Coordination

Description

Coordination is the process by which the brain and body work together to produce movement. This involves the brain sending signals through the nervous system to muscles, guiding actions like walking, writing, or playing. Usually this happens automatically (quickly and smoothly), without thinking.

Sometimes the brain can struggle to plan or send the right messages at the right time. This can make movements harder or slower, even when the person knows what they want to do or to say.

Impact on neurodiverse young people

For neurodivergent young people — including those with autism, ADHD, dyspraxia, or Tourette syndrome — this communication may look different,

Sometimes, messages between the brain and body

- Take longer to process or respond
- Come out in unexpected ways, such as tics, stimming, or unplanned movements
- Require extra effort, creativity, or alternative strategies to complete tasks

Neurodivergent children may experience:

- **Delayed motor planning**: Difficulty organizing and executing movement
- **Sensory processing differences**: Over- or under-sensitivity to touch, sound, or movement
- **Muscle tone and balance issues**: Affecting posture, coordination, and endurance
- **Unexpected movements**: Such as tics or stimming, which may be regulatory or expressive

These differences are *not intentional* or disruptive — they are simply part of how a neurodivergent brain functions. Movement may be unpredictable, but it is valid and meaningful.

Benefits of support

Empowering Neurodivergent Young People

To neurodivergent young people: your brain works in its own brilliant way. Movement might feel different for you — and that's okay. You might:

- Need more time to plan or complete a movement
- Use tools like fidget items, visual supports, or movement breaks
- Discover new ways to express yourself through motion

Your persistence, adaptability, and creativity are powerful. You are not broken — you are building your own path.

Tools to Help with Movement and Coordination

Here are some helpful tools and strategies:

- **Visual Schedules**: Help with transitions and reduce anxiety around movement tasks.
- **Movement Breaks**: Short, structured physical activities that help reset focus and energy.
- **Sensory Walks**: Calm, mindful walks that engage the senses and support regulation.
- **Adaptive Equipment**: Items like therapy balls, balance boards, or pencil grips can support motor skills.
- **Fidget Tools**: Tactile objects that help with focus and self-regulation.
- **Digital Apps**: Tools like *GoNoodle*, *Super Stretch Yoga*, or *Choiceworks* support movement, mindfulness, and routines.

How Adults Can Support Neurodivergent Movement

Parents, caregivers, and educators can make a big difference by:

- **Being patient and understanding**: Recognize that movement challenges are neurological, not behavioural.
- **Celebrating persistence and creativity**: Acknowledge the effort it takes to try, adapt, and succeed.
- **Supporting sensory needs**: Use tools like fidget items, or movement breaks to help regulate the nervous system.
- **Encouraging self-expression**: Allow stimming and other self-regulatory behaviours that help with focus and comfort.
- **Avoiding pressure to conform**: Let children move in ways that feel natural and empowering to them.
- **Create a movement-friendly environment**: Allow space for safe exploration and expression.

To improve coordination, use strategies that combine sensory support, movement routines, adaptive tools, and positive reinforcement tailored to your unique neurological profile.

Strategies to Improve Coordination

- **Occupational Therapy (OT)**: A specialist can design personalized motor skill programs using play-based activities to improve fine and gross motor coordination.
- **Sensory Integration Techniques**: Activities like swinging, climbing, or textured play help regulate sensory input and improve body awareness.
- **Visual and Verbal Cues**: Use step-by-step instructions, visual schedules, or modelling to support motor planning.
- **Core Strengthening Exercises**: Yoga, swimming, or animal walks (e.g., crab walk, bear crawl) build foundational strength for better coordination.
- **Break Tasks into Small Steps**: Simplify movement sequences and celebrate each success to build confidence.
- **Use Adaptive Equipment**: Tools like pencil grips or balance boards can support motor control and sensory regulation.
- **Incorporate Interests**: Embed movement into preferred activities (e.g., dancing to favourite music, acting out stories) to boost engagement.
- **Provide Movement Breaks**: Short, frequent breaks help reset focus and reduce frustration during tasks requiring coordination.

Resources

Canchild.ca

Dyspraxia resource material

Video Library - Watch Me Do It Project

Autistic Children and Motor Skills

Dyspraxia/DCD Ireland - Home

Dyspraxia Collective

Developmental co-ordination disorder (dyspraxia) in children - NHS

Sensory Strategies for Parents and Carers

Sensory Help Now

Dyspraxia - Support for neurological conditions | The Brain Charity