impacting on participation eg PE, games, sports, home activities

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- Difficulties not core to DCD (and seen in other NDDs) may be present, including:
 - Organisational skills eg packing bag
 - Lowered self-esteem
 - Social communication and interaction
 - Visual perception and visual-spatial awareness eg difficulties with orientation, sense of direction
 - Temporal awareness eg difficulties with sense of time, telling time from analogue clock-face, forward planning, time management
 - Sensory sensitivities eg sound, touch, textures of food
 - Sleep, reduced levels physical activity, fatigue

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DCD in adults (16+ years)

- Coordination difficulties continue. They may:
 - affect participation in education, work, employment
 - manifest when learning new skills eg driving, drilling a hole
- Non-motor difficulties may be more evident to the individual



"When I was a child, motor difficulties were a real challenge. They're still there but I manage. My real challenge now is organising myself so I can hold down a job."

"One of the reasons I gave up driving lessons: I could never master the act of actually putting a car into gear. Same with making coffee. Same with following recipes. Same with knitting, sailing, sewing, using a cash register, and following dance routines. If it has more than two steps, you've lost me."

Adult & parent reports (Hill & Sorgardt; Dockery & Hill; Tal-Saban et al. 2014; Purcell et al. 2015)

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Evidence to identify DCD in adults

- Use tests to confirm a diagnosis – no standardised tests for adults with DCD
- Performance depends on context
- Gather sufficient evidence – quantitative and qualitative, past and present
- **VMI / WAIS do NOT diagnose DCD ...**

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52 DCD children (mean age 9y)

52 TD children (age; gender match)

Comparing groups across each WISC-IV test and four indices - no differences between groups

WISC-IV (or WAIS for adults) cannot indicate a DCD profile or lead to a diagnosis



Fig. 2. Variation of scores on the WISC-IV subtests
Sumner et al. (2016) *Research in Developmental Disabilities*

Can support conclusions, identify specific areas of cognitive ability that need support or can be useful for compensatory strategies

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- Returning to DSM-5 criteria, identification of DCD in adult must be linked to:
 - Evidence of a developmental history of motor coordination difficulties
 - persistence into adulthood (despite targeted interventions previously)
 - impact in everyday life
 - Difficulties not explained by lack of practice, lack of motivation, other conditions, generalised learning difficulties ...
- Evidence that questions have been asked and/or suitable medical referral has been made

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- Input from adult; parents/carers (if possible)
- Adult DCD/dyspraxia Checklist (ADC) for Further & Higher Education (Kirby & Rosenblum 2011) recommended
- DIDA (Kirby et al. 2018) if ADC indicates possibility of DCD


Online version freely available at: <http://www.movementmattersuk.org/dcd-dyspraxia-adhdspid/developmental-disorders-documentation/information-for-assessors.aspx>

- Assessment confirms and considers:
 - Motor difficulties
 - Associated difficulties eg self-organisation, forward planning
 - Possible co-occurring SpLDs
 - Other developmental, cognitive, medical, environmental factors that may contribute to difficulties with learning

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- SASC recommended post 16 report format:
 - evidence motor coordination difficulties in *additional diagnostic evidence and information* section
 - shows significant features consistent with DCD / shows a profile of DCD
- State any combination of DCD with other SpLDs eg dyslexia
- When considering additional possibilities such as autism, mental health, work within professional boundaries, onward referral as appropriate
- If possible discuss report with the individual

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Intervention, recommendations, reasonable adjustments

- Recommendations should be clearly linked to:
 - Difficulties reported in background information and linked to information gained through assessor's assessments
 - Individual's needs within study environment, course or workplace
 - Developed with relevant specialists / workplace (where possible)
 - Reflexive questions help individual think through/manage strategies
 - Effective targeting of need (eg computer use vs extra time), additional training to learn new skill, coaching support ...
- Reasonable adjustments without adding unreasonable advantage

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Reasons for seeking a diagnosis – a need for:

- Resources in FE/HE
- Support at work
- Interest
- Specific, targeted help eg emotional, organisational
- Making sense of who individual is
- Short hand descriptor to share with others

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Who can assess

- Children:
 - Motor assessments can be noted/described in SpLD assessment
 - Referral to GP needed; inter/multi-disciplinary team
- Adults:
 - Assessors should evaluate extent of own skills following professional and ethical guidelines
 - Have knowledge and training in both typical and non-typical motor skills development and good familiarity of typical difficulties in daily life, education and work for those struggling with motor coordination
 - Have knowledge and experience of diagnostic assessment including history taking, psychometric testing, observation; and applying this knowledge to assessment of DCD

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Red flags





- Loss or deterioration in motor skills
- Functional loss eg could make food/dress, now can't
- New problem
- No childhood history of motor difficulties
- Reported:
 - Asymmetry of movement
 - Loss of muscle mass
 - Tremor
- Pain in joints
- Headaches/visual disturbance
- Increased or changes in mood
- Memory loss

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