

Fine Motor Skills

What are fine motor skills?

Why are fine motor skills important?

Building blocks necessary to develop fine motor skills include:

You can tell there are problems with fine motor skills if the child:

When you see difficulties with fine motor skills, you might also see difficulties with:

What can be done to improve fine motor skills?

Activities that can help improve fine motor skills include:

Why should you seek therapy if you notice difficulties with fine motor skills?

Left untreated, difficulties with fine motor skill can lead to:

What type of therapy is recommended for fine motor difficulties?

If you are concerned about fine motor difficulties, the next step is:

Other relevant resources:

What are fine motor skills?

Fine motor skills involve the use of the smaller muscle of the hands, such as when doing up buttons, opening lunch boxes or using pencils or scissors. Fine motor skill efficiency significantly influences the quality of the task outcome as well as the speed of task performance. Efficient fine motor skills require a number of independent skills to work together to appropriately manipulate the object or perform the task.

Why are fine motor skills important?

Fine motor skills are essential for performing everyday skills like cutting, self care tasks (e.g. managing clothing fastenings, opening lunch boxes, cleaning teeth) and pencil skills. Without the ability to complete these every day tasks, a child's self esteem can suffer and their academic performance is compromised. They are also unable to develop appropriate independence in life skills (such as getting dressed and feeding themselves).

Building blocks necessary to develop fine motor skills include:

- **Bilateral integration:** Using two hands together with one hand leading e.g. opening a jar lid; with the other and helping e.g. stabilising the jar.
- **Crossing Midline:** The ability to cross the imaginary line running from a person's nose to pelvis that divides the body into left and right sides.
- **Hand and finger strength:** an ability to exert force against resistance using the hands and fingers.
- **Hand eye coordination:** the ability to process information received from the eyes to control, guide, and direct the hands in the accomplishment of a given task, such as handwriting.
- **Hand Dominance:** The consistent use of one (usually the same) hand for task performance, which allows refined skills to develop.
- **Hand division:** just using the thumb, index and middle finger for manipulation, leaving the fourth and little finger tucked into the palm not participating.
- **Object Manipulation:** The ability to skilfully manipulate tools, including the ability to hold and move pencils and scissors with control and controlled use of everyday tools such as a toothbrush, hairbrush, cutlery.
- **Proprioception:** This is information that the brain receives from our muscles and joints to make us aware of body position and body movement.

You tell there are problems with fine motor skills if the child:

- Has an awkward or immature pencil grasp for their age.
- Has messy, slow or laborious drawing, colouring or writing skills.
- Fatigues quickly when typing or using a mouse on a computer.
- Has difficulty (or achieves a messy/choppy outcome) when using scissors.
- Has difficulty performing precise manipulation tasks (i.e. doing up buttons, threading, or tying shoelaces).
- Dislikes precise hand and eye coordination tasks (e.g. construction).
- Difficulty performing self-care tasks independently (i.e. age influenced).
- Has difficulty mastering new fine motor tasks.
- Tires easily when engaged in fine motor task.

When you see difficulties with fine motor skills, you might also see difficulties with:

- **Behaviour:** May avoid or refuse to participate in fine motor tasks.
- **Frustration** with precise eye and hand tasks.
- **Avoidance:** Preference to get others to perform fine motor tasks for them under their direction, rather than actually doing themselves (e.g. "Daddy, draw me a house", or "build me a rocket", with refusal to do it themselves).
- **Showing academic ability:** Being verbally very skilled but having difficulty showing this on paper (i.e. writing, drawing or colouring).
- **Self esteem:** A person's overall sense of self-worth or personal value.
- **Academic performance:** The ease with which a student is able to complete academic tasks.
- **Computer skills:** The ability to competently use a computer for the purpose of academic tasks.

What can be done to improve fine motor skills?

- **Hand dominance:** Determine which is the dominant hand and reinforce its more frequent use in precision task performance.
- **Bilateral Integration:** Practice using both hands to perform tasks, not just one (e.g. use the 'doing hand' to place the block and the 'helping' hand to hold the block construction steady).
- **Finger Isolation:** Practice tasks that use just one or two fingers - not all the fingers at once (e.g. 'poking' games).
- **Hand and Finger Strength:** Enhance finger strength by using pegs and/or clips in play.
- **Experience:** Encourage activity participation instead of focusing on a 'successful' outcome (e.g. rewarding pencil to paper attempts, not whether the drawing actually looks like a car or a house).

Activities that can help improve fine motor skills include:

- **Threading and lacing**, with a variety of sized laces.
- **Tongs or teabag squeezers**, to pick up objects (e.g. put marbles down a marble maze).
- **Manipulation games**, such as 'Pick up Sticks' and 'Connect 4'.
- **Play-doh**, e.g. using the fingers, not the hands as whole, working with the Play-doh up in the air, not flat on the table.
- **Construction** that requires pushing and pulling with fingers (e.g. 'Mobilo', 'K'nex' or 'Lego').
- **Storing construction materials** in jars with screw lids that need to be opened and closed as the materials are needed.
- **Craft**: Make things using old boxes, egg cartons, wool, paper and sticky or masking tape.

Why should you seek therapy if you notice difficulties with fine motor skills?

- To improve ability in and persistence with fine motor tasks.
- Increase school readiness.
- To help a child to complete self care tasks, such as doing up buttons and zips.
- To avoid a child becoming disengaged in an academic environment due to difficulties completing fine motor activities (e.g. writing, cutting, drawing).
- To avoid frustrations experienced by parents, teachers and children when a child is struggling to remain engaged in academic activities.
- To help maintain and develop a positive sense of well being.
- To ensure that a child doesn't fall behind their peers in development of handwriting.

Left untreated, difficulties with fine motor skills can lead to:

- Difficulties meeting academic criteria due to poor handwriting skills and rapid fatigue.
- Difficulties mastering letter formation.
- Excessive pressure and anxiety in a school-aged child due to difficulties keeping up in class.
- Difficulties completing exams due to difficulty answering all written questions within the allocated time.
- Poor self esteem when a child compares their abilities with their peers.
- Difficulties filling in forms, such as job and rental applications due to poor handwriting skills.
- Difficulty developing efficient typing skills.
- Difficulty manipulating items for construction (puzzles, lego).
- Difficulty completing self-care tasks (e.g. doing up shoelaces, buttons, zips, using cutlery).

What type of therapy is recommended for fine motor difficulties?

If your child has difficulties with fine motor skills, it is recommended they consult an Occupational Therapist.

If you are concerned about fine motor difficulties, the next step is:

- Call Kid Sense for an obligation-free discussion with a paediatric professional on ph 1300 66 00 67.
- Take the free on-line Self Assessment to obtain a visual representation of how your child is developing (doing this in conjunction with your teacher can be really helpful too).
- Visit the Child Development *Ages and Stages* Charts and Checklists to see what skills are expected at your child's age.
- Go to Booking an Appointment for more information.
- Review the fact sheets below for more relevant information.

Other relevant resources:

- Pre-writing skills (fact sheet)
- Hand control (fact sheet)
- Crossing the midline (fact sheet)
- Handwriting expectations (fact sheet)
- Handwriting performance (fact sheet)