Autism Asperger's Digest Author Spotlight – Lindsey Biel, M.A., OTR/L

Lindsey Biel, M.A., OTR/L is an occupational therapist specializing in pediatrics and



the coauthor of *Raising a Sensory Smart Child: The Definitive Handbook for Helping Your Child with Sensory Processing Issues.* Through her private practice in Manhattan and her work with the NY State early intervention program, she evaluates and treats infants, toddlers, and older children with a variety of diagnoses including sensory processing disorder, autism spectrum disorders, and developmental delays.

AAD: Tell us a little bit about Lindsey, the professional. When and how did you come to be an Occupational Therapist (OT)?

LB: My first career was as a writer—advertising, sales promotion, magazine articles, short stories, and dreadful poetry. After many years, I felt bored and unfulfilled and serendipitously came across a review copy of Temple Grandin's book, Thinking in *Pictures.* It set me on fire! Here was a person who experienced the world in a completely different way. I devoured Dr. Grandin's other book, *Emergence: Labeled Autistic*, and then Oliver Sacks' wonderful books, which introduced me to neuropsychology. As part of a full scholarship to New York University from the NYC Department of Education, I was required to work in the city schools for two years. I worked with children from kindergarten to 12th grade with a variety of special needs, from physical disabilities to learning disabilities to autism. The kids were fascinating, but I was drawn most to children who seemed "lost in space." These kids, who had a variety of diagnostic labels, were unhappy inside their own skin, unable to concentrate in class, prone to emotional outbursts or painfully withdrawn, and usually all alone on the playground. They couldn't write well, lost their homework, were physically awkward, self-conscious, and often very sad. Most were labeled "behavior problems." And yet they seemed drawn to me, and I to them.

So, when I left the city school system I decided to devote my occupational therapy practice to pediatrics, helping children of all ages with these kinds of issues. I love what I do!

AAD: What, exactly does an OT do?

LB: Occupational therapy is a healthcare profession concerned with helping people of all ages better perform tasks that occupy their time. OTs work in schools, hospitals, physical rehabilitation settings, nursing homes, mental health facilities, and elsewhere. As a pediatric OT, I help kids with:

- Attention span and arousal level
- Sensory processing skills
- Fine motor and gross motor skills
- Activities of daily living/self care tasks
- Visual-perceptual skills
- Handwriting (graphomotor skills)
- Assistive technology: low-tech devices (like pencil grips) and high-tech equipment (like computers).

While not all kids with sensory issues have autism, the vast majority of children on the autism spectrum do have sensory challenges, oftentimes quite severe. A survey of kids and adults with autism conducted at the Geneva Centre for Autism in Toronto found that over 8 in 10 were hypersensitive to touch and sound and had vision problems, while one-third had taste and smell sensitivities. Dr. Stanley Greenspan and Serena Wieder found that 94 percent of children with ASD studied had sensory issues. While oversensitivities such as to noise or touch are easy to recognize, *under*sensitivities are less apparent. A child who is *under*sensitive to movement, for example, may demonstrate this by frequently spinning and jumping in an effort to obtain more of this needed input.

Just as one size of clothing never fits all, using just one approach to working with a child on the spectrum rarely meets all of that child's needs. Happily, more and more teachers, psychologists, and therapists are working together, integrating their approaches. I hope that in the future, there is little distinction between "sensory people" and "behaviorists."

AAD: What is the function of our senses? How can they be impaired?

LB: All of us learn about the world and ourselves through our senses. If, due to different wiring in the nervous system a child is receiving unreliable sensory information, or has difficulty linking up all the sensory information in the brain, he or she will have difficulty acting on such input appropriately. For example, if an innocent touch on the back from a classmate feels like an assault, or letters jiggle on the page, or the sound of fluorescent lighting hurts, a child will have profound difficulty paying attention in school.

AAD: Do kids outgrow sensory issues?

LB: All of us have sensory preferences and intolerances, especially little kids. It's fairly typical for a toddler to refuse to eat certain foods or be fussy during diaper changes, but when a child gags because of a particular food texture, or has a meltdown whenever he's placed on a changing table, something more significant is happening for that child.

With individualized intervention, many children's sensory issues diminish over time. Sometimes it takes repeated exposure and ongoing reassurance to become comfortable using finger paints or hearing the vacuum cleaner. While kids learn more quickly than adults, the human brain remains "plastic" throughout the lifespan; it is always remains capable of remodeling and forming new, more beneficial nerve connections. Even so, with more significant sensory issues, more often seen on the autism spectrum, there may always be a sensitivity to certain sensory experiences: a person may always become distressed by fluorescent lights, always feel uncomfortable wearing certain types of clothing, always prefer to avoid noisy parties and crowds. So sometimes the sensitivities remain, hopefully less dramatically, but what does change is the individual's ability to cope with sensory issues and to use "sensory smart" strategies." As an adult, a person whose nervous system requires more vestibular (movement) input, can go for a run or do yoga to feel better. A person who is sensitive to sounds can use noise reducing headphones or earplugs at a concert or party to remain on an even keel.

AAD: What do sensory challenges look like in "real life"?

LB: The most obvious thing to look for is out-of-proportion reactions to touch, sounds, sights, movement, tastes, or smells.

- Bothered by clothing fabrics, labels, tags, etc.
- Distressed by light touch or unexpected touch
- Dislikes getting messy
- Resists grooming activities
- Very sensitive to sounds (volume or frequency)
- Squints, blinks, or rubs eyes frequently
- Bothered by lights or patterns
- High activity level or very sedentary
- Unusually high or low pain threshold

There are often related motor skill and body awareness difficulties in which the child struggles with fine motor skills such as managing buttons and shoelaces, learning to write, stringing beads, using scissors. There may also be gross motor skill delays so the child may have trouble learning to walk or run gracefully, difficulty with jumping, climbing stairs, ball skills, and using playground equipment. There may also be oral motor and feeding problems, including oral hypersensitivity, frequent drooling or gagging, so-called picky eating, and frequently speech and language delays. Quite often you'll see poor attention and focus, resulting in "tuning out" or "acting up" behaviors.

AAD: What's a "sensory diet"?

LB: A "sensory diet" is a carefully designed, personalized activity schedule that provides the sensory input a person's nervous system needs to stay focused and organized throughout the day.

Just as you may chew gum to stay alert or soak in a hot tub to unwind, your child needs calming, focusing activities to help her self-regulate too. Infants, children, teens, and adults with mild sensory issues or sensory processing disorder all benefit from a well-designed, individualized sensory diet.

Generally, a child whose nervous system is on "high trigger" needs more calming input like slow rocking or soothing music, while the child who is more "sluggish" need more arousing input like jumping on a mini-trampoline to activate her nervous system. We have a huge section in *Raising a Sensory Smart Child* about how parents can do this at home, and how teachers can do this at school.

AAD: Many professionals in the autism field are still not "on board" with sensory integration therapy. Why do you think that is so?

LB: There are some professionals who "do not believe in sensory issues." There are some professionals who believe it's a good idea to make a child sit in a chair at a table for hours of discrete trial training. There are some professionals who criticize SI theory because there have not been scads of scientific research studies conducted.

Whether or not people "believe" in sensory issues, they exist. Regardless of whether a child is receiving traditional or modified ABA, Functional Behavior Analysis, TEACCH, or whatever, if the child is in pain, neurologically overwhelmed by intolerable sensations, or struggling to register and process sensory input, that child simply will be unable to reap the full benefit of the educational approach. You've got to recognize and handle the underlying sensory issues to help that child be available for learning.

Happily, more and more educators, psychologists, and therapists recognize this, and work together to meet all of the child's needs. Increasingly, behaviorists are working with kids in natural environments rather than working at a tabletop with a notebook of statistics. Increasingly, OTs are incorporating behavioral strategies into their sessions. And meanwhile, there are now more and more scientific studies showing the effectiveness of approaches that use sensory integration principles.

AAD: Tell us a little about your book, Raising a Sensory Smart Child.

LB: My coauthor, Nancy Peske, has a son I treated through early intervention. He was adorable, and his parents were terrific at following through on recommendations. When

she mentioned there weren't any helpful books available, we decided to write one together. *Raising A Sensory Smart Child: The Definitive Handbook for Helping Your Child with Sensory Processing Issues*, released in 2005, was the first practical guidebook for parents of children with sensory processing disorder. We've gotten wonderful reviews. It won the National Parenting Publications' Gold Award, the iParenting Media Award, and has been featured in consumer and professional publications.



An expanded edition of Raising a Sensory Smart Child just released

in August 2009, and while the book has always been extremely relevant to children with ASD, the new edition is even more so. It includes a chapter devoted to sensory challenges and autism spectrum disorders as well as new information on sensory diet activities for the entire family. We also added many more practical solutions for young children, teens, and even adults.

AAD: What hobbies or passions would we find you doing outside work?

LB: When not working with kids and families, not responding to emails from readers around the world, or teaching workshops, I try to venture outside New York City. I love hiking in the woods with my dog, Yoshi, and my longtime companion, Rick. I also enjoy going to the beach, curling up with a novel, and snorkeling in interesting places like Belize. Here in the city, I enjoy going to theater, concerts, and walking around looking at the amazing mosaic of cultures that is New York City.

Any parting thoughts?

LB: Dealing with sensory issues takes a lot of detective work, a lot of patience. I find it always helps to maintain your sense of humor.

I hope readers will visit our website at www.sensorysmarts.com, where you'll find lots of great information you can use right away to help your child with sensory processing issues.

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