AFIRM

Autism Focused Intervention Resources & Modules
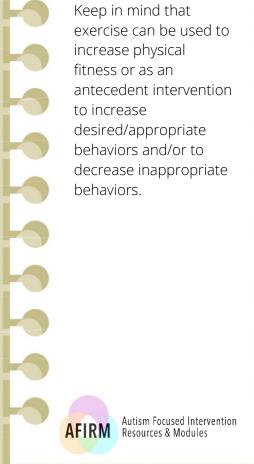
Exercise (ECE)
---Step-by-Step Guide---

This practice guide outlines how to plan for, use, and monitor the practice of exercise.

Keep in mind that exercise can be used to increase physical fitness or as an antecedent intervention to increase desired/appropriate behaviors and/or to decrease inappropriate behaviors.

BEFORE YOU START...

Each of the following points is important to address so that you can be sure the selected EBP is likely to address the learning needs of your student.

Have you found out more information about. . .?

- ☐ Identified the behavior...

- ☐ Collected baseline data through direct observation...

- ☐ Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered...

If the answer to any of these is "no," review the process of how to select an EBP.

For more information visit:
www.afirm.fpg.unc.edu

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Now you are ready to start...

Step 1: ECE Planning

The planning step explains initial steps and considerations involved to prepare for and develop an exercise plan for a learner.

1.1 Identify potential exercise activities.

To develop an exercise plan, you should first consider the potential location or locations that will be used for exercise. Next, brainstorm a list of potential exercise activities that would be appropriate to the location(s).

   📄 *The **Sample Exercise Inventory** can assist you in thinking of possible activities*

1.2 Conduct individualized exercise assessment.

An individualized exercise assessment often begins with informal observation and a review of current data. Additional data should be collected as needed to determine learner skills and preferences regarding the various movement activities.

*** Please remember to consult a physical education expert, physical therapist, or even a physician when designing a plan for learners with any physical or medical health issues. ***

   📄 *The **Sample Informal Exercise Assessment Tool** can be used to collect data about a learner's ability and level of interest in performing a skill*

1.3 Develop an exercise plan

Make a plan for the length and frequency of the intervention – at least one routine per day of at least 10-20 minutes, resulting in moderate to vigorous physical exertion, is recommended. Use the information obtained from the individualized assessment to inform the structure of the routine – consider learner skills, any physical limitations, stamina, and preferences. Finally, determine when the exercise routine will be implemented. Ideally, schedule the routine prior to activities/tasks in which the target behavior will more likely occur.

1.4 Plan for any needed supports

Determine visual supports that may be needed, such as picture cards, written descriptions, a schedule, or a timer. Consider additional structure that may be needed to make the end of the activity or activities clear. Determine whether peer or adult support is necessary and any modifications that may be needed to make the activity more appealing. Finally, make a plan for reinforcement of engagement in the exercise routine.

1.5 Obtain and organize all needed materials and equipment

Before beginning the routine, make sure you have all the materials and equipment you need.

Step 2: Using ECE

This section describes the process of implementing the exercise plan that was developed – teaching, reinforcing, and fading prompts.

2.1 Teach the learner the exercise routine

The teaching process should be individualized for each learner based on his or her strengths and skills. In general:
- use visual cues as needed; reference the visual schedule for the routine as transitioning to each movement activity
- model each movement activity
- prompt as needed (visual, verbal, physical)

2.2 Reinforce learner engagement and completion of the exercise routine

Part of the teaching process involves the reinforcement of newly learned skills. Some learners are easily reinforced by simple verbal praise, while others may require different forms of rewards or a more sophisticated reinforcement system. Both learner engagement and completion of exercise activities should be reinforced.

2.3 Fade prompts and any tangible reinforcement as quickly as possible when criterion is met

It is important to fade any additional reinforcement as soon as the learner has learned the routine and can successfully complete the activities. Extra prompting and cuing used while teaching should also be faded as much as possible, although some visual cues might continue to be helpful to learners throughout the intervention.

Step 3: Monitoring ECE

The following process describes how the use of exercise can be monitored and how the plan might need to be adjusted based on the data.

3.1 Collect data on engagement in exercise routine and target behaviors

Collect data on both the learner's participation in the exercise routine and the target behaviors of the learner. Learners may also complete a self-assessment regarding their perceived effort of level of difficulty of the routine.

Sample Datasheets may be used as is or modified for use.

3.2 Determine next steps based on learner progress

The team will need to make a determination about effectiveness of the exercise intervention based on the data collected. If the learner is making progress, the team will need to decide whether or not to fade use of the exercise routine altogether, reduce the frequency, make further modifications, or continue with the intervention as planned.

If the team determines that the learner is not making appropriate progress, consider the following:
- Is the target skill or behavior well defined?
- Is the skill or behavior measurable and observable?
- Is the skill too difficult? Does it need to be broken down into smaller steps?
- Have we devoted enough time to using this strategy (frequency, intensity, and/or duration)?
- Was the exercise intervention implemented with fidelity?
- Are the supports developed appropriate for the learner?
    - Is the form of supports appropriate (e.g., picture, photograph, words, a combination, etc.)?
    - Is additional support/structure needed (this may include tangible support materials or even adult assistance)?
    - Does the reinforcement plan need to be adjusted (e.g., identify a novel set of rewarding items/activities, increase the frequency of reinforcement, etc.)?
- Are there changes to the exercise routine itself that might make it more appropriate/accessible for the learner? For example:
    - More/less/different activities on the schedule
    - More opportunities for learner choice

If these issues have been addressed and the learner with ASD continues to not show progress, consider selecting a different evidence-based practice to use with the learner with ASD