

The Essential Collaboration between ODs and OTs

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As a pediatric occupational therapist, most of my referrals come from neuropsychologists, pediatricians, and schools due to concerns about motor skills, handwriting or attention span. My evaluations are comprehensive: I assess fine and gross motor skills, neuromuscular status, sensory processing skills, self-care skills, visual motor integration, visual perception, sleep habits, eating habits, and social-emotional development. I always, always conduct a basic vision screening. I am astounded, child after child, year after year, by how many have poor ocular motor skills, convergence difficulties, and other undiagnosed visual processing deficits. I am grateful to have wonderful developmental optometrists to refer to for comprehensive vision exams and optometric intervention when needed.

Why, I wonder, do pediatricians, reading specialists, general education and special

education teachers, neuropsychologists, and all too many pediatric OTs, PTs, and speech-language therapists not recognize that the one of the very first steps in helping struggling children is to get a proper vision examination?

Clearly the answer is lack of knowledge. This is why I highlighted the importance of developmental optometry in both of my books: the award-winning *Raising a Sensory Smart Child* and my newer title, *Sensory Processing Challenges: Effective Clinical Work with Kids & Teens*.

Putting this question aside, let's examine how occupational therapists can and should collaborate with ODs to help kids and teens. Occupational therapy is a healthcare profession dedicated to helping people of all ages to better perform the tasks that occupy their time. For children, this means learning, playing, and participating in activities of daily living such as dressing, grooming, eating, and so on. If a child's visual system is not working optimally, it directly impacts the acquisition and refinement of all of the necessary developmental skills. Once the OT makes a thorough assessment, she or he is then able to identify specific therapeutic interventions and environmental and task modifications.

Many if not most of the children that I evaluate and work with have some degree of low muscle tone (the state of the muscle *at rest*) along with decreased strength (the state of the muscle *in use*) and poor posture while standing or when seated on a chair or on the floor. Decreased tone and strength is usually global, affecting the muscles of the eyes, neck, mouth, trunk, pelvis, legs, and arms. Kids seem to melt into gravity because they do not have the ability to sustain themselves against this powerful gravitational force. Tone and strength deficits interfere with all functional activities including reading and writing. If you slouch down in your seat right now, you will feel how difficult it is to swallow, breathe, and visually regard the environment.

Many "sensory smart" OT interventions include activation of vestibular receptors

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(sensory receptors in the inner ear which detect changes in gravity and movement) and proprioceptive receptors (sensory receptors in the joints, muscles, ligaments and connective tissue which detect body position). Activation and strengthening of core musculature, particularly spinal extensors as well as neck muscles, are especially important for visual regard. OTs also modify tasks (what they are asked to do) and the environment (the set up in which they must accomplish a task) to empower clients to participate to the best of their abilities.

During vision exams and vision therapy sessions or when making recommendations for home and school:

- Make sure the person has a solid base of support. Hips, knees, and ankles should be positioned at about 90° angles. Feet should be able to rest on the floor, a foot bar, footstool or a band that can be added to the front legs of a chair such as a Bouncy Band.
- Get the pelvis in a neutral position at a table of appropriate size so that the child is not slouching or forced to hike his or her shoulders up in order to place arms for support on the table surface or equipment. If the child is slumped in the chair, add a lightly inflated wedge-shaped cushion such as the Movin' Sit Jr. for little kids, or full size Movin' Sit for teens and adults. The cushion should be lightly to moderately inflated with the wider end facing the back of the chair.
- Make sure the person's neck is in a neutral position rather than flexed forward or extended backward. Using an appropriately sized table and chair along with a slantboard or vertical work surface will do much to help a client keep his shoulders relaxed and his neck in neutral position.

- Make sure lighting is conducive to learning. Sensitive kids, teens, and adults can see and hear fluorescent lights as they rapidly cycle on and off. They may be disturbed by light from overhead fixtures as it bounces off shiny surfaces. Replace compact fluorescent bulbs with full spectrum bulbs or warm LED bulbs. You can switch out overhead fluorescent tubes with LED tubes now available at local hardware stores. If you can't do a thing to change the overhead fluorescents, get inexpensive light diffuser panels such as Cozy Shades which magnetically attach to overhead fixtures.
- Find out where a student does his or her homework. Working at the dining room table with piles of paper, dishes, and other distractors is more common than one might imagine. Discuss the need for a quiet work area with decreased visual and auditory distractions and proper seating and lighting. Watch out for auditory and visual distractions in your VT area as well. If lighting or glare bounces off shiny table surfaces, use a desk blotter or simply cover the surface with matte paper.
- Provide general guidelines for worksheets, especially for special education and integrated classrooms, including minimal font size and recommended white space in the margins and in the gutter between columns of text. All too many worksheets are ill-prepared and visually confusing, contributing to poor performance from a student who may actually have mastered the material being worked on. Teach students about using highlighters to feature essential keywords. An understanding teacher can use a highlighter to visually separate items placed too closely on the page.

- Any student with visual processing difficulties should be given test accommodations on their Individualized Education Plan (IEP) or 504 Plan if they do not receive special education services.
- Kids need to move to learn. By activating the vestibular system we activate auditory and visual systems through neuroanatomical linkages. A few simple movement ideas that you can easily integrate into your practice or recommend to parents and teachers before demanding sustained focus and attention include:
 - Playing a game of catch, Frisbee, or balloon tennis (using lightweight rackets and a punch ball style balloon)
 - Doing a movement activity from GoNoodle.com which you can play on a computer, tablet, or smartphone
 - Performing jumping jacks before sitting down or jumping on a mini-trampoline
 - Doing wall push-ups before sitting down and/or chair push-ups once seated
 - Sitting on a physioball and bouncing before or even during an activity
 - Climbing a few flights of stairs before sitting down
 - Taking a stretch break every 30 minutes, e.g., alternate reaching for the earth with reaching for the sun
 - Doing some Brain Gym moves (see *Brain Gym: Teacher's Edition*)
 - Using a movement card deck such as *Super Duper's Move Your Body* or *Yoga Pretzels*

These are just a few recommendations, and of course any therapeutic interventions or task and environmental modifications must be individualized to best meet the particular needs of a particular person. You'll find many other sensory smart strategies in my books, particularly *Sensory Processing Challenges: Effective Clinical Work with Kids & Teens*, where you'll also find screening tools for home and school.

Our wonderful clients are so complex. Collaboration between ODs and OTs is essential in optimizing how they feel and function in your office, at home and school, and out and about in the community.



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Lindsey Biel, MA, OTR/L, is a pediatric occupational therapist based in Manhattan, where she evaluates and treats children, adolescents, and young adults with sensory processing challenges, autism, and other issues. Lindsey is coauthor of *Raising a Sensory Smart Child*, with a foreword by Temple Grandin, and author of *Sensory Processing Challenges: Effective Clinical Work with Kids & Teens*. She is a popular speaker, teaching therapists, doctors, teachers and others real-life "sensory smart" strategies for challenges at home, school, and in the community. Please visit her websites at www.sensorysmarts.com and www.sensoryprocessingchallenges.com.