

Fine-Motor Skills

What are they?

- ❖ Fine-motor skills, commonly referred to as fine motor coordination or hand functions, involve patterns including reaching, grasping, carrying, voluntarily releasing, bimanual skills, and in-hand manipulation (Case-Smith & Exner, 2015).
- ❖ Research shows, “a variety of child factors influence the development of fine-motor skills such as movement skills, visual skills, sensory integration, visual perception, cognition, and social and culture factors” (Lerslip et al., 2016, p. 60).
- ❖ Fine-motor skills are crucial for a child’s interaction and engagement with materials, objects, and people in everyday life as these skills are the “tools” that often allow for that engagement (Case-Smith & Exner, 2015).
- ❖ For more information on fine-motor skills, you can visit the following websites:
 - Kid Sense - <https://childdevelopment.com.au/areas-of-concern/fine-motor-skills/>
 - Empowered Parents - <https://empoweredparents.co/fine-motor-skills-for-preschoolers/>
 - Penfield Building Blocks - <https://penfieldbuildingblocks.org/developmental-milestones/importance-fine-motor-skill-development/>

What are the signs of fine-motor deficits?

- ❖ Signs that may indicate challenges with fine-motor skills include (but are not limited to), limited interest in or avoidance of activities that involve grasping such as writing, drawing, or using feeding utensils, clumsy appearance during activities due to poor hand-eye coordination, and/or frequently experiencing hand fatigue during fine-motor tasks.
- ❖ Children with fine-motor challenges may also experience delays in reaching and/or achieving age-appropriate fine-motor milestones such as those related to stacking blocks, drawing lines/shapes, or turning pages.

How can fine-motor deficits impact occupational performance?

- ❖ Poor fine-motor skills can impact a child’s ability to participate successfully in occupations including play (ex. assembling puzzles, completing craft projects, etc.), ADLs (ex. dressing, eating, etc.), and school functions (ex. using crayons or scissors, handwriting, etc.) (Case-Smith & Exner, 2015).

How can OTs help?

- ❖ Depending on the child’s needs, an OT may work to promote independence and participation in occupations by:
 - Using supportive splints, assistive equipment, activity modifications, and/or bimanual skill training (Dorich & Harpster, 2015)
 - Educating on and practicing using adaptive strategies for ADLs (i.e., dressing, self-care tasks, etc.)
 - Engaging in play-based activities that provide opportunities to use fine-motor skills (ex. crafts, coloring)
 - Practicing using adaptive writing utensils/tools to develop functional grasp and improve handwriting
 - Utilizing the Handwriting Without Tears program for handwriting development
 - Using therapy putty, tongs, and/or tweezers to strengthen hand and finger muscles and promote grasp
 - Providing parent and caregiver education

**Information above is not comprehensive and all treatment plans are specific to and depend on the needs of the child and are in no way limited to the examples provided above*

References

- Case-Smith, J., & Exner, C. E. (2015). Hand function evaluation and intervention. In J. Case-Smith & J. C. O'Brien (Eds.), *Occupational therapy for children and adolescents* (7th ed., pp. 220-257). Elsevier Mosby.
- Dorich, J., & Harpster, K. (2015). Pediatric hand therapy. In J. Case-Smith & J. C. O'Brien (Eds.), *Occupational therapy for children and adolescents* (7th ed., pp. 812-838). Elsevier Mosby.
- Lerslip, S., Putthinoi, S., & Panyo, K. (2016). Fine motor activities to promote fine motor skills in a case study of Down's syndrome. *Global Journal of Health Science*, 8(12), 60-67. 10.5539/gjhs.v8n12p60