



RESEARCH BRIEF

Sensory Processing in Persons with Autism and Developmental Disabilities: Considerations for Research and Clinical Practice

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How an individual handles and processes sensory information (i.e., sights, sounds, touch, tastes, and smells) from his or her environment is thought to affect development. Sensory processing and sensory integration are terms used interchangeably by clinicians to describe how a person reacts to sensory stimuli in their environment.

Occupational therapists are often asked to evaluate and treat individuals with sensory processing difficulties. Characteristically, children with autism and children with developmental disabilities prefer activities that are repetitive (i.e. opening and closing doors), and they may try to avoid social interactions with others. Frequently, individuals with autism will over and/or under react to some sensory stimuli. Occupational therapists often characterize children with autism as having extreme fluctuations in their responses to sensory stimuli. For example, children with autism and fragile X syndrome tend to overreact to stimuli which may manifest as anxiety and stereotypic behaviors (e.g., flapping, rocking, spinning). When children display defensive behavior toward the

stimuli (e.g., rub the spot where it touched them) or try to avoid the stimuli altogether (e.g., back away from the stimuli, tantrum, shout), they may be attempting to regulate the amount of stimulation they receive from their environment.

Occupational therapists attempt to help children experiencing these kinds of challenges modulate their arousal levels through sensory-based therapies. For example, for a child who overreacts to stimuli the focus of therapy might be on helping the child decrease his or her arousal level. A child with a developmental delay and/or autism may be unable to verbally express sensory likes and dislikes. In these cases, clinicians should closely monitor the child's reaction to the stimulus and rely on reports from caregivers for information regarding sensory preferences and aversions. Factors that may influence a child's response to sensory input include their age, maturity, cognition, and previous sensory experiences. In addition, how a caregiver reacts to the child's response to sensory stimuli may be influential in shaping the child's memories of sensory experiences.

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