Exercise As An Evidence Based Practice for Individuals with Autism Spectrum Disorders

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Objectives

- Participants will learn the components of an effective exercise intervention plan.
- Participants will learn the importance of using exercise to intervene in an appropriate and positive way to address a wide variety of behaviors.
- Participants will learn how to teach students with ASD how to use exercise to become healthy and productive.
The NPDC has identified 27 Evidence-Based Practices

- Evidence-Based Practice Briefs

- The center is currently developing a new online resource, Autism Focused Intervention Resources and Modules (AFIRM) that will host self-paced e-learning modules for each of the EBPs.
Criteria for Qualification as an Evidence-Based Practice:

- At least two high quality experimental or quasi-experimental group design articles
  - Conducted by at least two different researchers/research groups
  
  OR

- At least five high quality single case design articles
  - Conducted by at least three different researchers/research groups
  - Having a total of 20 participants across studies
  
  OR

- A combination of at least one high quality experimental or quasi-experimental group design article and at least three high quality single case design articles
  - Conducted by at least two different research groups
Exercise
Increase in physical exertion as a means of reducing problem behaviors or increasing appropriate behavior.
What is this effective for?

- Self-stimulatory behaviors
- Hyperactivity
- Aggression
- Self-Injurious behaviors
- Depression
- Anxiety
- Gastro-intestinal issues
- Attention issues
- Obesity
Skills it can improve:

- Fine and gross motor skills
- Sensory Processing
- Coordination and Planning
- Slow Reaction Times
- Visual Tracking
Components of Effective Exercise Plans
Components of Effective Plans

• Types of Exercise
  – Programmed & Structured Activities
    • Aerobic exercise
    • Strength training
    • Stretching exercises
  – Warm-up & Cool-down activities

Must occur on a regular basis.
Exercise Routine

- Exercise routine on daily basis reduced a variety of challenging behaviors to zero or near zero levels
- 20 minute exercise routine; 2 times per day (start of day; after lunch)
  - Jumping on trampoline
  - Scooter boards
  - Jogging
  - Stretching
  - Arm curls with weights
- 1 minute exercise breaks once per hour
  - Yoga poses
  - Jogging in place
Added Benefits:

- Increased physical health
- Helps build in structured breaks and time for exercise during the day
- Teaches exercise as a coping skill
- Increases motor functioning
- Social implications
- Promotes self-esteem
Important Points to Remember:

• Never use exercise as a punishment

• Make sure to include as a part of daily routines

• Highly repetitive is GOOD!
Ideas on how to teach students with ASD to become healthy and productive
Set up an exercise board that requires communication and choice making.

AutismClassroomNews.com
Acknowledgements to Christine Reeve
Exercise as a Station:

- Shoulders
- Knees
- Toe touches
- Head rolls
- Slide
- Side bends
- Walk
- Jumping jacks
- Wall push-ups
- Arm circles
- Sit-ups
- Squats

AutismClassroomNews.com
Acknowledgments to Christine Reeve
Start the day with a yoga or exercise routine

- Cosmic Kids
- Brain Breaks/The Learning Station
- “The Sid Shuffle”
- Dash’s Dance Party—PBS Kids
Create your own obstacle course:

• Crawl under chairs
• Log roll across pillows
• Walk a balance beam of duct tape
• Throw a ball in a basket
• Walk with a bean bag on your head
A Classroom Example
Other Ideas:

- [http://www.yourtherapysource.com/cap.html](http://www.yourtherapysource.com/cap.html)
References

- http://www.autismclassroomnews.com
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