

# Influence of Sensory Processing Patterns on Stress and Sleep Among Parents of Children With Autism

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**BACKGROUND:** Previous study suggests that parents who have children with ASD are more likely to have sensory processing issues than parents of typically developing children (Donaldson et al., 2017). Moreover, parents of children with autism spectrum disorder (ASD) experience high levels of stress and poor sleep quality which contributes to decreased occupational participation and family functioning (Martin et al., 2019). However, it is unclear how sensory processing difficulties influence stress levels and sleep dysfunction in these parents. The purpose of this study are to: 1) investigate sensory processing patterns among parents of children with ASD compared to the norms; 2) test the relationships of sensory processing patterns with perceived stress levels and sleep quality.

**METHOD:** Survey study design was used. Parents of children diagnosed with autism spectrum disorder aged 3-12 were eligible to participate. Three standardized assessments were uploaded to Qualtrics for data collection, which include: the 49-item Adult Sensory Processing Scale (Blanche et al., 2014), 10-item Perceived Stress Scale (Cohen, 1983) and Pittsburgh Sleep Quality Index (Buysse, 1989) in addition to a short demographic survey. It took about 15-20 minutes to complete.

**RESULTS:** There were 157 parents who completed all three surveys. Of those, 86.6% were female (n = 136) and 88.5% (N = 139) were married. Majority of them completed at least a college degree (78.3%, n = 123). Only 8.3% (n = 13) were aware of having sensory processing issues. Twenty families (13%) have more than one child diagnosed with ASD and 32 of these parents (20%) have mental illness with the highest percentage with depression (12%) followed by anxiety (10%). For ASPS total sensory processing scores, compared to males, females had significantly higher scores (p < .01) and marginally significant higher perceived stress (p = 0.7). Out of 11 sensory processing factors, eight factors were significantly higher than the population means. Sensory processing is significantly correlated with parental perceived stress (r = 0.37; p < .001) and sleep (r = 0.32; p < .001).

**DISCUSSION:** This study shows that there is a high percentage of parents of children with ASD who have sensory processing difficulties, which has a significant impact on their perceived stress and sleep quality. Parents play a pivotal role in supporting their children's development and family's quality of life. It is imperative to evaluate parents' sensory processing and incorporate their sensory needs when possible to yield successful family outcomes.

## References

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