

This article describes how differences in children’s neurological thresholds and behavioral responses to the environment combine to create four sensory processing profiles. By observing children’s responses to the environment, teachers can determine each child’s processing profile and then implement various strategies to help all children succeed.

The content of this article is most closely related to NAEYC Standards for Early Childhood Professional Preparation Programs 1 and 5, and NAEYC Early Childhood Program Standards 2 and 3.

This training outline is primarily for educators who work with children ages 3 to 8.

Key messages

- ➔ Sensory processing occurs through the interaction of two dimensions—a child’s neurological threshold and her behavioral responses to the environment. These two dimensions combine to form four patterns identified by Dunn (1997): *low registration*, *sensory sensitivity*, *sensation seeking*, and *sensation avoiding*.
- ➔ Children with different patterns, or sensory processing profiles, react differently to stimuli and may need specific strategies to help them adapt to the classroom environment.
- ➔ If children display concerning behaviors, teachers can observe them over time to determine their processing profiles and help them develop self-regulation. Teachers can use specific strategies to support children, for example, maintaining calm, organized environments for sensation-avoiding children.

Self-study

Respond to the following questions in the space provided.

In your view

1. Write down three new things that you learned from reading this article. If possible, compare your choices with others who have read it.

2. What research findings cited by the authors did you find most interesting? Why were they of particular interest to you?

Glossary

Sensory integration—a child’s ability to use sensory information from the environment (including sounds, lights, textures, motion, and gravity) and the sensations from their bodies, and then respond appropriately (Dunn 1997; Lynch & Simpson 2004).

Neurological threshold—the level at which a child’s nervous system is activated from a stimulus. Some children need very little input, while others require a lot of stimulation to notice the stimuli (Dunn 1997; Lynch & Simpson 2004).

Behavioral response—children’s behavior in reaction to the stimuli in their environment, ranging on a spectrum from passive to active. A child with an active strategy might avoid or seek out more stimulation, whereas a child with a passive strategy might not respond immediately or directly to stimuli (Dunn 1997; Lynch & Simpson 2004).

3. How does the content of this article relate to developmentally appropriate practice, state and local early learning standards, or other requirements applicable to your setting?

Reflect and revisit your practice

1. Which ideas in this article affirm your work with or on behalf of young children in early childhood settings?

2. What ideas and research findings in this article raise questions about your practices in early childhood settings (public and/or private)? What new approaches might you try?

3. What kinds of supports do you and your colleagues need to try out these new ideas (such as assistance from a colleague or other practitioners, and/or additional resources for your setting)?

Discuss with one or more colleagues/peers

Discuss the following questions with at least one colleague/peer. Record the key points of your discussion in the space provided.

Consider current practice

1. Reflect on a time when you were surrounded by a lot of stimulation, such as at a loud party, a busy store, or a rock concert. How did you feel and respond to the environment? What might this experience as well as similar experiences indicate about your own sensory processing profile?

2. Consider the children in your setting. What have you noticed about how different children respond to stimulation? How do you help children adapt to the classroom environment? How do you help promote children's self-regulation? What new strategies would you like to try after reading this article?

3. Think about your setting. In what ways is it structured to meet children's different sensory needs? For example, how does the setup accommodate large-group, small-group, and individual work? How much stimulation does it provide? What physical adjustments could you make to better meet children's specific needs?

Connect research and practice

1. What does research reveal about the role that self-regulation plays in children's development? How can it help children with different sensory processing profiles?

2. What are some strategies that teachers can use to support children in each of the four patterns of sensory processing?

Action steps

Try out these ideas over the next two to four weeks. Document and discuss your experiences with others.

Implement and document

- 1. Observe, document, and review.** Observe children in your setting throughout the day while they are engaged in various activities, especially as they interact with peers and during sensory-rich activities, such as water, sand, and other sensory play. Document your observations, noting times when children appear happy as well as distressed. Pay particular attention to the environment and what is happening when the children display different behaviors. Review your documentation to determine if there are patterns of sensory processing that suggest children's different sensory profiles.
- 2. Communicate with families.** Share your observations with families, particularly with those of children who frequently appeared distressed during your observations. Provide families with the article to read, and meet to discuss the families' perspectives on their children's sensory needs to gather a more complete picture of children's sensory profiles. Work with families to generate ideas about how to meet children's needs in your setting and at home.
- 3. Implement new strategies and make adjustments to the environment.** Put into action different strategies to meet children's unique sensory needs. For example, create a quiet area in the classroom for children with the sensory-sensitivity and sensation-avoiding patterns. Be sure to reflect on how strategies to meet some children's needs may impact other children. For example, let sensation-seeking children use fiddle toys and move around the classroom so they can maintain focus; however, keep these children at a distance from sensation-avoiding children so the latter won't be distracted. Continue to observe children during and after implementing new strategies and making adjustments. Consider any additional modifications or adaptations that could further assist the child. If your efforts do not seem to help certain children, seek the professional opinion of an occupational therapist or other professional who is familiar with sensory integration issues.

Discuss experiences and outcomes

Summarize your experiences and outcomes in the space provided, and then discuss them with at least one colleague/peer.

1. What did you do that was successful?

2. What challenges did you face? How did you address the challenges?

3. Have you noticed changes in your program as a result of the new strategies? Did anything surprise you?

4. How can you build on your progress?

5. What other resources or research do you need to review in order to better understand sensory processing?

Continue learning

Ayres, A.J. 2005. *Sensory Integration and the Child: Understanding Hidden Sensory Challenges*. 25th anniversary ed. Los Angeles: Western Psychological Services.

Bodrova, E., & D.J. Leong. 2007. *Tools of the Mind: The Vygotskian Approach to Early Childhood Education*. 2nd ed. Upper Saddle River, NJ: Pearson.

Miller, L.J. 2006. *Sensational Kids: Hope and Help for Children With Sensory Processing Disorder*. New York: G.P. Putnam's Sons.

Reference

Dunn, W. 1997. "The Impact of Sensory Processing Abilities on the Daily Lives of Young Children and Their Families: A Conceptual Model." *Infants and Young Children* 9 (4): 23–35.

Lynch, S., & C. Simpson. 2004. "Sensory Processing: Meeting Individual Needs Using the Seven Senses." *Young Exceptional Children* 7 (4): 2–9.

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