

Comments on Eunice Kennedy Shriver National Institute of Child Health and Human Development's Scientific Vision Workshop on Behavior

The **American Occupational Therapy Association (AOTA)** represents over 140,000 occupational therapy practitioners and students whose goal is to maximize independence and function for people across the lifespan.

AOTA commends the participants of the behavior workshop for recognizing the importance of environmental factors on behavioral development. We recommend considering the impact of **sensory** factors on behavioral development. **Sensory processing** of environmental stimuli as well as internal stimuli (from one's own body) can influence the ability to achieve self-regulation (Miller, 2005; Porges, 1996) and provide a foundation for successful environmental interactions across multiple domains for learning and adaptive behaviors. Systematic reviews suggest that **sensory integration** intervention positively effects behavioral outcomes and that these gains are sustained at follow-up (American Occupational Therapy Association [AOTA], 2009). However, it is unclear whether sensory integration intervention is more effective than other interventions.

The emphasis of **early health conditions on behavioral development** is particularly needed in populations of children and adolescents with intellectual and developmental disabilities as they transition from one system of care to another (i.e., early intervention, school system, etc.).

We agree with the idea of conceptualizing child behaviors using a dimensional approach. We also need more research examining the **moderators and mediators of behavior**, particularly in young children with disabilities (0-5 years). For issue #7, it may be helpful to examine behavior and executive function separately. For example, what antecedent skills or body and structure functions are necessary for self-regulation of behavior? The same question could be asked for executive function.

AOTA has also been interested in studying **environmental influences** on behavioral expression across a severity continuum, in the context of what enables functional performance. Questions like "How can environmental supports influence the expression of independent and adaptive behavior, coping, and self-regulation" could spark research using universal design principles and assistive technology interventions. AOTA appreciates this opportunity to submit comments to guide NICHD's vision for future research. For additional information, please call 301-652-6611.

References

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