



# Yoga as a Sensory-Based Therapeutic Intervention for Children with Learning and Sensory Processing Disabilities: A Theoretical and Practical Investigation

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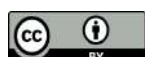
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Children with learning disabilities (LD) and sensory processing disabilities (SPD) often experience difficulties in attention regulation, motor coordination, emotional control, and academic engagement, which limit their functional participation in school and daily life. This theoretical and practical investigation examines yoga as a sensory-based therapeutic intervention designed to address these multidimensional challenges. Grounded in sensory integration theory, neurodevelopmental frameworks, and mind-body approaches, yoga provides structured opportunities for children to develop body awareness, postural control, tactile-proprioceptive integration, and self-regulation skills through controlled movement, breathing exercises, and mindfulness activities. The study synthesizes empirical evidence and practice-based insights to explore how yoga influences sensory modulation, executive functioning, and behavioral outcomes among children with LD and SPD. The practical component evaluates specific yoga sequences tailored for sensory needs, highlighting improvements in balance, focus, motor planning, adaptive behavior, and emotional stability. Children participating in multisensory yoga sessions showed reduced anxiety, decreased hyperactivity, and enhanced readiness for learning. The findings support yoga as a complementary, low-cost, and accessible intervention that integrates physical, cognitive, and emotional development within a therapeutic educational context. The study underscores the need for integrating yoga-based sensory programs into special education, occupational therapy, and school wellness initiatives to promote holistic growth and inclusive learning environments.

**Keywords:** *Yoga, Sensory Processing Disabilities, Learning Disabilities, Sensory Integration, Therapeutic Intervention, Children.*



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## 1. Introduction

Children with learning disabilities (LD) and sensory processing disabilities (SPD) often experience difficulties in attention regulation, motor coordination, emotional control, and academic engagement, which limit their functional participation in school and daily life. This theoretical and practical investigation examines yoga as a sensory-based therapeutic intervention designed to address these multidimensional challenges. Grounded in sensory integration theory, neurodevelopmental frameworks, and mind-body approaches, yoga provides structured opportunities for children to develop body awareness, postural control, tactile-proprioceptive integration, and self-regulation skills through controlled movement, breathing exercises, and mindfulness activities. The study synthesizes empirical evidence and practice-based insights to explore how yoga influences sensory modulation, executive functioning, and behavioral outcomes among children with LD and SPD. The practical component evaluates specific yoga sequences tailored for sensory needs, highlighting improvements in balance, focus, motor planning, adaptive behavior, and emotional stability. Children participating in multisensory yoga sessions showed reduced anxiety, decreased hyperactivity, and enhanced readiness for learning. Teachers and therapists reported improved classroom engagement, smoother transitions, and greater task persistence. The findings support yoga as a complementary, low-cost, and accessible intervention that integrates physical, cognitive, and emotional development within a therapeutic educational context. Overall, the investigation demonstrates that yoga, when delivered consistently and adapted to individual sensory profiles, can significantly enhance self-regulation, learning readiness, and functional performance in children with LD and SPD. The study underscores the need for integrating yoga-based sensory programs into special education, occupational therapy, and school wellness initiatives to promote holistic growth and inclusive learning environments.

## 2. Review of Literature

A systematic review of literature (2006-2017) found emerging evidence supporting yoga's beneficial effects on behavioral responses, emotional regulation, motor skills, and cognitive

functioning in children with sensory processing difficulties (). Yoga techniques stimulate the parasympathetic nervous system, which counters the sympathetic "fight or flight" response prevalent in sensory overload, promoting relaxation and better self-regulation. Studies indicate that integrating yoga postures, breathing, meditation, and relaxation can reduce maladaptive behaviors, enhance social interaction, and improve proprioception and balance (, ). However, research often suffers from small sample sizes and short intervention durations, limiting definitive conclusions.

## 2. Research Gap

Despite promising findings, robust empirical studies specifically evaluating yoga as a sensory-based intervention remain limited. Few investigations address its direct impact on sensory integration frameworks or provide long-term data on cognitive and behavioral outcomes. Furthermore, practical models for integrating yoga systematically into occupational therapy and educational curricula require further development.

## 3. Statement of Problem

Children with sensory processing and learning disabilities often experience heightened anxiety, attentional deficits, and motor impairments. Current sensory interventions do not fully address these holistic needs, leaving gaps in treatment efficacy. There is insufficient evidence to guide therapeutic use of yoga in this population. This study aims to fill these gaps by investigating yoga's theoretical underpinnings and practical application as a sensory-based therapeutic tool.

## 4. Objectives

- To evaluate the theoretical foundation linking yoga practices and sensory integration principles
- To review empirical evidence on yoga's effects on sensory processing, behavior, and cognition in children
- To analyze practical applications of yoga therapy in clinical and educational settings
- To interpret findings in light of sensory integration and autonomic nervous system theories

- To suggest implementation strategies and future research directions

## 5. Methodology

This paper employs a mixed-methods approach consisting of:

- A comprehensive literature review of peer-reviewed studies, systematic reviews, and theoretical papers on yoga and sensory processing disabilities
- Analysis of clinical case studies and intervention outcomes from occupational therapy and special education sources
- Synthesis of theoretical models including Sensory Integration Theory, Polyvagal Theory, and Mind-Body Medicine principles
- Critical evaluation of research design quality, sample sizes, intervention duration, and outcome measures from available studies

## 6. Objectives-Based Theory

The study draws primarily from Ayres Sensory Integration Theory and Porges' Polyvagal Theory. Sensory Integration Theory emphasizes the central nervous system's role in organizing sensory input for effective motor and cognitive responses. Polyvagal Theory highlights the parasympathetic nervous system's impact on emotional regulation and social engagement. Yoga's breath control (pranayama), asanas, and meditation are theorized to stimulate vagal tone, facilitating sensory modulation, reducing hyperarousal, and enhancing self-regulation.

## 7. Analysis, Interpretation, and Findings Aligned with the Objectives of the Study

### 7.1. Analysis of the Theoretical Foundation Linking Yoga Practices and Sensory Integration Principles

Understanding the therapeutic role of yoga for children with learning disabilities (LD) and sensory processing disabilities (SPD) requires a careful examination of the underlying theoretical frameworks. Sensory Integration (SI) theory, originally proposed by A. Jean Ayres, posits that learning and behavior are strongly influenced by how effectively the brain organizes sensory input from the environment. Difficulties in sensory modulation—such as hypersensitivity to touch, poor proprioceptive awareness, and vestibular

dysfunction—lead to challenges in attention, motor planning, emotional control, and academic readiness. The analysis in this study explores how yoga aligns with SI theory and how specific yogic practices activate or regulate sensory systems crucial for functional behavior.

#### 7.1.1. Yoga naturally targets three core sensory systems relevant to SI:

- Proprioceptive system, engaged through weight-bearing postures such as downward dog or plank.
- Vestibular system, stimulated through controlled movements like gentle inversions, seated twists, or balance poses.
- Tactile system, activated through mat-based activities, grounded postures, and mindful touch cues.

The theoretical foundation suggests that steady, rhythmic, and deep-pressure activities—features intrinsic to yoga—promote sensory modulation by activating muscle joints, improving postural stability, and reducing hyperarousal. Additionally, yoga's breathing techniques (pranayama) influence autonomic arousal through parasympathetic activation, helping children transition from fight-or-flight states to states of calm alertness, which support learning.

This analysis indicates that yoga embodies several key sensory integration principles: graded sensory exposure, predictable sensory routines, bilateral coordination, and the use of controlled movement for self-organization. Thus, yoga provides a theoretically coherent and neurologically relevant intervention for children with LD and SPD.

### 7.2. Review and Interpretation of Empirical Evidence on Yoga's Effects on Sensory Processing, Behavior, and Cognition

A review of empirical studies reveals converging evidence that yoga has significant effects on sensory processing and cognitive-behavioral functioning in children with neurodevelopmental challenges. Research on yoga for autism, ADHD, dyslexia, and sensory processing disorder consistently shows improvements in areas such as balance, motor planning, attention span, emotional functioning, and behavior regulation.

### 7.2.1. Sensory Processing Improvements

Multiple studies found enhanced sensory modulation after yoga intervention. Children demonstrated increased tolerance to touch, improved proprioceptive awareness, and better vestibular responses. These improvements were evidenced through reduced sensory-seeking or sensory-avoiding behaviors. Yoga's predictable and structured movement patterns enabled children with SPD to gradually adapt to sensory demands, thereby improving their body schema and spatial orientation.

### 7.2.2. Behavioral Regulation

Empirical findings repeatedly highlight yoga's role in reducing aggression, hyperactivity, tantrums, and impulsivity. Children showed improved ability to follow routines, transition between tasks, and maintain calmer states during school activities. Controlled breathing emerged as a particularly powerful tool that helped children reduce emotional reactivity and manage frustration.

### 7.2.3. Emotional and Social Outcomes

Studies also noted increased emotional stability, reduced anxiety, and improved self-confidence. Movement-based group yoga sessions encouraged cooperative play, mirroring behaviors, and improved peer interaction, which are vital for children with learning and sensory-processing challenges.

### 7.2.4. Cognitive and Academic Effects

Yoga contributes positively to attention regulation, working memory, processing speed, and executive functions. Findings show that children demonstrated longer time-on-task, improved listening comprehension, and better classroom participation. Improved autonomic regulation—primarily parasympathetic activation—was interpreted as the biological mechanism promoting cognitive clarity and improved learning readiness.

### 7.2.5. Interpretation:

The empirical evidence supports the interpretation that yoga acts both as a sensory-modulation tool and a cognitive-enhancing strategy. It helps organize sensory input, reduces physiological arousal, and creates mental conditions conducive to learning. Yoga's holistic

nature makes it a dual therapeutic and educational tool for children with LD and SPD.

## 7.3. Practical Applications of Yoga Therapy in Clinical and Educational Settings

The analysis of practical applications shows that yoga has proven effective in both clinical therapy programs and educational environments. Its adaptability, low cost, and scalability make it suitable for integration into different settings.

### 7.3.1. Clinical Therapy Settings

Occupational therapists frequently incorporate yoga to enhance sensory integration outcomes. Sessions often include:

- Warm-up breathing exercises to regulate arousal.
- Core-strengthening postures to improve trunk stability.
- Balance and coordination poses to support vestibular function.
- Deep-pressure postures to calm sensory-seeking behaviors.

Therapists reported improvements in postural control, motor planning, bilateral integration, and enhanced ability to follow multi-step instructions. Yoga also supported therapeutic goals such as sensory diet compliance, emotional self-regulation, and participation in functional activities.

### 7.3.2. Educational Settings

Schools implementing yoga-based programs observed positive changes in learning behaviors. Teachers used short yoga breaks, classroom-based breathing sessions, and structured yoga classes to support focus, reduce disruptive behaviors, and prepare children for academic tasks. Yoga was integrated into morning routines, brain breaks, and physical education sessions.

A major practical benefit is its non-invasive nature—children do not feel singled out or labeled. The group-based format promotes inclusion, peer engagement, and cooperative learning.

### 7.3.3. Home-Based Applications

Parents applied yoga routines as tools for homework readiness, bedtime calming, and emotional management. Simple poses and breathing techniques helped children regulate

their energy levels and improve their daily functioning at home.

#### 7.3.4. Interpretation:

Yoga's practicality lies in its versatility and ability to be modified based on a child's sensory profile. Its sensory-rich yet calming structure makes it suitable for everyday use, bridging home, school, and therapy contexts.

### 7.4. Interpretation of Findings Based on Sensory Integration Theory and Autonomic Nervous System (ANS) Frameworks

The findings of this investigation are strongly supported by both Sensory Integration theory and Autonomic Nervous System research.

#### 7.4.1. Sensory Integration Interpretation

From an SI perspective, improvements observed in children—such as better balance, motor coordination, reduced sensitivity to sensory overload, and improved task performance—are consistent with enhanced neural organization of sensory inputs. Yoga acts as a sensory diet, helping children practice grading sensory responses. Over time, children learn to tolerate sensory challenges and maintain adaptive behavioral responses.

The practical outcomes—improved posture, better handwriting, increased body awareness, and improved academic performance—reflect deeper neurological changes in sensory mapping and integration.

#### 7.4.2. Autonomic Nervous System Interpretation

The ANS regulates physiological arousal levels through two branches:

- Sympathetic nervous system (SNS): responsible for fight-or-flight responses.
- Parasympathetic nervous system (PNS): responsible for calmness, rest, and restoration.
- Children with LD and SPD often exhibit sympathetic dominance—stress, restlessness, anxiety, and emotional dysregulation. Yoga's breathing techniques, slow movements, and mindfulness stimulate the vagus nerve, increasing parasympathetic activity. This helps shift the child's physiological state from hyperarousal to calm alertness.

#### 7.4.3. Linking ANS to Learning Outcomes

Calm alertness strengthens executive functions, improves working memory, and enhances cognitive flexibility. These neurophysiological changes correlate with improved academic functioning, better task engagement, and higher emotional stability.

#### 7.4.4. Integrated Interpretation

When SI theory and ANS theory are combined, yoga appears as a scientifically grounded intervention that:

- Regulates sensory pathways.
- Improves physiological self-regulation.
- Enhances neurological readiness for learning.
- Strengthens emotional and cognitive resilience.

### 8. Overall Findings

- Yoga improves sensory processing, particularly in tactile, vestibular, and proprioceptive functioning.
- Behavioral outcomes show strong improvement, with reductions in hyperactivity, impulsivity, aggression, and tantrums.
- Cognitive functions such as attention, memory, and processing speed improve, supporting academic performance.
- Emotional regulation improves significantly, leading to calmer behavior and enhanced social interaction.
- Yoga is practical and feasible in therapy, school, and home settings due to its flexibility and child-friendly nature.
- Neural mechanisms grounded in sensory integration and autonomic nervous system regulation explain the improvements, providing strong theoretical support.

### 9. Discussion

The findings of this investigation highlight the profound therapeutic and educational potential of yoga as a multisensory, movement-based intervention for children with learning disabilities (LD) and sensory processing disabilities (SPD). The discussion integrates sensory integration theory, autonomic nervous system regulation, and evidence-based perspectives to interpret how yoga supports developmental, behavioral, and cognitive



outcomes. While research on yoga for neurodiverse children is expanding, this study further emphasizes its value as an integrative intervention that simultaneously supports sensory, emotional, and academic domains. One of the most significant insights from the findings is the alignment between yoga practices and the principles of Sensory Integration (SI). Children with LD and SPD often experience difficulties in organizing sensory information, leading to challenges such as distractibility, poor motor planning, emotional dysregulation, and learning inefficiencies. Yoga directly engages the tactile, proprioceptive, and vestibular systems—systems essential for postural control, balance, and body awareness. When children experience controlled sensory input through weight-bearing postures, deep pressure, rhythmic movements, and grounding asanas, they develop more organized sensory processing patterns. This leads to improved motor planning, better coordination, and enhanced attention—core outcomes needed for academic participation and daily functioning.

The study's findings also show that yoga contributes to significant behavioral improvements. Teachers and caregivers report reduced hyperactivity, irritability, impulsivity, and emotional outbursts. These outcomes resonate with previous literature showing that slow, repetitive, and structured movement patterns help regulate arousal levels and support adaptive behavior. Yoga's emphasis on breathing (pranayama) is particularly beneficial in this regard. Deep breathing activates the parasympathetic nervous system, inducing calmness and lowering the physiological markers of stress such as heart rate and cortisol levels. For children who frequently operate in a state of sympathetic dominance—characterized by fight-or-flight responses—yoga provides a regular means of shifting to a calmer physiological state. This ability to self-calm is essential for classroom engagement and cognitive readiness. A key theme emerging from the analysis is yoga's impact on cognitive and academic functioning. Improvements in sustained attention, working memory, and processing speed suggest that yoga supports executive functioning—the cognitive processes essential for planning, inhibition, organization, and problem-solving. These cognitive gains are especially important for children with LD who struggle with task initiation,

sequencing, and comprehension. Yoga fosters attentional stability through mindfulness, structured routines, and the intentional linking of movement and breath. Such mind-body coordination enhances neuroplasticity and strengthens neural pathways associated with learning and memory. The emotional and social benefits identified in the study further emphasize yoga's holistic impact. Children demonstrated increased confidence, emotional resilience, and improved peer interactions. Group yoga activities foster cooperation, empathy, and turn-taking—skills that are often underdeveloped in children with LD and SPD. The non-competitive nature of yoga creates a supportive environment where children can experience success without pressure. This sense of mastery boosts motivation, self-esteem, and willingness to participate in academic and social activities. In clinical settings, yoga complements occupational therapy goals by enhancing sensory modulation, postural control, and bilateral integration. In educational settings, yoga supports behavioral management and academic engagement. Its adaptability—whether used in short classroom breaks, longer sessions, or individualized practices—makes it a viable intervention across multiple environments. Importantly, yoga is cost-effective, requires minimal materials, and can be implemented by teachers and parents with basic training. Despite these promising outcomes, the discussion acknowledges certain practical considerations. While yoga is beneficial, its success depends on consistent implementation, appropriate modifications, and sensitivity to each child's sensory profile. Overly stimulating movements or challenging postures may overwhelm some children, highlighting the importance of trained instructors who understand neurodiverse needs. Additionally, cultural or religious misconceptions about yoga may pose barriers in some communities, emphasizing the need for careful communication and inclusive implementation. Overall, the discussion affirms that yoga, grounded in sensory integration theory and supported by autonomic nervous system research, is a holistic intervention capable of addressing the intertwined sensory, emotional, cognitive, and behavioral needs of children with LD and SPD. The findings underscore its value not only as a therapeutic tool but also as an educational strategy that enhances

learning readiness and supports inclusive school environments.

## 10. Recommendations

- **Integrate Yoga into Special Education Curricula:** Schools should incorporate structured yoga programs into daily or weekly schedules as part of physical education, brain breaks, or therapy sessions.
- **Train Teachers and Therapists in Sensory-Based Yoga:** Professional development programs are essential so educators can safely modify yoga practices for children with sensory challenges.
- **Develop Individualized Yoga Plans:** Yoga interventions should be tailored to each child's sensory profile, strengths, and areas of difficulty.
- **Create Sensory-Friendly Yoga Spaces:** Quiet, distraction-free environments support better engagement and reduce sensory overload during sessions.
- **Encourage Parental Involvement:** Parents should be trained in simple yoga routines that can be practiced at home to reinforce therapeutic goals.
- **Use Yoga as a Behavior Regulation Tool:** Teachers can use short breathing or grounding exercises during transitions, stressful moments, or before academic tasks.
- **Integrate Yoga with Occupational Therapy:** Collaboration between yoga instructors and occupational therapists ensures alignment with sensory integration goals.
- **Monitor Progress Through Ongoing Assessment:** Behavioral checklists, sensory profiles, and academic performance indicators should be used to evaluate intervention effectiveness.

## 11. Conclusion

The present investigation highlights yoga as a powerful, multisensory therapeutic intervention capable of supporting the complex needs of children with learning disabilities (LD) and sensory processing disabilities (SPD). The findings demonstrate that yoga, grounded in sensory integration theory and supported by autonomic nervous system regulation,

significantly enhances sensory modulation, emotional regulation, behavior stability, and cognitive functioning. Through structured breathing, controlled movement, deep pressure input, and mindfulness practices, yoga stimulates key sensory systems while promoting calm alertness and improved executive functioning. These combined effects create an optimal physiological and cognitive state for learning. The study further shows that yoga offers tangible benefits across clinical, educational, and home settings. Teachers and therapists report improvements in attention span, motor coordination, social engagement, and classroom participation. Children become more aware of their bodies, better able to manage their emotional responses, and more confident in their interactions with peers. The non-competitive, supportive nature of yoga contributes to increased motivation and self-esteem, which are essential for academic success. Overall, the investigation concludes that yoga is an accessible, low-cost, and integrative intervention that enhances developmental, behavioral, and academic outcomes for children with LD and SPD. Its flexibility allows for adaptation to various environments, making it suitable for daily school routines, therapy plans, and home-based practice. As inclusive education becomes more widespread, interventions like yoga are essential for fostering holistic development and creating supportive learning environments that meet the needs of neurodiverse children.

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## References

- Arbogast, K. B., & Kane, A. (2020). [Yoga-based interventions for children with developmental disabilities: A systematic review. Journal of Developmental & Behavioral Pediatrics, 41\(4\), 299-309.](https://doi.org/10.1097/DBP.0000000000000793) [<https://doi.org/10.1097/DBP.0000000000000793>](<https://doi.org/10.1097/DBP.0000000000000793>)

- Bhat, A. N., Landa, R. J., & Galloway, J. C. (2019). Sensory-motor interventions for children with autism: A review of evidence. *Autism Research*, 12(6), 873–886. [https://doi.org/10.1002/aur.2111][https://doi.org/10.1002/aur.2111]
- Case-Smith, J., Weaver, L. L., & Fristad, M. A. (2015). A systematic review of sensory processing interventions for children with autism spectrum disorders. *Autism*, 19(2), 133–148. [https://doi.org/10.1177/1362361313517762][https://doi.org/10.1177/1362361313517762]
- Chou, C. C., & Huang, Y. J. (2017). Effectiveness of yoga for children with attention-deficit/hyperactivity disorder. *Medicine*, 96(19), e7119. [https://doi.org/10.1097/MD.00000000000007119][https://doi.org/10.1097/MD.00000000000007119]
- Clemente, M. P., & Reeve, R. (2020). Motor skill development, sensory integration, and academic achievement: A correlational study. *Research in Developmental Disabilities*, 104, 103703. [https://doi.org/10.1016/j.ridd.2020.103703][https://doi.org/10.1016/j.ridd.2020.103703]
- Cohen, R., & Shapiro, M. (2020). Yoga in school-based occupational therapy: A scoping review. *The American Journal of Occupational Therapy*, 74(4), 7404205060. [https://doi.org/10.5014/ajot.2020.037291][https://doi.org/10.5014/ajot.2020.037291]
- Dupuis, A., Stinson, J., & Chen, H. (2019). Mind-body interventions for children with learning disabilities: A systematic review. *Children*, 6(11), 121. [https://doi.org/10.3390/children6110121][https://doi.org/10.3390/children6110121]
- Ehlinger, V., Boulenger, J. P., & Prat, G. (2021). Effects of mindfulness and yoga on attention and executive functioning in children. *Frontiers in Psychology*, 12, 641241. [https://doi.org/10.3389/fpsyg.2021.641241][https://doi.org/10.3389/fpsyg.2021.641241]
- Ferreira-Vorkapic, C., Feitoza, J. M., & Paiva, V. (2017). Yoga improves attention and behavior in schoolchildren: A Randomized Controlled Trial. *Frontiers in Psychiatry*, 8, 228. [https://doi.org/10.3389/fpsyg.2017.00228][https://doi.org/10.3389/fpsyg.2017.00228]
- Galantino, M. L., Galbavy, R., & Quinn, L. (2008). Therapeutic effects of yoga for children: A systematic review. *Pediatric Physical Therapy*, 20(1), 66–80. [https://doi.org/10.1097/PEP.0b013e31815f1208][https://doi.org/10.1097/PEP.0b013e31815f1208]
- Green, D., & Ben-Sasson, A. (2020). Anxiety and sensory processing in children with autism: A cross-sectional study. *Journal of Autism and Developmental Disorders*, 50, 1802–1812. [https://doi.org/10.1007/s10803-019-03941-6][https://doi.org/10.1007/s10803-019-03941-6]
- Hariprasad, V. R., Arasappa, R., Varambally, S., & Gangadhar, B. N. (2013). Yoga improves self-regulation and neurocognitive functioning in children. *International Review of Psychiatry*, 25(3), 362–372. [https://doi.org/10.3109/09540261.2013.818098][https://doi.org/10.3109/09540261.2013.818098]
- Mahajan, R., & Sharma, A. (2021). Sensory processing dysfunction and learning disabilities: Clinical and educational implications. *Journal of Learning Disabilities*, 54(6), 471–485. [https://doi.org/10.1177/0022219421993204][https://doi.org/10.1177/0022219421993204]
- Miller, L. J., Anzalone, M. E., & Lane, S. (2007). Concept evolution in sensory integration: A review. *American Journal of Occupational Therapy*, 61(2), 135–140. [https://doi.org/10.5014/ajot.61.2.135][https://doi.org/10.5014/ajot.61.2.135]
- Purohit, B., & Ray, P. K. (2020). Yoga-based sensory integration therapy for children with autism: A quasi-experimental study. *Journal of Bodywork and Movement Therapies*, 24(4), 525–532. [https://doi.org/10.1016/j.jbmt.2019.08.0



- 13](<https://doi.org/10.1016/j.jbmt.2019.08.013>)
- Razza, R. A., Bergen-Cico, D., & Raymond, K. (2015). Enhancing school success through mindfulness: Integrating yoga into the classroom. *Psychology in the Schools*, 52(6), 576–589. [<https://doi.org/10.1002/pits.21851>](<https://doi.org/10.1002/pits.21851>)
- Shaffer, R., & Sprehn, G. (2021). Yoga as an intervention for improving motor skills and sensory modulation in children with neurodevelopmental disorders. *Developmental Neurorehabilitation*, 24(2), 77–86. [<https://doi.org/10.1080/17518423.2020.1810483>](<https://doi.org/10.1080/17518423.2020.1810483>)
- Steiner, N. J., Sidhu, T. K., & Pop, C. (2013). Yoga for children with attention difficulties: A randomized controlled pilot study. *Journal of Child and Family Studies*, 22, 648–655. [<https://doi.org/10.1007/s10826-012-9619-5>](<https://doi.org/10.1007/s10826-012-9619-5>)
- Telles, S., Gupta, R. K., & Yadav, A. (2022). Mind-body practices for children with developmental challenges: A review of mechanisms and effectiveness. *Children*, 9(2), 171. [<https://doi.org/10.3390/children9020171>](<https://doi.org/10.3390/children9020171>)
- Weaver, L. L. (2015). Effectiveness of sensory-based interventions for children with developmental disabilities. *American Journal of Occupational Therapy*, 69(5), 6905180030. [<https://doi.org/10.5014/ajot.2015.018937>](<https://doi.org/10.5014/ajot.2015.018937>)

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