

## Article Links for Journal Club

Crasta, J. E., Martis, J., Kromalic, M., Jarrott, S., Wengerd, L., & Darragh, A. (2024). Characterizing occupational therapy intervention for children on the autism spectrum. *American Journal of Occupational Therapy*, 78, 7805205210. <https://doi.org/10.5014/ajot.2024.050734>

- Importance: Occupational therapy is one of the most used interventions for children on the autism spectrum. There is a critical need to develop an operationalized list of key treatment components of usual-care occupational therapy practice for children on the autism spectrum.
- Objective: To identify and develop consensus on definitions and examples of key treatment components of usual-care occupational therapy for children on the autism spectrum, ages 6 to 13 yr.
- Design: We conducted a Delphi study to obtain feedback from a panel of experts.
- Setting: Electronic survey.
- Participants: 17 occupational therapy panelists with expertise in autism intervention.
- Outcomes and Measures: Panelists rated the definition and example of each treatment component and provided feedback through multiple rounds of survey.
- Results: On the basis of the panelists' feedback on Delphi Round 1, the criteria rating form was revised to include four questions for the definition and example of each treatment component. Through four Delphi rounds of consensus building, we developed an operationalized list of 20 treatment components with definitions and examples that incorporated elements of usual-care occupational therapy intervention for children on the autism spectrum.
- Conclusions and Relevance: This operationalized list of treatment components serves as a foundational framework to improve education, practice, and research of occupational therapy intervention for children on the autism spectrum.
- Plain-Language Summary: This study identified and developed consensus on definitions and examples of key treatment components used in usual-care outpatient occupational therapy for children on the autism spectrum. Through four rounds of consensus building with 17 occupational therapy experts in autism, we identified 20 key treatment components central to occupational therapy practice. Our results have the potential to serve as a framework to improve education, practice, and clinical research in autism

Baum, S.H., Stevenson, R.A., & Wallace, M.T., (2015). Behavioral, perceptual, and neural alterations in sensory and multisensory function in autism spectrum disorder. *Progress in Neurobiology*, 134, 140-160. <https://doi.org/10.1016/j.pneurobio.2015.09.007>

### Highlights

- Although sensory processing problems are common in ASD, they are poorly characterized.
- There is increasing recognition of the prevalence and importance of multisensory processing changes in ASD.
- Sensory and multisensory representations form the building blocks of higher-order cognitive representations.
- Hence low-level sensory changes in ASD are likely to impact domains such as social communication.
- Remediation approaches that focus on sensory function may hold promise in ASD treatment.

### Abstract

Although sensory processing challenges have been noted since the first clinical descriptions of autism, it has taken until the release of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in 2013 for sensory problems to be included as part of the core symptoms of autism spectrum disorder (ASD)

in the diagnostic profile. Because sensory information forms the building blocks for higher-order social and cognitive functions, we argue that sensory processing is not only an additional piece of the puzzle, but rather a critical cornerstone for characterizing and understanding ASD. In this review we discuss what is currently known about sensory processing in ASD, how sensory function fits within contemporary models of ASD, and what is understood about the differences in the underlying neural processing of sensory and social communication observed between individuals with and without ASD. In addition to highlighting the sensory features associated with ASD, we also emphasize the importance of multisensory processing in building perceptual and cognitive representations, and how deficits in multisensory integration may also be a core characteristic of ASD.