Sensory Defensiveness in Persons with Developmental Disabilities (Abstract)

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The authors completed this study of adults and children with developmental disabilities in order to provide some empirical support for a construct of sensory defensiveness, as well as determine the relative prevalence of sensory defensive behaviors in this population and any differences in prevalence that might occur between children and adults. The researchers used 6 items from a 54-item survey of stereotypical and unusual behaviors, the Stereotypical Behavior Checklist. The 6 items chosen were thought to represent behaviors indicative of sensory defensiveness. Of the 6, 4 targeted tactile defensiveness primarily while only 1 addressed auditory issues and 1 addressed more general sensitivity. The complete survey was done with 158 adults and 88 children with developmental disabilities (mental retardation, autism, and a variety of syndromes). Two staff members who knew the subject well were asked to complete the survey.

Since the agreement between the raters overall was poor, the researchers chose to report relative prevalence only when both raters agreed on the behavior being present. Overall, the prevalence rates for children ranged from 2% (oversensitivity to food textures) to 30% (oversensitivity to noise). They examined differences between adults and children and found that only on 2 of the 6 items were the children more likely to exhibit the behavior. Those 2 items were "upset by noise" and "oversensitive to specific sounds, lights, smells or textures."

The authors completed factor analyses to examine how well the items held together in one factor. They found that the factor loading (correlation) supported general interrelationships, but that as a whole the factor accounted for only 34% of the variance. They completed further analyses and found that the 6 items actually fell into 2 factors. One was the 4 tactile items and the other was the auditory and general hypersensitivity item. These 2 factors accounted for 52% of the variance.

The authors stress caution in interpreting the data because of the small sample size and poor interrater agreement for these behaviors. However, they do feel that sensory defensive behaviors were generally uncommon in this group. Two items were much more common in children, perhaps suggesting that defensive behaviors decrease with increasing maturity. Lastly, the authors feel their results support the construct of sensory defensiveness as being made up of subtypes. Their data suggested two subtypes, tactile and auditory.