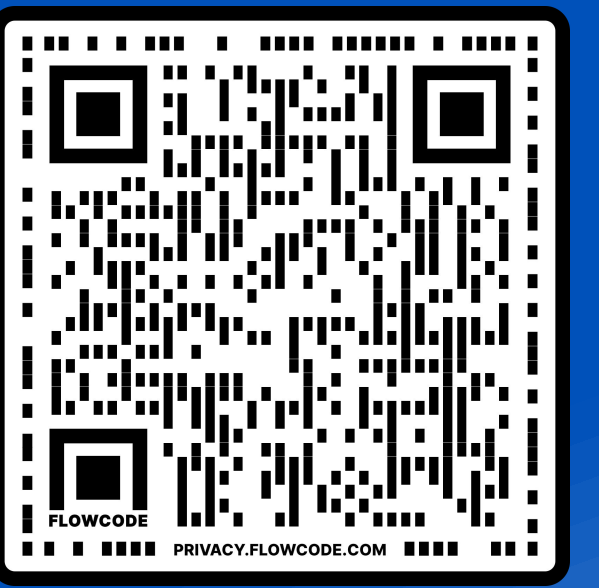


# Effectiveness of Sensory Integration on School-Aged Children with ADHD

Lauren Cunfer, SPT, Maryssa Hodder, SPT, Saige Miller, SPT,  
Maureen Rinehimer, PT, PhD, MS, MHS



## INTRODUCTION

- Attention Deficit Hyperactivity Disorder (ADHD) is a common mental disorder that poses significant effects on an individual's ability to effectively carry out daily functions; characteristics include hyperactive, inattentive, and impulsive behaviors (Dogru; Kadam).
- ADHD is associated with sensory processing disorder, which is an inability to process sensory information.
- Our purpose is to explore the effectiveness of sensory integration therapy in managing ADHD symptoms in school aged children.



## METHODS

- Three searches of literature was conducted during September of 2022 and January of 2023.
- Databases used: EBSCO Host, Academic Search Ultimate, and National Library of Medicine.
- Search terms: “children or kids or youth, ADHD or attention deficit hyperactivity disorder or attention deficit-hyperactivity disorder, children with ADHD, and sensory integration or sensory modulation or sensory integration therapy or sensory based intervention”
- The total articles found were forty-two.

## RESULTS

- Ten articles were included in this study.
- An analysis using the Hierarchy of Evidence Scale identified two articles as level 2 and 8 as level three.

## INTERVENTIONS FOUND TO BENEFIT CHILDREN WITH ADHD

Senses	Interventions
Tactile <sup>1,6</sup>	Brushes, bean containers, varied fabrics, shaving cream, ball pool, balance stones, climbing wall, cushions, balls of different size and shape, hand and mouth fidget toys, taste labs, outdoor play
Visual <sup>5,6,7,8</sup>	Computerized game programs, lighting and visual stimulation, outdoor play
Olfactory <sup>6</sup>	Taste labs, outdoor play
Taste <sup>8</sup>	Taste labs
Auditory <sup>5,6,7,8</sup>	Music and white noise stimulation, computerized game programs, outdoor play
Proprioception <sup>1</sup>	Heavy suit or weighted vest, exercise ball, vests with pockets, tunnel, climbing wall, bicycles.
Vestibular <sup>1,5,6,7</sup>	Trampoline, ramps, balance boards, swing, hammock, climbing wall, ball pool, balance stones, computerized game programs

## CONCLUSION

- Sensory integration therapy provides interventions that target the following senses: tactile, visual, olfactory, taste, auditory, proprioception, and vestibular.
- Research supported that sensory integration therapy helps improve sensory integration, motor control, and executive function, which may lead to improved behaviors, academic achievement, and social development.
- **Sensory integration interventions in physical therapy treatment sessions in children with ADHD are beneficial.**