



Exercise Routines for Autistic Individuals Worth the Stretch

David Geslak, ACSM EP-C, CSCS

From the moment that parents learn of their child's autism diagnosis, they begin their journey toward providing the very best in care and support. Driven by an unwavering commitment to enhance their child's opportunities and quality of life, they leave no stone unturned in exploring avenues for their child's well-being. One vital intervention that often remains overlooked throughout this tireless pursuit is *exercise*.

It may come as a surprise that exercise is rarely discussed by doctors or the early intervention team. While many parents assume their child is getting physical activity through occupational or physical therapy, the reality is that these therapies are not tailored to meet the daily physical activity needs of autistic children and adults. Statistics from the U.S. Centers for Disease Control and Prevention reveal that nearly a third of autistic children are severely obese. This fact highlights the urgent need for a holistic approach to physical activity.

Children's lack of physical activity is compounded by insufficient awareness among parents of the *mandate* for physical education services according to the Individuals with Disabilities Education Act (IDEA) in the United States. Exercise interventions are frequently not discussed or included in Individualized Education Plans (IEPs). This lack of emphasis on exercise as part of comprehensive support for autistic individuals can result in missed opportunities for promoting physical health, social interaction and overall well-being. Even with all the research that shows exercise has a positive impact beyond the health-related benefits, it's sad, shocking and frustrating that exercise is not getting the attention it deserves in more schools.

An understanding of how to effectively deliver exercise for those with autism in communities worldwide is slowly increasing. Successfully engaging an autistic person in *any* new activity, especially exercise, is achievable. To do so, however, requires patience, creativity and the use of evidence-based teaching practices.

Exercise is an Evidence-Based Practice

"Exercise and Movement" is one of 28 defined evidence-based practices (EBPs) that support autistic individuals. In addition to the health-related benefits, exercise and movement have been shown to produce positive outcomes in academics, communication, school readiness, behavior, and motor and cognitive development.

It is important to note, however, that parents and professionals cannot just put their children, clients or students in a physical activity program or environment and immediately expect those results. They need to apply a combination of the other 27 evidence-based practices to start making the exercise connection. For example, visual supports, social narratives, video-modeling and reinforcement are commonly used practices in a special education classroom, therapeutic environment and home. These familiar practices promote success for those with autism and should be applied in exercise settings as well. Parents know what strategies have been used to motivate their children and can apply them in an exercise program to get their children engaged!

10 Minutes to Exercise Success

It's vital that parents have the right perspective when embarking on an exercise program with their autistic children. By way of illustration, let me share a personal anecdote.

I had just completed a successful exercise session with a 10-year-old autistic boy. He was engaged throughout the entire session and was making progress in his exercises and in his time on-task. When the session ended, I escorted him to his mother who was waiting in the foyer. I was excited to share the news but noticed a bit of concern on the mother's face. She then said to me, "What did I just pay for?" Taken aback, I replied with genuine curiosity, "What do you mean?" With a hint of frustration, she elaborated, "He's not sweating."

At that moment, I came to understand the urgent need to narrow the gap between mainstream notions of exercise and the subtle but critical requirements of autistic individuals' success with exercise.

What is seen on reality fitness shows like "The Biggest Loser" with individuals dripping in sweat does not represent a successful workout for most people. In fact, this approach will likely lead to children pulling further away from exercise.

When you first start on this mission, your goal should be to have your child enjoy completing the first session. If the child gets through the first session and is willing to try again, you've won! At the beginning, you and your child need to be like the tortoise, not the hare.



Making the Exercise Connection

The American College of Sports Medicine and the World Health Organization recommend that individuals do at least 60 minutes of physical activity that is moderate to vigorous in intensity every day. They further recommend that resistance and strength-training exercises be done at least three times a week.

Achieving such exercise goals can be a huge undertaking for families and individuals with motor challenges, sensory differences or busy lives. Some tips and strategies to get you and your child started and working towards those exercise goals are outlined below.

Start with 10 Minutes a Day

While the recommendations listed above are optimal goals, parents need to know that the most important thing is to just get started. Don't let the recommendations deter you from getting your children to exercise at all. In fact, a 2017 study from Rutgers University showed that just 10 minutes of low- to moderate-intensity exercise each day could make a significant difference in the lives of autistic individuals. Whether your child has never exercised before or has exercised intermittently throughout his or her life, a goal of 10 minutes a day is an achievable and realistic place to start, with more time being added eventually.

Start with Low-intensity Exercises

Research shows that adequate exercise requires high-intensity activities, including high-intensity cardiovascular exercise. For many autistic individuals, however, such high-intensity exercises should not be the initial focus as they require underlying skills like core stability, balance and motor planning to complete. Low-intensity exercises are a great place to start to slowly build a routine of engaging exercises, build confidence, and improve core muscles.

Use Evidence-based Practices in the Exercise Program

Evidence-based practices are rarely used in the physical education environment. Work with your child's school, sports team and personal trainers to help them implement an exercise program with visual supports, structured routines, sensory considerations, individualized goal-setting, positive reinforcement, adapted equipment and progress monitoring. Incorporating these approaches allows instructors to create a supportive and inclusive environment that caters to the unique needs and abilities of autistic individuals.

Provide Structure and Routine

Since autistic individuals typically thrive on structure and routine, it is important to have the same application and methodology in exercise. Choose the same day and time every week to schedule exercise. Provide the same exercises each week in the same order, and then slowly build on that foundation.

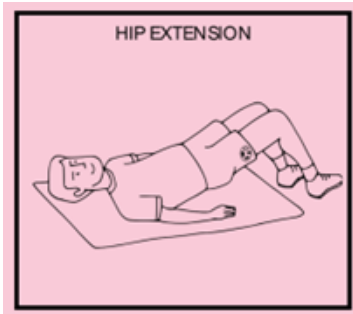
Consider a Gym Membership or a Personal Trainer

Autistic individuals often benefit from one-on-one instruction. It is especially effective for motivation and for use in a customized exercise routine. Participating in exercise in a gym setting also allows for increased community engagement and the opportunity to improve social skills. Seek out qualified professionals within your community to assist in developing a healthy relationship with physical activity.

Low-intensity Exercises at Home

Low-intensity exercises are an excellent place to start because they require limited or no equipment and provide significant benefits. These are also excellent exercises for parents to participate in with their children.

HIP EXTENSIONS



Having strong glutes and hamstrings can help autistic individuals improve gross motor movement challenges while also reduce any lower back pain. This is a low-impact exercise that can help build confidence and that most individuals should be able to perform safely.

What to Do

- Have your child lie on his or her back with knees bent, feet flat and neck relaxed.
- Have your child lift the butt or tummy up so the knee, hip and shoulder are in a straight line.
- Control the movement on the way down and repeat.
- Parents or coaches can stand by the child's feet and show the visual support card.

How Much

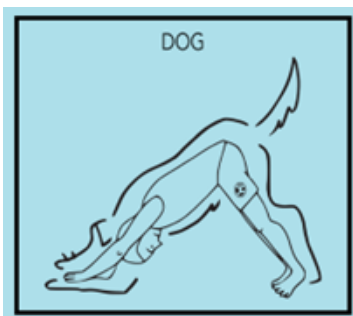
Perform 2 to 4 sets of 6 to 12 repetitions each. Focus on proper form.



Coaching Tips

- Try not to let the butt hit the ground in order to reduce the risk of injury while also challenging the muscles.
- It's okay if your child begins doing this exercise fast. At least your child is moving! In future workouts, coach your child and demonstrate how to make it a more controlled movement

DOWNWARD DOG



The yoga position called downward-facing dog offers full-body benefits, including stretching the lower body, strengthening the upper body, improving blood flow and improving posture.

What to Do

- Have your child start on his or her hands and knees and then lift his or her butt in the air.
- Place the visual support card on the ground in your child's line of vision.

How Much

Have your child do 1 to 4 sets of 10 to 20 seconds each.



Coaching Tips

- If your child's hands are not pointed straight ahead, don't adjust them in the first attempt. Just have your child try to complete the duration.
- Make sure your child is breathing throughout the exercise and not holding his or her breath.

LOG STRETCH

This exercise uses a foam roller and has many benefits without placing too many demands on a person new to exercise. It calms the nervous system, engages the abdominal muscles and reduces stress and tension in the neck, all while building a positive relationship with exercise.



What to Do

- Show your child the visual support card.
- Model how to get onto the foam roller.
- Be prepared to spot your child by staying close by.
- Make sure your child's head is always in a neutral position on the "log."

How Much

Begin with 30 to 60 seconds. Allow your child to stay on longer if he or she is in a safe postural position.



Coaching Tips

- Palms should face up.
- It's okay if the hands are not on the ground as this means that the muscles of the neck and shoulder girdle are tight. Don't force them down. This will improve over time.
- As your child becomes independent and confident in this position, you can add various arm movements to work on muscle tension reduction and motor planning.
- Practice, practice, practice.

Our motto at Exercise Connection, a company passionate about building autism-inclusive exercise solutions, is "Persistence, not perfection." Even basic exercises can be complex for autistic individuals. It is important to recognize that perfection isn't the immediate goal. While I acknowledge the importance of biomechanics and correct body positioning, the priority initially should be to simply engage in 10 minutes of physical activity every day. As the relationship between the child and his or her parent, occupational therapist or trainer strengthens and fosters trust, there will be opportunities to refine body movements and strive for perfection. The most important thing is to provide your child with an exercise program that is as accommodating and enjoyable as possible. This will allow your child to develop and maintain a lifelong routine of regular physical activity.



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David Geslak, ACSM EP-C, CSCS, began his journey as a paraeducator, then Fitness Coordinator, at a school for children with autism, where he experienced firsthand the unique challenges of teaching exercise to individuals with diverse learning needs. This experience ignited his passion for revolutionizing exercise for those with autism and other disabilities.

With a deep understanding of these challenges, David founded Exercise Connection, dedicating his career to pioneering innovative approaches to empower the lives of individuals with autism and disabilities to exercise. Through his groundbreaking work, David has developed award-winning and research-supported visual exercise tools and programs that have transformed countless lives.

As a published author, researcher, and internationally renowned presenter on autism and exercise, David's impact extends far beyond his initial experiences. Collaborating with esteemed organizations such as the American College of Sports Medicine (ACSM) and the National Center of Health, Physical

Activity, and Disability (NCHPAD), David has spearheaded initiatives that have reshaped the landscape of inclusive fitness.

One of his notable achievements includes co-creating the Autism Exercise Specialist Certificate with ACSM, empowering professionals worldwide to better serve individuals with autism through fitness. Additionally, his autism exercise video series, developed in partnership with NCHPAD, has garnered nearly 1 million views, spreading awareness and understanding of the importance of exercise for those with autism.

David's dedication to his mission has earned him recognition and accolades, including being named a finalist for IDEA's Fitness Leader of the Year in 2022 and ACSM's Certified Professional of the Year in 2021. His expertise as an ACSM Certified Exercise Physiologist and NSCA Certified Strength and Conditioning Specialist, along with his Bachelor's Degree in Health Promotion from the University of Iowa, underscores his comprehensive approach to promoting wellness.

Furthermore, David's innovative methodology has been embraced by parents, professionals, and higher education institutions worldwide. Twelve universities have incorporated his programs into their Adapted Physical Education and Special Education Programs, further solidifying his impact on the field.

A true pioneer in the field, David's influence transcends borders, with his insightful and inspiring presentations captivating audiences across nine countries. David continues to lead the charge in promoting exercise, inclusion, and empowerment for individuals of all abilities.



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