

Sensory Processing Correlates of Occupational Performance in Children with Fragile X Syndrome: Preliminary Findings

Baranek, G.T., Chin, Y.H., Hess, L.M., Yankee, J.G., Hatton, D.D., & Hooper, S.R. (2002). Sensory processing correlates of occupational performance in children with fragile X syndrome: Preliminary findings. *American Journal of Occupational Therapy*, 56, 538-46.

The relationship between sensory processing and occupational performance was examined in a sample of children with fragile X syndrome (FXS). The sample included fifteen school-aged boys with full-mutation FXS. Each subject was assessed with occupational performance measures, including the School Function Assessment, the Vineland Adaptive Behavior Scales, and play duration, and three measures of sensory processing measures, including the Sensory Profile, the Tactile Defensiveness and Discrimination Test — Revised, and the Sensory Approach — Avoidance Rating.

The results demonstrated significant correlations independent of effects of age and IQ. For example, avoidance of sensory experiences was associated with lower levels of school participation, self-care, and play. In contrast to expectations, aversion to touch from externally controlled sources was associated with a trend toward greater independence in self-care. The findings suggest links between sensory processing and individual differences in occupational performance. Children's behavioral responses may reflect different coping strategies that mediate the relationship between sensory processing deficits and occupational behaviors. The authors suggest that this warrants further investigation.