

Sensory Integration and the Internationally Adopted Child

By Barbara Elleman, OTR/L, BCP

Have you ever wondered why the fast, spinning rides that you repeatedly enjoyed as a child, now make your head spin and your stomach turn? As we mature, our brain's ability to organize and interpret information from our senses (touch, taste, and smell, movement, sight, sound and body awareness) improves. This is a process called sensory integration. For most children, sensory integration occurs automatically. These children naturally seek out the sensory information they need to grow and mature. Some children do not. Some children experience dysfunction of sensory integration.

Children, who have been adopted internationally, particularly from an orphanage, may be at risk for dysfunction of sensory integration. This may be due to early environmental circumstances, prenatal or medical factors that predispose a child to altered sensory input during the first year of life. A large amount of sensory integration occurs during the first year of life. The integration of simple sensory information becomes the basis for more complex tasks as a child develops. For example, an infant integrates information from vision, touch, and body awareness to locate and reach for a brightly colored toy held above her. Sensory information comes to the brain as input from sights, sounds, taste, smell, touch, movement and body position.

The touch (tactile) system is highly responsive during the first years of life. It allows us to determine if we are being touched and to locate that touch (such as when a fly lands on our leg). The tactile system also provides us with the ability to react when the touch input is harmful (such as a hot or sharp surface). When a touch sensation is provided, our brain registers the sensation and determines a reaction (such as withdrawing a hand from hot water or swatting away a fly).

The movement (vestibular) system is also highly responsive during the first years of life. It informs our brain about the direction and position we are holding / moving in space and provides the foundation for coordination, balance, eye movements and posture.

Proprioception is the term used for the sense of body position. It provides information about the position of our body in space. It allows us to perform tasks such as turning on a light switch in the middle of the night.

Dysfunction of sensory integration occurs when sensory integration does not develop as efficiently as it should. It may result in problems with learning, behavior, or development.

Older children with Dysfunction of Sensory Integration usually exhibit more than one of the following symptoms:

Over or under reactive to touch movement, sights, sounds, food textures/tastes

- Easily distracted
- Unusually high or low activity level
- Clumsiness or difficulty with coordination
- Difficulty making transitions or accepting change in routine
- Inability to unwind or calm self
- Poor self concept
- Difficulty with academic achievement
- Social and or emotional problems
- Speech, language or motor delays

Younger children with dysfunction of Sensory Integration usually exhibit more than one of the following symptoms:

- Poor muscle tone
- Slow ability to achieve developmental milestones
- Unusually fussy, difficult to console
- Failure to explore the environment
- Difficulty tolerating changes in position
- Resistance to being held or cuddled
- Difficulty with sleep
- Difficulty with sucking

Not all children who have been internationally adopted will have dysfunction of sensory integration. Often symptoms may be present initially after adoption during the transition to a new culture and new environment. Dysfunction of sensory integration usually presents as a pattern of symptoms that persist beyond the initial period following adoption.

During the period initially following adoption, parents of internationally adopted children can provide activities to promote a sensory rich environment. Parents should incorporate a variety of sensory experiences into their child's everyday routine. Parents should introduce new activities slowly. They should provide an opportunity and encourage but not force the child to perform the activities. Below are some suggestions for activities. Caution should be used regarding the child's age and ability when choosing activities.

Touch Activities

- Finding small toys in sand or a container filled with macaroni or beads
- Rubbing with lotions, powders or towels
- Finger-painting, playing in pudding
- Dress up activities
- Building forts with blankets, towels or sheets

Movement Activities

- Playgrounds or backyard equipment- swing sets, slides, tire swings
- Gym programs
- Riding toys

Sit 'n spin or spinning activities and games

Gentle bouncing on old mattress, cushions, lap or when held securely on a ball.

Proprioceptive (Body Awareness) Activities

Crawling and climbing

Wheelbarrow walking, jumping, hop-scotch

Tug of war or obstacle courses

Pushing or pulling weighted objects such as a wagon, laundry baskets, filled buckets

Position games such as twister or Simon says

Visual Activities

Punching bags, balls, balloons and bubbles

Target games such as tee ball, tennis or soccer

Puzzles, tracing, dot to dot, mazes

Scissor activities

Mobiles

Sound Activities

Whistles, bells and horns

Listening to stories, tapes and songs

Repeating sequence of sounds

Naming sounds for animals

Rhythmic games and activities

If you suspect your child may have dysfunction of sensory integration, an evaluation may be beneficial. Occupational therapists with training in sensory integration can provide evaluations and develop individualized treatment programs to help children who struggle with dysfunction of sensory integration.

Parents who wish to learn more about sensory integration may find the following resources helpful:

Websites:

www.sensoryint.com – Sensory Integration International

www.sinetwork.org – Sensory Integration Network

Books:

The Out-Of-Sync Child by Carol Kranowitz

Sensory Integration and the Child by Jean Ayres

References:

Ayres, J.A. (1979). *Sensory Integration and the Child*. Los Angeles: Western Psychological Services.

Haradon, G. (2000). Sensory Integration Therapy and Children from Deprived Environment. In T. Tepper, L. Hannon, & D. Sandstrom (Eds.), *International Adoption: Challenges and Opportunities* (pp.77-86). Parent Network for the Post-Institutionalized Child.

If you have questions about your internationally adopted child or would like more information related to Sensory Integration and the internationally adopted child,

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