Using Two Questionnaires to Understand Adult Sensory Processing Behaviors

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Research Question:
- Does the Adult Sensory Processing Scale exhibit concurrent validity when compared to the Adolescent/Adult Sensory Profile?

Background Information & Current Literature:
- Sensory integration theory describes how individuals receive, organize, and respond to sensory experiences in the environment (Ayres, 2005). While much research has been conducted on children, few studies on sensory processing in adult populations are available (Dunn, 2007; Dunn, Saiter, & Rinner, 2002; Kranowitz, 2005).
- Two instruments that are currently available for adults are the Adolescent/Adult Sensory Profile (AASP) and the Adult Sensory Processing Scale (ASPS) (Blanche et al., 2014; Brown & Dunn, 2002).
- The ASPS is a newly developed tool published in the American Journal of Occupational Therapy in 2014, specifically designed to measure patterns of sensory responsiveness within specific sensory systems. The publication purports adequate reliability and validity and is useful in examining the effects of sensory dysfunction within specific sensory areas on occupational choice (Blanche et al., 2014).
- The AASP is the most widely used instrument measuring sensory processing patterns in adults. It is well-established assessment tool used to determine sensory processing patterns (Dunn & Brown, 2002). This instrument has been shown to have strong internal consistency and content validity, and moderate convergent validity.

Methods:
- We used a survey study design which included the ASPS, AASP, and a demographic survey. We used convenience and snowball sampling to obtain responses from 187 respondents aged between 18-64 years.
- Respondents completed both sensory assessments, a demographic form, and a consent form.
- The responses were transcribed into digital form and cross-checked for accuracy.
- Through SPSS, descriptive statistics were used to analyze the demographic data. The relationship between the variables in the ASPS and the AASP were examined using correlational analysis.

Results:
• Analyses focused on the relationship between 11 ASPS sensory responsiveness factors (over-responsiveness to vestibular input, auditory input, visual input, social touch, and touch involving textures; proprioceptive and auditory seeking; overall under-responsiveness and under-responsiveness to proprioceptive-vestibular input and tactile input; intolerance to movement) and four AASP responsiveness quadrants (i.e. low registration, sensory seeking, sensory sensitivity, sensory avoiding).
• A comparison of questions relating to specific sensory systems (tactile, vestibular, auditory, visual, proprioceptive, taste/smell) was also completed.

Discussion:

Implications for Quadrant/Factor Results
• Moderate to strong correlations between most factors in the ASPS and quadrants in the AASP indicate the presence of concurrent validity between the two assessments.

Implications for Sensory Modality Results
• When comparing the assessment questions as they relate to specific sensory systems, the differences between the two became apparent.
• The ASPS was designed to look at the individual senses, whereas the AASP is more focused on overall response patterns.

Limitations
• Smaller than anticipated sample size due to time constraints
• Sample did not match the general population in terms of gender distribution, education levels, or working status.

Future Research
• Further studies comparing the ASPS to other assessments
• Examination of the ASPS as it relates to specific diagnoses
• Further examination of the data collected, such as potential differences in male and female responses, age groups, and analyzing data relating only to the questions/factors found in the final, published version of the ASPS.

Conclusion
These results support the use of the ASPS in the field of occupational therapy and could have many exciting implications. The ASPS may be used as an instrument for examining the relationship between the diverse modes of processing within specific sensory systems and the occupational choices of adults with disabilities.

References:
Ayres, A. J. (2005). The nervous system within: Understanding how the brain works and


