

YOGA FOR YOUNG CHILDREN WITH DOWN SYNDROME

AMANDA J. YOUNG
Texas Woman's University

LISA SILLIMAN-FRENCH
Texas Woman's University

LINDY CRAWFORD
Texas Christian University

Abstract

The purpose of this paper is to describe benefits of yoga and to provide practitioners multiple ways to implement yoga into classroom settings and home environments for young children with Down syndrome (DS). Yoga can be introduced into many settings to enhance motor development as a physical activity warm up or cool down, a behavior management technique, and/or an innovative way to get children with DS moving. There are various techniques to integrate yoga into adapted physical education classes, early intervention or preschool classroom, as well as home-based settings. Fun activities to incorporate yoga include yoga stories and songs, picture cards, yoga with technology, playing yoga games, and involving families. Practical applications and multiple references help as a starting point for educators and care givers to introduce the practice of yoga for young children with DS.

Keywords: *Developmental disability, physical activity, physical education, gross motor development, early childhood*

Evidence-based practices are constantly evolving in the fields of special education and adapted physical education (Cook & Cook, 2013; Jin & Yun, 2010). Children with Down syndrome (DS) frequently demonstrate delays in motor development therefore warranting the continual need for additional practices promoting increased participation and meaningful engagement in physical activity (Hodge, Lieberman, & Murata, 2012; Jobling, 1994; Menear, 2007; Naznin, Kerns, Zhou, Kapur, & Shiffrar, 2006). The practice and integration of yoga may be used to engage children with DS to enhance motor development. A systematic review of 24 studies examined the efficacy of yoga for children without disabilities (Galantino, Galbavy, & Quinn, 2008). Based on the results of this review there were positive physiological benefits of yoga for young children, suggesting that these benefits might assist children in gross motor development (Galantino et al., 2008). Other possible benefits of yoga include lower stress and blood pressure, improved cardiovascular health, and increased positive

behavior (Drever, 2008; Telles, Singh, Bhardwaj, Kumar, & Balkrishna, 2013; White, 2009).

Despite the fact that a growing number of children with DS are participating in yoga (Feldman, 2005; Murray, & Ryan-Krause, 2010), and yoga is becoming more popular in school and community-based settings (Rogers, 2011; Toscano, & Clemente, 2008), published literature on how to implement yoga activities for children with DS is lacking. Yoga is the union of mind and body and therefore provides both physical and mental benefits not only for children with DS but all children. Yoga emphasizes individual performance rather than group competition, therefore making yoga an appropriate activity for all children and youth, including those with a disability such as DS (White, 2009). Yoga can facilitate concentration, balance, and self-control in children's daily lives (Sumar, 1998). In a school-based setting, yoga can provide children with DS an enjoyable, noncompetitive activity and can be adopted as a life-long physical activity (Drever, 2008). Therefore, the purpose of this paper is to describe specific benefits of yoga and to provide practitioners and/or caregivers multiple ways to implement yoga into classroom settings and home environments for young children with DS using cross-curricular learning.

Yoga Benefits

Over the past few years, many children with developmental disabilities, including those with DS, have participated in different exercise programs including yoga in school or community based settings (Fugler et al., 2015). Researchers have examined the use of yoga for children and are exploring the multiple benefits. Fugler et al. (2015) conducted a systematic review of literature related to the use of yoga for children with autism. Through this review, the researchers reported improvements in gross motor skills, balance, posture, eye contact, imitation skills, attention, time spent on task, sleep, play habits with peers, anxiety, and breathing, in addition to decreasing undesirable autistic tendencies. The same benefits may be actualized for children with other developmental delays including children with DS (Drever, 2008). As such, yoga activities may be included in Individualized Education Programs (IEPs) to

promote development in said areas. Further, yoga can easily be infused in many curriculum designed for preschoolers to incorporate crosscurricular learning.

Roopnarine and Johnson (2013) discussed the importance of curriculum learning in the early childhood setting, with an emphasis on inclusion, diversity, and multicultural awareness. Current curriculum trends include interdisciplinary teaching and/or cross-curriculum learning where similar topics are covered in a variety of classes and subjects (Alexander, Walsh, Jarman, & McClune, 2008). In addition to motor development, yoga can provide cross-curricular learning for young children with DS in a number of ways, including but not limited to speech development, cognition, and technology implementation, and music therapy (Lavay, French, & Henderson, 2016). If a class or group is learning about how plants grow, this same concept can be discussed in additional settings, such as physical education classes or physical activity classes by performing yoga movements that mimic the plant-growth sequence. If a class of students is learning about jungle animals in their class, a “yoga story” about exploring the jungle can be added to further learning. For example, teachers can lead students through different poses of things that live in the jungle (e.g., snake, lion, frog, tree) or teachers can use published yoga stories such as *Jungle Adventure* in Kirsten Hall’s *Yoga Kids: Keeping Busy Kids Fit and Relaxed* (2011). In this way, children with DS are able to generalize knowledge from one class/setting and make similar connections in another class or setting. Children can practice animal awareness, make animal sounds connecting to speech and language development and move their bodies like each animal for physical development. Visual support to emphasize these concepts can be provided through simple PowerPoint presentations, or through use of images saved to an iPad (see Figure 1). iPads can be used by individual children or facilitated by an adult in a small group setting. Visual supports are helpful supplementary tools for children with DS by providing additional support (Hodge et al., 2012). PowerPoint presentations also can be projected in classrooms, on computers, interactive white boards, or TVs, where appropriate.

Yoga can help children explore body movements, learn new skills, supplement classroom curriculum and improve gross motor function. Yoga can easily be implemented into any early childhood setting to provide fun, creative, and enjoyable activities for young children with DS.

Yoga in Adapted Physical Education

Warm-Ups

A typically structured adapted physical education (APE) or general physical education (GPE) class begins with some form of warm-up activity. These activities engage multiple muscle groups and prepare the student for physical activity (Walter, Quint, Fischer, & Kiger, 2011). Instead of a classic stretching routine, yoga can easily be used to facilitate a warm-up activity. A yoga warm-up could be a combination of poses that address stretching different body parts and muscles, including a “yoga story,” or a “yoga song.” An example of a simple combination of yoga poses for a warm-up might include (a) pretzel twist (easy seated + modified bharadvaja’s twist), (b) candle (hero), (c) squirrel (child’s pose), (d) cat, (e) dog (downwardfacing dog), (f) waterfall (standing forward bend + upward salute + backbend), (g) bird (diver), and (h) warrior. Picture cards such as *Yoga Kit for Kids* by Imaginazium (n.d.) can be used as visual aids to help children follow along (see Figure 2). Different yoga poses engage different parts of the body; therefore, warm-ups can be structured to reach different muscle groups appropriate for different classes. Another idea for a yoga warm-up could be reading a “yoga story” from books such as *Yoga Kids: Keeping Busy Kids Fit and Relaxed* by Hall (2011), or *Little Yoga: A Toddler’s Sleepy Book of Yoga* by Whitford (2007) [see Table 1]. It is important to note that some published materials have different names for child-friendly poses. For example, one pose may have different names according to different published stories; rock and mouse are both names used for child’s pose according to separate published materials. Teachers are advised to pick a style or version and remain consistent in yoga practice for young children with DS.

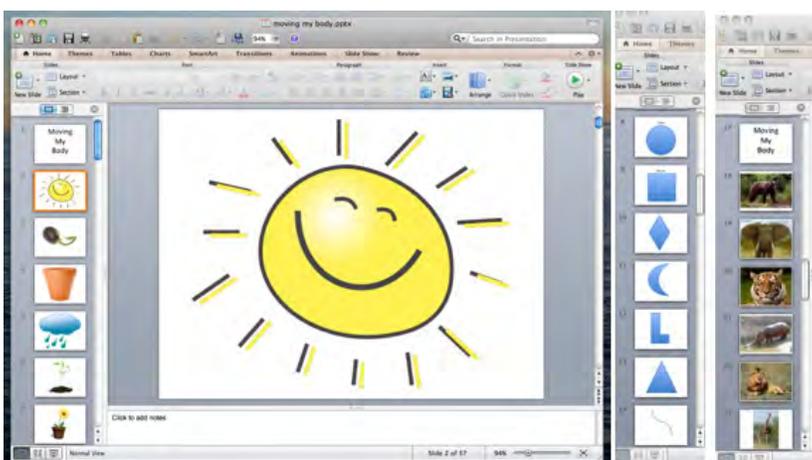


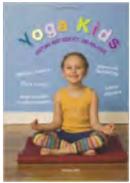
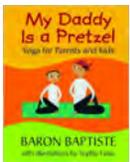
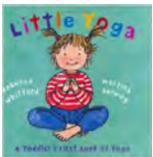
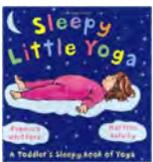
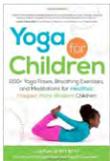
Figure 1. Sample PowerPoint presentation created to supplement class instruction and yoga poses.



Figure 2. Student looking at yoga picture cards.

Yoga can also be combined with locomotor skills for children who are mobile. An example of a locomotor warm-up with yoga could be a freeze type of song (i.e., *The Freeze*, by Greg & Steve, 1987), with a yoga pose inserted between each locomotor skill.

Table 1 (cont.)

Yoga Resources		
Title	Author (publication date)	Picture
Kids Books		
Yoga Kids: Keeping Busy Kids Fit and Relaxed	Kristen Hall (2011)	
My Daddy is a Pretzel	Baron Baptiste (2012)	
Little Yoga: A Toddler's Sleepy Book of Yoga	Rebecca Whitford (2005)	
Sleepy Little Yoga: A Toddler's Sleepy Book of Yoga	Rebecca Whitford (2007)	
Adult Resource Books		
Yoga for Children: 200+ Yoga Poses, Breathing Exercises, and Meditations for Healthier, Happier, More Resilient Children	Lisa Flynn (2013)	
Yoga for the Special Child	Sonia Sumar (2007)	
Yoga Therapy for Children with Autism and Special Needs	Louise Goldberg (2013)	

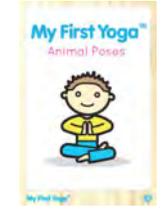
Picture/Activity Cards		
Yoga 4 Classrooms Activity Card Deck	Lisa Flynn (2011)	
Yoga Kids: Keeping Busy Kids Fit and Relaxed	Kristen Hall (2011)	
Yoga Kit for Kids	Imaginazium	
Body Poetry Yoga Cards	Roylko	
Applications		
My First Yoga – Animal Poses for Kids	Atom Group	
Super Stretch Yoga	The Adventures of Super Stretch, LLC	
Kids Yogaverse: I Am Sun, I Am Moon	Gramercy Consultants	
Kids Yogaverse: I Am Love	Gramercy Consultants	
Music		
Stretch and Yoga Music for Children (Music CD)	Christy Lane (2008)	
YogaKids Fitness Fun Tunes CD	Marsha Wenig	

Table 1 (cont.)

Come Play Yoga CD	Karma Kids Yoga Studio (2008)	
Musical Yoga Adventures	Linda Lara (2007)	
Musical Yoga Adventures: World Journey	Linda Lara (2011)	
Do-It-Yourself (DIY) Yoga Resources		
Pictures		
iPad		
Picture Cards		
Picture Books		

Cool-Downs

When engaging in physical activity, cool-downs are as equally important as warm-ups. Cool-downs guide the children in a gradual transition from higher intensity physical activity to a calming/resting state and a lowered heart rate (Costa, Medeiros, & Fukuda, 2011). Yoga can provide a fun and interactive way to provide children with DS with a cool-down after physical activity not only in PE, but also in the classroom, after recess or free play, and during activities at home. The yoga stories mentioned earlier end with a sleep/corpse/savasana pose with children lying on their backs in a state of rest. Transitioning through the poses aids in the gradual process of slowing down the children’s heart rates, concluding with the sleep pose.

Transitions. All students require some form of transition to aid in the movement between classes or class activities; yoga provides a perfect routine for young children with DS. Soft and relaxing music can be paired with yoga cool downs to help children signal a change. A combination of yoga and music can assist children in shifting focus from physical activity to a different activity, making daily transitions smooth and routine. It is amazing that, with practice, yoga can be used to get a class of 5- and 6-year-olds with DS laying on their back in silence, letting their body relax, and getting ready to go back to class (see Figure 3).



Figure 3. Students ending with the rest/sleep pose.

Behavior Management

A biophysical approach to behavior management is relaxation training. Relaxation training is used in schools and in homes when young children need to calm down. Stress and anxiety can often create problematic behaviors; therefore, relaxation training may be necessary to relieve such physical responses (Lavay et al., 2016). Yoga can be the perfect exercise for relaxation training. While some yoga activities involve moving from sitting to standing to balancing to laying on the floor, it is recommended that relaxation training yoga should remain on the ground or floor, whether the poses be seated or laying down. Specific yoga poses help the child to remain focused on breathing, stretching, and calming down and may consequently be used as a calming strategy in a behavior intervention plan. Teachers have had so much success with this practice of relaxation yoga, other teachers bring yoga into their classroom setting for quite time to help the children rest and restore their attention (Lavay et al., 2016).

Keeping students engaged. There are two key components when teaching young children with DS. The first is to have very high expectations for all students, and the second is to make learning fun (Lavay et al. 2016; see Figures 4 & 5). With these two important components, teachers can create a successful learning environment for their students. Teachers should set routines when doing yoga activities so the children know what to expect when coming to class. GPE/APE teachers can also provide the opportunities to students take leadership roles and make choices of different yoga stories or cards, or music options depending on the activity, and keep them engaged, giving the students a sense of pride and investment in the activity. Additionally personalized picture cards can be used



Figure 4. Student practicing the candle pose.

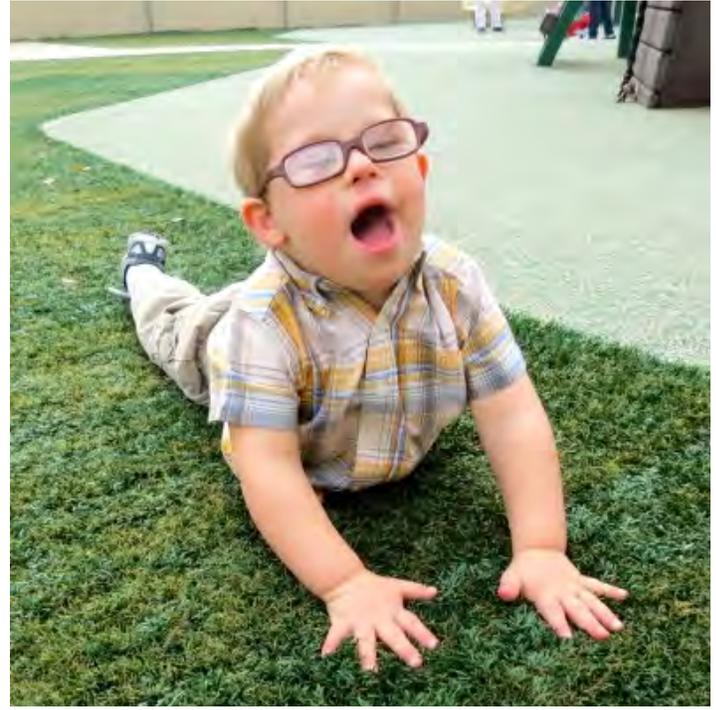


Figure 5. Student practicing the lion pose.

to engage students in the activities. Teachers should use reinforcers when necessary including stamps/stickers as rewards as well as verbal and non-verbal praise. Personal attitude and enthusiasm also helps to create an exciting and engaging physical activity or classroom environment for children (Lavay et al., 2016).

Specific Yoga Activity Strategies

Postures

Hatha yoga is the most common style of yoga incorporated into the schools and is known for the different postures, called *asanas*. These postures are divided into categories including (a) standing, (b) seated, (c) balance, (d) twists, (e) supine (lying on back), (f) forward bends, (g) back bends, and (h) inversions (White, 2009). Similar to many physical activities, yoga should be done with balance taken into consideration. For example, if one balance pose is done on the right side, it should be done for an equal amount of time on the left side. Creating this balance helps children develop symmetrically and keep the body in its natural alignment. Keep in mind, the names associated with different postures and poses may vary from commonly known yoga poses practiced by adults. When practicing yoga with children, the names and poses are more child friendly, easier to understand and relate to.

Yoga Stories and Songs

In an early childhood setting, most everything can be performed using a song or story (e.g., circle time, days of the week, transition songs, clean up songs, social stories) and yoga is no exception. When songs are combined with weekly themes and yoga, one simple activity can address physical,

social, and cognitive development. A few “yoga songs” and/or “yoga stories” can be made by modifying common nursery rhymes or songs, such as “Old McDonald,” and “Brown Bear, Brown Bear, What Do You See?” (read as a story or sung as a song). It is reinforcing to students when songs are modified to include their school name and/or names of specific students participating in class. This also provides for collaboration with music and speech therapists. For example:

“Yoga friends, yoga friends, what do you see?”

– I see Ryan, doing the puppy pose for me

Yoga friends, yoga friends, what do you see?

– I see Madison, doing the tree pose for me...

Yoga friends, yoga friends, what do you see?

– I see all my friends, doing the rest/sleep pose for me”

The order of poses should align with the physical skill levels of the children and the activities for the day. One possible progression of poses for “Yoga Friends, Yoga Friends, What Do You See?” may include: mouse, candle, dog, bridge, mountain, bird, windmill, waterfall, tree, and rest. Picture cards, or pictures of the children, can easily support yoga songs and stories. Most children enjoy seeing their own picture and pictures of their peers, friends, or family. When using “yoga stories” or songs for a cool-down or relaxation training, the story/song should always end with the rest or sleeping pose, aiding in transition between activities.

Another example could use the classic Old McDonald song:

“Old McDonald had a farm

E-I-E-I-O

And on his farm he had a cow

E-I-E-I-O

With a moo moo here

And a moo moo there
Here a moo, there a moo
Everywhere a moo moo
Old MacDonald had a farm
E-I-E-I-O..."

Possible progressions for Old McDonald might include: mouse, squirrel, cat, cow, dog, and bird. This song could be easily tied to a farm theme or unit in the classroom or at home. Sharing ideas with parents, sending electronic copies of the pictures, or even posting a video of the activities online can easily support these same activities as well as in the home. Integrating this kind of yoga activity not only gets the children warmed up, but also provides them with practice recognizing how to identify animals (as coupled with picture cards) and the different noises animals make, as well as practice with sign language.

Another example of a yoga song might be:

"Paxton did the squirrel pose, squirrel pose, squirrel pose, Paxton did the squirrel pose, all day long.

Hudson did the frog pose, frog pose, frog pose, Hudson did the frog pose, all day long. . .

Everyone did the sleep pose, sleep pose, sleep pose, everyone did the sleep pose, All day long!"

With this example, students not only get a leadership role by choosing their favorite pose, they also get to be recognized but their peers, friends, and/or family. Name recognition paired with yoga helps children relate to the individuals with whom they interact. Turning songs/stories into Do-It-Yourself (DIY) books can help support the children throughout the day; other individuals working with each specific child often like to keep copies to be used in a myriad of ways (see Table 1). Classroom teachers may keep a copy of the story in their book center or library. Parents may want to keep a copy at home so they can learn about their child's peers as well as supplement school instruction. Language therapists might keep a copy of the book in their room to help children learn names, pronunciations, and peer recognition.

Yoga with Technology

Technology should be used as a strategy to support activities in classroom and home-based settings, and can be effectively integrated into specific subject areas with the support of knowledgeable practitioners, parents, or caregivers (Janiu, 2011). Many new and exciting technological devices and strategies are constantly available; therefore, technology can serve as an engaging strategy that captures the attention of children. Yoga can be combined with hightechnology options for young children with DS, including the use of televisions/projectors and iPads/tablets. Instructional DVD's of yoga poses can be played on televisions or projectors in a variety of settings. Screens and projectors can also be used to connect to a teacher made PowerPoint presentation or digital copies of picture yoga cards. Yoga picture cards can also be made using pictures of each specific child, when personal pictures come up on the digital screen (e.g., iPad, projector), the children are more engaged. Many gaming devices have slots for memory cards that can be inserted and viewed using the game system. For

example, the Wii gaming system has a secure digital (SD) card reader that links to the Wii's photo channel. The photo channel can be used to view pictures, insert music, and flash through yoga pictures of each child.

Using yoga with technology can be modified for individuals or classes depending on the setting. Many yoga applications developed for young children exist on iPad/tablet devices (see Table 1 for recommended applications). Most interactive applications provide exciting and stimulating pictures and sounds or games during which children can follow along or play along. Photos or picture cards can also be loaded on tablets for some children to scroll through independently or with a peer or family member. Prior knowledge and experience about how to use a tablet can help children use technology appropriately and safely.

Yoga Games and Activities

Yoga can provide many benefits to children with DS, and can therefore be implemented into games and/or activities. Some additional games young children enjoy that include yoga are Simon says, yoga stations/rotations, freeze dance with locomotor skills, or musical hula-hoops with yoga. Simon says is a classic game where one person is Simon, they get to direct other children to do different yoga poses, "Simon says do the frog pose." All children have to do the Frog pose. The game continues by practicing of different poses and skills; children and adults can take turns being Simon. If Simon says, "Do the cat pose" without saying, "Simon says," the children are not supposed to do the pose. This game incorporates listening skills and helps children attend to game instructions. Yoga cards can be used in this game to support visual learning and comprehension.

Yoga stations. Rotating stations can be used to divide a large group of students into smaller groups, pairs, or individuals, with each group focusing on a different yoga skill or pose. If there is space in the room being used, yoga mats can be spread out and yoga cards can be dispersed at each station (one card per station). Each yoga mat represents one station, with calming music in the background; students can have 30 to 60 s to look at the card and practice the yoga pose, either independently or with a partner/small group. After 30 s, the instructor will ring a chime signaling students to rotate. This activity ends when all students have rotated to each station. Yoga cards such as *Yoga Kids: Keeping Busy Kids Fit and Relaxed* (Hall, 2011) provide the child with pictures and descriptions on how to do each pose. When working on a balance or gymnastic unit with stations, yoga can be used as one specific station that children can rotate to while practicing the skills in a unit. As mentioned previously, a locomotor skill warm up or freeze dance game can include yoga poses between skills, allowing children to catch their breath, and work on additional skills, such as balance and coordination. A game of musical hula hoops (e.g., musical chairs) can be played and when the music stops, instead of simply standing or sitting in a hoop, children perform a designated yoga pose inside a hoop. Skills addressed and practiced in a number of settings and activities provide more opportunities for learning and growth.



Figure 6. Students performing the tree pose using different modifications.

Family and Community Involvement

Families can easily be involved in practicing yoga with their young child or sibling with DS, as a type of recreation (Mactavish & Schleien, 2004). Children with Down syndrome can benefit and enjoy yoga as a recreational activity outside of schools. Some yoga classes are offered in many communities to include individuals with developmental delays and families. Families are encouraged to find inclusive settings for children with DS to participate in yoga with peers without disabilities. Yoga can be inclusive of children with DS because it can be individualized and practiced with modifications when necessary. Siblings can serve as peer models to their brother or sister with DS. Parents can serve as partners and provide assistance when needed. Schools or groups can hold family yoga nights where families can come together and participate in a fun physically active yoga session, and develops a community of active individuals. Families participating in activities together and making physical activity a priority provide ample opportunities of physical growth and development in a positive way.

Yoga Modifications

Safety is a key component and should be considered when working with children with DS. Some children with DS have compromised stability and the potential of atlan-

toaxial instability that results in increased mobility between the first and second cervical vertebrae (Fegan, 2011). Children with DS who have evidence showing a positive cervical X-ray of atlantoaxial instability should not participate in any yoga pose that puts their neck at risk, or puts their neck or back in a compromising position (i.e., fish pose, bridge pose, headstand poses). However, children with DS are capable of multiple benefits when practicing yoga safely and using modifications when necessary. The systematic review by Galantino et al. (2008) reported that yoga may be used for children with and without disabilities, and although orthopedic injuries are often caused by lack of strength and flexibility in children, there were still positive effects of yoga. No accounts of injury or safety concerns were reported in the systematic review. However, practitioners and teachers should be fully aware of children's medical needs prior to any participation in physical activity.

With safety taken into account, yoga is an ideal activity for children with DS, because all of the poses can be modified to meet the individual needs of each child. The poses may be held for multiple seconds, but each individual's body response needs to guide each individual through the specific poses. When practicing yoga, children should be reminded that they should not force a pose or be in pain (White, 2011). Poses are easily adaptable through modifications that can be made to each pose. For example, the tree pose is a great

option for a balance pose. The tree pose can be done with many modifications, including foot placement (the lower the foot to the ground, the more stability), and arm placement (extended out to the side, above the head, close to the heart), and/or static or dynamic balance options (see Figure 6). Further modifications with other poses can use bolsters, blocks, and/or straps depending on the individual need.

Summary

Yoga can provide children with DS a fun, non-competitive, and social experience in an educational setting (Drever, 2008), benefiting physical and motor development, social and emotional development and cognition through cross-curricular learning. The creativity and exploration brought by yoga keeps children engaged and active. When implemented into an early intervention APE/GPE setting, yoga can be used as a warm up or cool down activity. Other ways to implement yoga include behavior management techniques such as relaxation training, and new and exciting ways to make learning and moving fun. With proper safety tips and modifications, yoga can also be incorporated into many different facets of daily life, including school and community based settings as well as at home (e.g., at the park, day care, after school programs). Enjoyable ways to include yoga into daily development include yoga stories, picture cards, using yoga with technology, playing yoga games, and involving families along the way. It is hoped that practitioners and caregivers understand the benefits of yoga and have been provided with a variety of ways to implement yoga into classroom settings and home environments for young children with DS.

References

- Alexander, J., Walsh, P., Jarman, R., & McClune, B. (2008). From rhetoric to reality: Advancing literacy by cross-curricular means. *Curriculum Journal*, 19(1), 23–35.
- Cook, B. G., & Cook, S. C. (2013). Unraveling evidence-based practices in special education. *The Journal of Special Education*, 47(2), 71–82.
- Costa, P. B., Medeiros, H. B. O., & Fukuda, D. H. (2011). Warm-up, stretching, and cool-down strategies for combat sports. *Strength and Conditioning Journal*, 33(6), 71–79.
- Drever, L. C. (2008). Yoga and children ages 5-12 with Down syndrome: An instructional yoga DVD and parent manual. *ProQuest Dissertations & Theses*, n/a, 1–55.
- Fegan, P. (2011). Intellectual disabilities. In J. Winnick (Ed.), *Adapted physical education and sport* (pp. 151–172). Champaign, IL: Human Kinetics.
- Feldman, H. M. (2005). Teaching yoga to school-aged children: Principles and personal experiences. *International Journal of Yoga Therapy*, 15(1) 87–95.
- Fugler, J., Martel, K., Wheeler, A., Yarbrough, K., Young, A., Liu, H., & Salem, Y. (2015). *Use of yoga in children with autism: A systematic review of literature*. Poster presentation at the 2015 Combined Sections Meeting of the American Physical Therapy Association. Indianapolis, IN.
- Galantino, M., Galbavy, R., & Quinn, L. (2008). Therapeutic effects of yoga for children: A systematic review of the literature. *Pediatric Physical Therapy*, 20(1), 66–80.
- Hodge, S. R., Lieberman, L. J., & Murata, N. M. (2012). *Essentials of teaching adapted physical education: Diversity, culture, and inclusion*. Scottsdale, AZ: Holcomb Hathaway.
- Janiu, S. (2011). Pedagogical uses of technology in physical education. *Journal of Physical Education, Recreation & Dance*, 82(9), 41–49.
- Jin, J., & Yun, J. (2010). Evidence-based practice in adapted physical education. *Journal of Physical Education, Recreation & Dance*, 81(4), 50–54. doi: 10.1080/07303084.2010.10598465
- Jobling, A. (1994). Physical education for the person with down syndrome: More than playing games. *Down Syndrome Research and Practice*, 2(1), 31–35.
- Lavay, B. W., French, R. W., & Henderson, H. (2016). *Positive behavior management in physical activity settings* (3rd ed.). Champaign, IL: Human Kinetics.
- Mactavish, J. B., & Schleien, S. J. (2004). Re-injecting spontaneity and balance in family life: Parents' perspectives on recreation in families that include children with developmental disability. *Journal of Intellectual Disability Research*, 48(2), 123–141. doi:10.1111/j.13652788.2004.00502.x
- Meneer, K. S. (2007). Parents' perceptions of health and physical activity needs of children with Down syndrome. *Down Syndrome Research and Practice*, 12(1), 60–68. doi:10.3104/reports.1996.
- Murray, J., & Ryan-Krause, P. (2010). Obesity in children with down syndrome: Background and recommendations for management. *Pediatric Nursing*, 36(6), 314–319.
- Naznin V. B., Kerns, K., Zhou, E., Kapur, A., & Shiffrar, M. (2006) Perceptual-motor deficits in children with Down syndrome: Implications for intervention. *Down Syndrome Research and Practice*, 10(2), 74–82.
- Rogers, D. (2011). *A new approach to holistic physical education: yoga in the classroom* (Master's thesis, University of Toronto, ON, Canada). Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/29488/6/Rogers_Deborah_C_20116_MA_thesis.pdf
- Roopnarine, J., & Johnson, J. E. (2013). *Approaches to early childhood education* (6th ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Scelsa, G. (1978) The freeze [Recorded by Greg & Steve]. On *Kids in motion* [CD]. Los Angeles, CA: Little House Music for Greg & Steve Productions.
- Sumar, S. (1998). *Yoga for the special child: A therapeutic approach for infants and children with Down syndrome, cerebral palsy, and learning disabilities*. Special Yoga Publications, Buckingham, VA: Special Yoga.
- Telles, S., Singh, N., Bhardwaj, A. K., Kumar, A., & Balkrishna, A. (2013). Effect of yoga or physical exercise on physical, cognitive and emotional measures in children: A randomized controlled trial. *Child and Adolescent Psychiatry and Mental Health*, 7(1), 1–16. doi:http://dx.doi.org/10.1186/1753-2000-7-37
- Toscano, L., & Clemente, F. (2008). Dogs, cats, and kids: Integrating yoga into elementary physical education. *Strategies: A Journal for Physical and Sport Educators*, 21(4), 15.
- Walter, T., Quint, A., Fischer, K., & Kiger, J. (2011). Active movement warm-up routines. *Journal of Physical Education, Recreation & Dance*, 82(3), 23–31. DOI: 10.1080/07303084.2011.10598594
- White, L. S. (2009). Yoga for children. *Pediatric Nursing*, 35(5), 277–295.

Amanda J. Young, MS, CAPE, is a doctoral student in the Department of Kinesiology, Sherrill Teaching and Research Laboratory, Texas Woman's University, Denton, Texas.

Lisa Silliman-French, is a professor with the Department of Kinesiology, Texas Woman's University, Denton, Texas.

Lindy Crawford is a professor with the College of Education, Texas Christian University, Fort Worth, Texas.

Copyright of Palaestra is the property of Sagamore Publishing and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.