

RESEARCH BRIEF



Hyperresponsive Sensory Patterns in Young Children with Autism, Developmental Delay, and Typical Development

By Grace T. Baranek, Brian A. Boyd, Michele D. Poe, Fabian J. David, and Linda R. Watson

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Unusual sensory features are commonly reported in individuals with autism and, although not universal in autism, may be relevant to diagnosis as well as intervention planning.

The purpose of this study was to examine the prevalence and nature of hyperresponsiveness (the term used to characterize a pattern of exaggerated behavioral responses to sensory stimuli) in children with autism compared to children with other developmental delays and typically developing children. Three groups of participants ranging in age from 5 to 83 months were included. The Sensory Processing Assessment for Young Children (SPA), a 20 minute play-based observational measure, was used to assess sensory processing patterns. The SPA enables observation of child responses to tactile, auditory, and visual stimuli through interaction with novel sensory toys and unexpected sensory stimuli.

Overall the findings in this study revealed that hyperresponsive sensory patterns (i.e., sensory aversion/avoidance and habituation) were characteristic of developmental delay in general, thus adding to the

growing body of evidence that sensory hyperresponsiveness is a general deficit associated with various developmental disabilities and likely is not specific to autism. Mental Age (MA) appears to be a strong predictor of level of aversive/avoidant responses to novel sensory experiences as well as habituation to a repeated stimulus. Hyperresponsiveness was found to diminish with increasing mental age, and this rate of decline was comparable for children in all three groups. Neurobiological maturation, life experiences, and/or acquired cognitive abilities appear to play an important role in affording children an increased tolerance to sensory stimuli.

Although not particularly useful for differential diagnosis, sensory hyperresponsiveness may still have important implications for development, adaptive behavior, and social participation. Clinical relevance includes implications for potential interventions such as provision of environmental adaptations, increasing exposure to novel sensory experiences, and/or teaching coping strategies to mitigate the effects of sensory hyperresponsiveness in various contexts.

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