Integrated Yoga Therapy for Children with Special Needs

By Yana Kofman

The physical effects of yoga therapy (YT) practice are widely known. Its holistic approach helps develop physical strength, increase flexibility and balance, and shift the mind into a meditative state. In its truest sense, yoga is about finding out who you are and finding your own voice. Application of these basic YT concepts is crucial when dealing with children with special needs within the context of knowing that these clients may have highly variable diagnoses as well as difficulties with concentration and postural control, including static and dynamic balancing. Such limitations present a challenge for research, documentation, and integration of the traditional components of a yoga session for the pediatric special-needs population. Practitioners must establish a framework for the whole student—and the family—to optimize outcomes.[1] Those who choose to work with the pediatric special-needs population require extensive training in understanding child psychology, motor patterns, reflex integration, and more.

Why Pediatric Yoga Therapy

Yoga therapists can successfully help their pediatric clients not only to discover the joy of movement, but to connect with their own feelings, gain a greater understanding of their body in space, and recognize with self-awareness how their emotions and feelings connect and impact their functional outcomes. The role of the therapist is to create a skilled and safe yoga practice. The yoga session develops an intrinsic motivation within the student and pushes each one to create a personal journey toward an independent lifestyle. The connection between the yoga postures and developmental milestones is critical for optimal success and outcomes of children with special needs.[2] The therapist first evaluates the milestones and assesses gaps in the development of the child. Children with special needs often use compensatory strategies with movement patterns. Structural and alignment work is critical to re-patterning the brain and promoting typical motor-pattern development. The therapist's responsibility is to continually assess, analyze, and identify weak and misaligned structures in the body and link practices to functional movement. The premise is to guide the child manually and mindfully yet allow the child to feel that they are performing the movements on their own. Thus, the child gains confidence and a "can-do" attitude, which in turn builds self-esteem and feeds the emotional soul.

Yana Kofman with a young client.

Components of the Session

Alignment. To help the body tune in, the child can benefit from external manual adjustments that promote/deepen the relaxation and enhance the physical outcomes. Jean-Pierre Barral, DO, and author of *Understanding the Messages of Your Body*, explains, "The brain is the conductor in our great concert of emotions."[3] A practitioner uses gentle manual techniques starting with non-weight-bearing postures such as supine and prone. Restorative yoga modalities can be performed on a yoga mat or massage table.

Breathing. Practicing pranayama is a cornerstone of traditional yoga practice where the nourishment or energy aids bodily functions. We can view the practice of yoga as an ongoing relationship between the asanas and controlled breathing in which the child learns intrinsic balance and about the forces of gravity.[4] Many children with special needs are mouth-breathers and as a result struggle with a basic ability to produce a controlled, purposeful exhalation. In more typical development, children learn to clear their sinuses as young as age two. Children with special needs may present with an inverse breathing pattern where instead of forced exhalation during *kapalabhati* breathing, the child exhales passively. Yoga breath practice strengthens a child's lungs, which we can expect to promote relaxation and a sense of well-being.

Gross-motor Readiness. YT has been shown to enhance the acquisition of age-appropriate gross motor skills and to guide children to find their own inner peace and serenity.[1] Many students are not ready or

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do not have the attention to follow motor patterns. A therapeutic yoga teacher must identify whether the reasons are behavioral or motor in nature. In the former, a developmental approach of engaging and bonding with the student must be introduced and practiced so that bonding between the student and the teacher can occur. Children with developmental challenges often have a history of delayed acquisition of motor skills, making it difficult to run smoothly, write, manage stairs, pedal a bicycle, catch a ball, climb monkey bars, pump themselves on a swing, and so on. They may present with clumsiness, awkward movement patterns, rigid gait, poor posture, and visual-motor coordination deficits. Negative body image and sense of self are also often present and affect overall performance in social settings such as the classroom and organized sports.

Parasympathetic Activation. Gentle breath-oriented yoga and slow diaphragmatic breathing activate the parasympathetic nervous system (PNS), otherwise known as the rest-and-digest mechanisms of the body. PNS activation reduces blood pressure and slows the heart and breathing rates after stressful situations. A yoga practice encourages the student to pay attention to the sensations of his or her body and the reactions to such sensations. These breathing techniques regulate the shift between periods of high stress and calm peaceful states. Students who practice yoga learn to be aware of and respond effectively to stress-inducing thoughts and movements of the body in space.

Many students with special needs present with poor muscle tone, often involving reduced muscle strength. This pattern is seen in children with hypotonia, cerebral palsy, developmental coordination disorder, sensory processing disorder, and many other diagnoses. Hypotonia is a common diagnosis among children with poor muscle tone. Additionally, children with hypotonia present with sensory dysfunction and general muscle weakness, limited or excessive range of motion, isolation of eye movements, and poor head control in anti-gravity positions. Children with this diagnosis struggle with staying on task for the long periods required for academic learning. Initially, the practitioner establishes trust between the teacher and the student and the foundation for socio-emotional security.

> The connection between the yoga postures and developmental milestones is critical for optimal success and outcomes of children with special needs.

The yoga therapist focuses on gentle stretching, body alignment, assisted pose practice, and bilateral integration and coordination improvement. It is imperative that the student is initially guided in a more passive and less demanding manner. The therapist introduces proper breathing techniques and encourages positions where the student learns the correct diaphragmatic breathing qualities. The yoga session then focuses on eye-strengthening exercises in supine and seated postures where the demand on the body is minimal.[5] The focus is on improvement in dynamic standing and sitting balance, and enhanced ability to transition from posture to posture via controlled and purposeful fluidity. Yoga sessions include positional changes in supine and seated postures that focus on hand-to-foot spatial orientation as well as on bringing the upper and lower limbs to the midline. The yoga therapist needs to continuously challenge the student to work on developmental patterns such as supine, prone, quadruped and tripod positions; oblique sitting; and kneeling and half-kneeling.

As the student gets stronger and more attentive, developmental patterns, such as squatting, improve. For example, squatting using the yoga block has been instrumental in developing lower abdominal strength and hip control. Over time, students develop an increased tolerance to positional changes with gravity assist, which in turn improves overall aerobic endurance.[6]

Conclusion

Yoga therapy is a wonderful way to develop the connection between spatial awareness of oneself in relation to the environment and to other objects. It helps a child experience and trust their instincts, develop love for themselves, and cultivate spirit while building a stronger, more flexible body and a balanced mind. Children also significantly improve nostril breathing and—as a result of improved breath control and increased duration of the exhalation—their conversation skills. Yoga therapy for this population also focuses on strengthening the emotional intelligence and connecting and establishing trust and love. Application of structural work on the yoga mat through continual asana practice develops direct skill acquisition such as independent ambulation, fluid movement, and daily life and general motor skills. The use of YT has proved its importance in the pediatric population. Students over time develop an innate desire to achieve functional goals with the therapist as a guiding influence. YTT

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