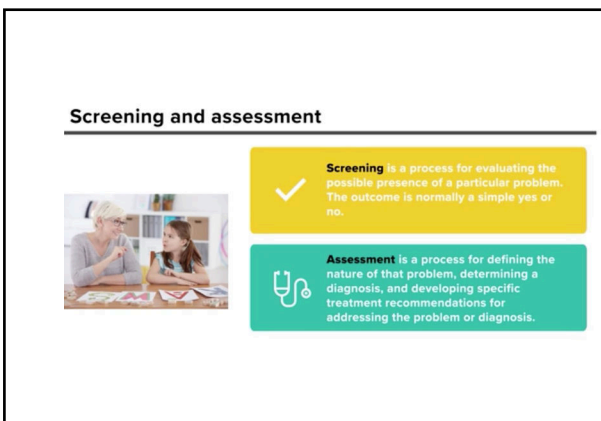


1




2



3

What should trigger screening?



- Early years** – Developmental delay such as with walking, talking, crawling
- 60% of children with Developmental Language Delay had DCD
- Concern**- Parent, teacher or child concern
- Born prematurely**
- Primary school** – Compared to others in an educational setting - What do you see other children doing of a similar age with similar experience?
- Family history** of neurodevelopmental conditions
- Presence** of another neurodevelopmental condition


That might actually encourage you to trigger the screening for DCD as well?

4

DEVELOPMENTAL MEDICINE & CHILD NEUROLOGY | SACO RECOMMENDATIONS

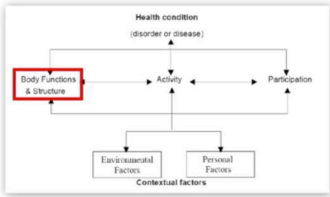
International clinical practice recommendations on the definition, diagnosis, assessment, intervention, and psychosocial aspects of developmental coordination disorder

RAINER BLANK^{1,2} | ANNA L BARNETT³ | JOHN CAIRNEY^{4,5} | DIDO GREEN⁶ | AMANDA KIRBY⁷ | HELENE POLATAJKO⁸ | SARA ROSENBLUM⁹ | BOUWIEN SMITS-ENGELSMAN¹⁰ | DAVID SUGDEN¹¹ | PETER WILSON¹² | SABINE VINÇON¹³



5

International Classification of Functioning, Disability and Health (ICF)



6

Impairments should reflect the levels of the ICF:

- Body function and structure (e.g. brain structure and function; motor, sensory, and cognitive function; emotional/affective function)
- Activities of Daily Living
- Participation (e.g. at home, school)
- Personal and environmental factors

7

Planning intervention


Limitations on activity
 e.g. Participation in sport, fitness, fatigue, independent living skills such as dressing, feeding, teeth cleaning

Participation
 e.g. Friendships, relationships, socially, sport

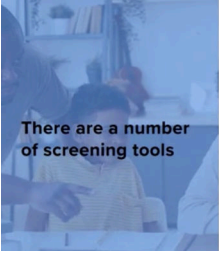
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There are a number of screening tools

- Some are free and some paid for
- Check if culturally appropriate for your country



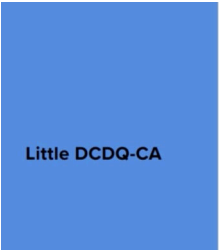
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There are a number of screening tools

- Some are free and some paid for
- Check if culturally appropriate for your country
- Some are for parent completion and others for teachers


10



Little DCDQ-CA

- Parent report
- 3 and 4 year old children
- 15 items with 2 factors:
 - Gross motor skills
 - Fine motor skills

11



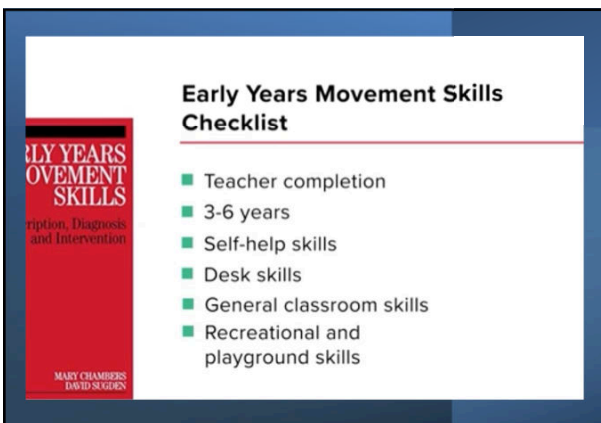
DCD Daily-Q

- Parent report
- 5-8 year olds
- Self-care and self-maintenance
- Productivity and school
- Leisure and play

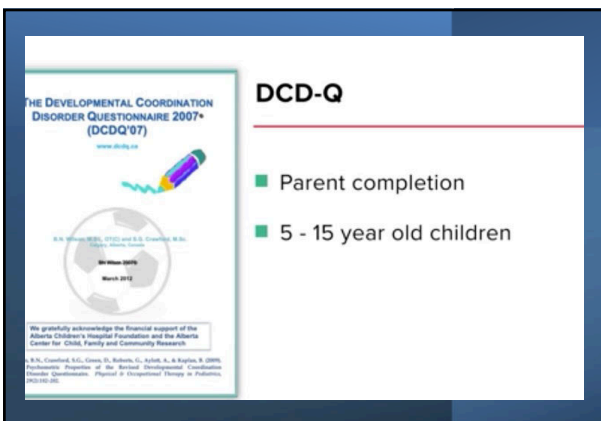
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13




14



15

Not at all like your child 1	A bit like your child 2	Moderately like your child 3	Quite a bit like your child 4	Extremely like your child 5
Your child <i>throws a ball</i> in a controlled and accurate fashion.				
1	2	3	4	5
Your child <i>catches a small ball</i> (e.g., tennis ball size) thrown from a distance of 6 to 8 feet (1.8 to 2.4 meters).				
1	2	3	4	5
Your child <i>hits an approaching ball or birdie</i> with a bat or racquet accurately.				
1	2	3	4	5
Your child <i>jumps easily over obstacles</i> found in garden or play environment.				
1	2	3	4	5
Your child <i>runs</i> as fast and in a <i>similar</i> way to other children of the same gender and age.				
1	2	3	4	5
If your child has a <i>plan</i> to do a motor activity, he/she can organize his/her body to follow the plan and effectively complete the task (e.g., building a cardboard or cushion "fort," moving on playground equipment, building a house or a structure with blocks, or using craft materials).				

16



Movement ABC checklist (Henderson and Sugden)

- Teacher completion
- 5-12 years
- 2 sections, each of which considers the child's performance in progressively more complex situations.
- The behaviour section of the checklist considers the extent to which a child's attitudes and feelings about motor tasks are situation specific or more generalised.

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Handwriting Proficiency Screen Questionnaire Children (HPSQ-C)

Teacher completion
7-14 year olds

1. Illegible handwriting
2. Unsuccessful in reading his or her own handwriting
3. Not enough time to copy
4. Often erases
5. Does not want to write
6. Does not do homework
7. Complains of pain
8. Tired while writing
9. Needs to look repeatedly when copying
10. Not satisfied with his or

18

The Child Evaluation Checklist (CHECK):

A Screening Questionnaire for Detecting Daily Functional "Red Flags" of Underrecognized Neurodevelopmental Disorders among Preschool Children (SLD, ADHD, and DCD)

- 3 to 6 years
- 40 questions relating to ICF
- 2 parts
- Function
- Impact

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Other screening tools

Miller Function & Participation Scales (2006)

- 2 years 6 months to 7 years 11 months
- Assess functional motor skills in natural contexts
- Measure performance and participation in 2.6 – 7.11 year olds
- Link performance of functional activities to neuromotor foundational abilities
- Use as an outcome measure to monitor progress over time
- Developed in line with the ICF framework

20

Assessments

- Need appropriate training
- Usually Occupational Therapists, Physiotherapists and Paediatricians undertake these assessments
- Need to rule out other reasons for motor difficulties

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Assessments

1. **History of motor difficulties impacting on day- to- day functioning.**
2. **Other motor reasons to consider** e.g. Cerebral Palsy, Stroke, Benign Joint, Muscular Dystrophy, Hypermobility Syndrome, BECCTS, Genetic conditions such as Neurofibromatosis 1, William's Syndrome, Klinefelter's syndrome.
3. **Consider co-occurring conditions** e.g. Developmental Language Delay, ADHD, ASD.

22

Movement ABC Battery -2


3 Subtests:

- Manual Dexterity e.g. threading, posting coins, peg board
- Aiming and Catching with a ball or bean bag at a target
- Balance- heel-toe walking, standing on one leg, hopping

Age- 3 bands

- 3-6.11
- 7-10.11
- 11.0-16.11

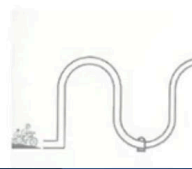
■ Takes about 30 minutes. **And then it's scored appropriately.**



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Bruininks Oseretsky Test-2 (BOT-2)

- Published in 2005
- 4-21 years



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Bruininks Oseretsky Test-2 (BOT-2)



8 subtests:

- **Fine Motor Precision**—7 items (e.g., cutting out a circle, connecting dots)
- **Fine Motor Integration**—8 items (e.g., copying a star, copying a square)
- **Manual Dexterity**—5 items (e.g., transferring pennies, sorting cards, stringing blocks)
- **Bilateral Coordination**—7 items (e.g., tapping foot and finger, jumping jacks)
- **Balance**—9 items (e.g., walking forward on a line, standing on one leg on a balance beam)
- **Running Speed and Agility**—5 items (e.g., shuttle run, one-legged side hop)
- **Upper-Limb Coordination**—7 items (e.g., throwing a ball at a target, catching a tossed ball)
- **Strength**—5 items (e.g., standing long jump, sit-ups, ball)

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Screening tools will have been designed on specific cohorts

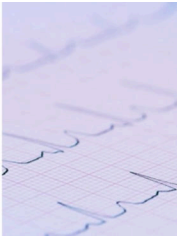
- Country
- Culture
- May have gender biases

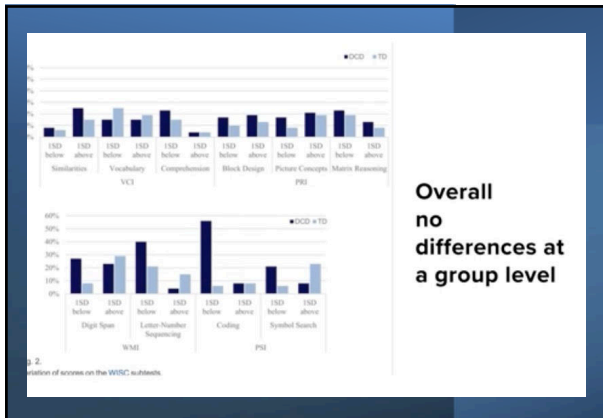
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IQ and Movement

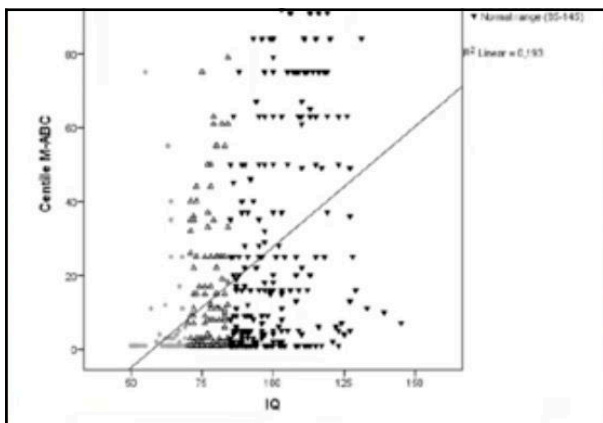
IQ assessments can't be used to diagnose DCD



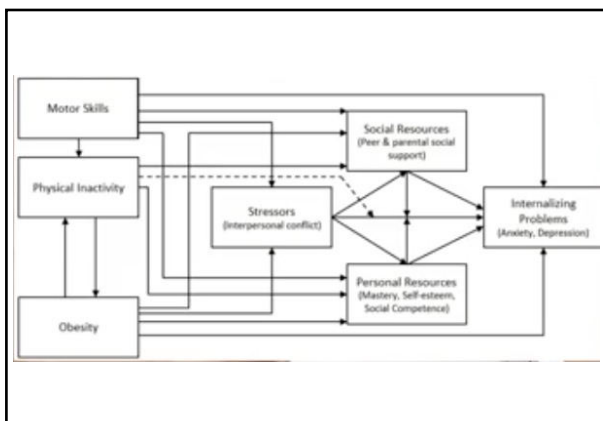
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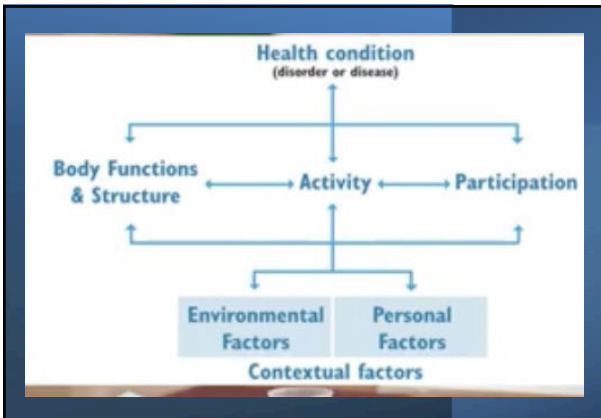
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30



31



Early Years: You may need to repeat the screening to see if these are persistent difficulties.

Primary School: Use a screening /checklist and if necessary, have a pathway for a full assessment.

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Everyone is different and people's lives change....

33
