

Eli's Rehab Report

Clinical Rehab Roundup: Early Intervention Is Best Approach For Sensory Integration Patients

Systematic Review of the Research Evidence Examining the Effectiveness of Interventions Using a Sensory Integrative Approach for Children. May-Benson TA, Koomar, JA. Am J Occup Ther. 2010 April-May;64(3).

More parents are turning to occupational therapists for help with children who struggle with sensory integration, but there hasn't been much proof that these interventions work. Until now.

Researchers at The Spiral Foundation and OTA-Watertown have reviewed 27 studies to determine whether sensory integration intervention is effective for children with difficulty processing and integrating sensory information.

Unique: This approach to intervention research is important because it independently reviews research articles and develops interpretations not skewed by previous reviewers' beliefs or opinions about the articles, explains lead author **Teresa May-Benson, ScD, OTR/L**, research director at The Spiral Foundation and clinical director at OTA-Watertown. Of the studies, 14 examined how sensory integration therapy affects motor skills, including fine and gross motor skills and general motor planning. Positive gains were found in 10 of these studies, which suggests the approach holds its own against more traditional perceptual-motor treatment.

Thirteen studies scrutinized the outcomes thought to indicate improvements in sensory processing. More than half of these showed a positive correlation between intervention and improvements in tactile function, eye control, responses to stress and anxiety, and decreases in sensory defensiveness. Three of the studies demonstrated gains in occupational performance -- including improved sleep patterns, more willingness to eat new foods, improved ability to complete homework, and improved ability to complete manual tasks like fasten a button and pump a swing.

Put it to work: Depending on the complexity of the desired outcome, the frequency and duration of therapy will vary, notes co-author **Jane Koomar, PhD, OTR/L, FAOTA**, president of The Spiral Foundation and executive director of OTA-Watertown.

For instance, if you want children to be able to read and comprehend, you might schedule therapy two to three times per week for six months, Koomar says. A less complex task, such as pumping a swing, wouldn't require as much time.

The bottom line: You can let parents know that your OT's sensory integration approach generally results in positive outcomes in sensorimotor skills and motor planning, socialization and behavioral regulation, reading, participation in play, and more. And after therapy cessation, children can sustain gross motor skills and other gains for up to two years.

If parents are deciding between sensory integration therapy versus no treatment, the results show that therapy is the way to go, May-Benson says.