Sleep Quality and Sensory Processing in U.S. Community-Dwelling Older Adults

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Sleep deprivation is prevalent in older adults and places them at risk for falls, cognitive deficits, and difficulties with social or occupational engagement. Although past studies demonstrated relationships between sensory processing patterns and poor sleep quality in children and adults, little is known in older adults. This study used a survey design to examine the relationships in U.S. community-dwelling adults 60 years and older. The Pittsburgh Sleep Quality Index and the Adult Sensory Processing Scale (ASPS) were used to collect data from 106 respondents. The ASPS, composed of 11 factors, was developed based on sensory domains and the following processing patterns: over-responsive, under-responsive and seeking. Results showed that over-responsive to auditory and vestibular inputs as well as under-responsive to proprioceptive-vestibular inputs significantly correlated with poor quality of sleep. Interestingly, older adults who are auditory and proprioceptive seekers may not experience negative impacts on sleep quality. When compared to adult norms for ages 18-64, older adults have significantly higher scores in all sensory factors, except for proprioceptive seeking. Results suggest that norms for sensory processing in older adults need to be developed, and there may be sensory preference changes in older adults. As such, it is important for therapists to address the sensory needs of clients during sleep consultations for community-dwelling older adults, particularly in auditory processing and proprioceptive-vestibular inputs that affect postural-motor abilities. Further research is needed to explore interaction effects of culture, environment, and biological aging processes on the relationships of sensory processing preferences and quality of sleep.