EXECUTIVE FUNCTIONING
10 PRACTICAL STRATEGIES TO HELP YOUR CHILDREN IMPROVE THEIR EXECUTIVE FUNCTION SKILLS

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AGENDA

• What is executive functioning
• 10 Practical Strategies to Help Your Children Improve EF Skills:
  - Planning;
  - Organizing;
  - Initiating & Completing Tasks;
  - Managing Time;
  - Self-Regulating;
  - Mental Flexibility;
  - and More
The executive functions are a set of processes that all have to do with managing oneself and one's resources in order to achieve a goal. It is an umbrella term for the neurologically-based skills involving mental control and self-regulation.
• EF issues are weaknesses in a set of important mental skills that are key to learning. Kids with executive functioning issues often struggle with working memory, flexible thinking and self-control.
IS IT CODE FOR ADHD?

All kids with ADHD have EF deficits
Not all (but many) who have EF deficits have ADHD
## ADHD VS EF DYSFUNCTION

<table>
<thead>
<tr>
<th></th>
<th>ADHD</th>
<th>EF Deficits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is it?</strong></td>
<td>A brain-based condition that makes it hard for kids to concentrate, use working memory, organize and manage themselves. They may also be impulsive or hyperactive. These are all issues with executive function.</td>
<td>Weaknesses in key mental skills that are responsible for attention, memory, organization and time management, and flexible thinking. Kids with ADHD struggle with these skills. But so do some kids with learning issues who don’t have ADHD.</td>
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<tr>
<td>Signs you may notice?</td>
<td>ADHD</td>
<td>EF Deficits</td>
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<td>------------------------------------------------------------------------------------</td>
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<tr>
<td>• Has a hard time paying attention</td>
<td>• Has difficulty with self-control</td>
<td>• Has a hard time paying attention</td>
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<tr>
<td>• Has difficulty with self-control</td>
<td>• Has trouble managing emotions</td>
<td>• Has difficulty with self-control</td>
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<tr>
<td>• Has trouble holding information in working memory</td>
<td>• Has difficulty holding information in working memory</td>
<td>• Has trouble managing emotions</td>
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<tr>
<td>• Has trouble switching easily from one activity to another</td>
<td>• Has trouble switching easily from one activity to another</td>
<td>• Has trouble holding information in working memory</td>
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<tr>
<td>• Has trouble getting started on tasks</td>
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<td>• Has trouble switching easily from one activity to another</td>
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<tr>
<td>• Has problems organizing his time or materials</td>
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<tr>
<td>• Has difficulty keeping track of what he’s doing</td>
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<td>• Has problems organizing his time and materials</td>
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<td>• Has trouble with thinking before acting</td>
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<tr>
<td>• Is easily distracted and often forgetful</td>
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<td>• Has trouble with thinking before acting</td>
</tr>
<tr>
<td>• Has trouble waiting his turn</td>
<td>• Has trouble waiting his turn</td>
<td>• Is easily distracted and often forgetful</td>
</tr>
<tr>
<td>• Doesn’t seem to listen when spoken to</td>
<td>• Doesn’t seem to listen when spoken to</td>
<td>• Has trouble waiting his turn</td>
</tr>
<tr>
<td>• Fidgets excessively</td>
<td>• Fidgets excessively</td>
<td>• Has problems remembering what he’s been asked to do</td>
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<tr>
<td>• Acts as if he’s “driven by a motor”</td>
<td>• Acts as if he’s “driven by a motor”</td>
<td></td>
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<tr>
<td>• Interrupts others and talks excessively</td>
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</table>
### ADHD EF Deficits

<table>
<thead>
<tr>
<th>Social / Emotional Difficulties</th>
<th>ADHD</th>
<th>EF Deficits</th>
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<tr>
<td></td>
<td>Impulsivity and trouble managing emotions may cause difficulty making and keeping friends. Frequent negative feedback for acting out or not paying attention can impact self-esteem and motivation. It can result in kids feeling “bad” or “no good.”</td>
<td>Trouble remembering what he’s been asked to do can cause problems in social relationships. Not thinking flexibly can make it hard to be flexible with others. Poor self-control and self-monitoring can cause problems with friends.</td>
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THE BOTTOM LINE ABOUT EF

• No matter the cause, EF deficits are teachable skills that can be worked on and improved starting in toddlerhood and continuing through adulthood.
10 TYPES OF EF ISSUES

1. Planning,
2. Organization,
3. Time-management,
4. Task initiation and self-motivation
5. Flexibility and transitions,
6. Memory (short-term, working, and long-term),
7. Self-monitoring,
8. Verbal and physical impulsivity,
9. Emotional control,
10. Self regulation
1. PLANNING

Key difficulty: Planning and prioritizing in order to manage current and future tasks

Ways to work on this deficit: use external systems such as planners to serve as visual reminders and help strategize how much time is needed to complete tasks and subgoals of tasks. Bring child to stationary stores and scavenger hunt for planners, establish homework center & routine of coming home each day after school and reviewing bookbag/ HW folder to plan for upcoming assignments, organize homework space to plan for a place to work without distractions.
My homework app

Trifold cardboard & neat desk to block distractions

Planners

The best way to keep your school life organized!
2. ORGANIZATION

• **Key difficulty:** The ability to impose order on work, play, and storage spaces

• **Ways to work on this deficit:** use of organization tools like supply caddies, office supplies (post its, binders, etc), calendars, and back pack routines
• Checklists

• Highlighters

Post its

Clean bookbag
3. TIME MANAGEMENT

• **Key difficulty:** Difficulty with comprehending how much time a project will take to complete, a sense of time.

• **Ways to work on this deficit:**
  - Use of watches
  - Clocks, clocks and more clocks
  - Website blockers to block / limit time with distractions
  - Learn to estimate time tasks take by timing self
Cold Turkey website blocker
4. TASK INITIATION

• **Key difficulty:** Difficulty with the ability to begin a task or activity and to independently generate ideas, responses, or problem-solving strategies.

• **Ways to work on this deficit:** use of timers to work in short interval bursts
TIMERS

[Image of a stopwatch and a smartphone screen with a stopwatch application]
5. SELF MOTIVATION

• **Key difficulty:** Difficulty motivating self to accomplish tasks related to work and school

• **Ways to work on this deficit:** Start with understanding what matters to your child (rewards and incentives will be based on this), create threat free environment, praise for all steps toward positive actions
6. MENTAL FLEXIBILITY AND TRANSITIONS

• **Key difficulty:** Difficulty moving from one situation to another and to think flexibly in order to respond appropriately to the situation.

• **Ways to work on this deficit:** Transitions: warnings about upcoming schedule changes, visual timers. Mental flexibility: role model rolling with the flow, reward flexibility, playing games with shifting rules.
7. MEMORY (SHORT TERM, WORKING, AND LONG-TERM)

• **Key difficulty**: Difficulty with The capacity to hold information in mind for the purpose of completing a task.

• **Ways to work on this deficit**: Note taking skill development, taking pictures of smart board, encouragement of using note taking and homework capture apps
8. SELF MONITORING

• **Key difficulty:** Difficulty with the ability to monitor one's own performance and to measure it against some standard of what is needed or expected

• **Ways to work on this deficit:** raise awareness of self and effect of environment on self, use of self monitoring apps and other technology
Stay on task app

Revibe watch

Cold turkey app
9. EMOTIONAL CONTROL

• **Key difficulty:** The ability to inhibit -stop one's own behavior at the appropriate time, including stopping actions and thoughts. The flip side of inhibition is impulsivity; if you have weak ability to stop yourself from acting on your impulses, then you are "impulsive."

• **Ways to work on this deficit:** games that encourage starting / stopping (simon says, freeze tag, statue), board games (sorry), mindfulness apps (see next page), activities (yoga, meditation), and teach zones of regulation
ENCOURAGE USE OF MINDFULNESS TOOLS

Breathe, Think, Do with Sesame is intended for parents and caregivers to use with their young children (ages 2-5) to help teach skills such as problem-solving, self-control, planning, and task persistence.
What it Costs: Free (iOS and Android)

The DreamyKid meditation app offers meditation, guided visualization and affirmations curated just for children & teens. It uses proven techniques that teach your kids methods to guide them towards a happier life through mindfulness.
What it Costs: Free (iOS)
<table>
<thead>
<tr>
<th>BLUE ZONE</th>
<th>GREEN ZONE</th>
<th>YELLOW ZONE</th>
<th>RED ZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sad</td>
<td>Happy</td>
<td>Frustrated</td>
<td>Mad/Angry</td>
</tr>
<tr>
<td>Sick</td>
<td>Calm</td>
<td>Worried</td>
<td>Terrified</td>
</tr>
<tr>
<td>Tired</td>
<td>Feeling Okay</td>
<td>Silly/Wiggly</td>
<td>Yelling/Hitting</td>
</tr>
<tr>
<td>Bored</td>
<td>Focused</td>
<td>Excited</td>
<td>Elated</td>
</tr>
<tr>
<td>Moving Slowly</td>
<td>Ready to Learn</td>
<td>Loss of Some Control</td>
<td>Out of Control</td>
</tr>
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Children will love to move their bodies as they flip through their very own yoga deck. With clear pictures and step-by-step instructions, these yoga poses are fun, child-friendly, and great for every body!
What it Costs: $1.99 (iOS)

Whether they need to mellow out before bed, develop positive relationships or simply have a peaceful moment, Stop, Breathe & Think Kids offers children a fun and easy way to identify and process their emotions. From counting breaths to friendly wishes or frog jumps, each activity brings fun rewards to keep them engaged.
What it Costs: Free (iOS)
PARENT SELF-GUIDED RESOURCES

• Camp Cope-A-Lot is a 12-session interactive CD-ROM-assisted treatment for use with children suffering from anxiety. The computer program provides cognitive behavioral therapy (based on the *Coping Cat* treatment) for 7 to 13 year old anxious youth.

• Consider using parent version of coping cat for 7-13 year olds

  [www.copingcatparents.com/Child_Anxiety_Tales](http://www.copingcatparents.com/Child_Anxiety_Tales)
SELF-GUIDED RESOURCES

Anxiety-Free Kids: An Interactive Guide for Parents and Children

What to Do When You Worry Too Much: A Kid's Guide to Overcoming Anxiety

We Thinkers! Series by Michelle Garcia Winner
10. SELF REGULATION

• **Key difficulty:** Difficulty with calming yourself down when you're upset and cheer yourself up when you're down.

• **Ways to work on this deficit:** Biofeedback, therapy, mindfulness, awareness of emotional vocabulary
GOALS OF BIOFEEDBACK

• Increase awareness of stress as it is mounting before it becomes a crisis (mindfulness)
• Increase control over reactivity to stress (empowerment)
• Learn methods to use this strategically and in cognito without a trainer (generalization)
WHAT DOES A SESSION LOOK LIKE?

• Baseline (2 minute segments each):
  • As you are
  • Emotional stressor
  • Cognitive stressor
  • Breathing practice (6 breaths per minute protocol)

• Training sessions:
  • Visualization (focus on someone you appreciate, a pet, time when they were in a place of calm and at ease)
  • Sensory layers (audio- nature sounds; smell- essential oils; tactile- fidget)
GOALS OF AN HRV BIOFEEDBACK SESSION

• Increase parasympathetic activity,
• Make a conscious shift of emotional state,
• Sustain focus on positive emotions
• Demonstration
  - Live with computer
  - With iphone (download now)
breathe.
BREATHE PROTOCOL

• Breathing in through nose for 3 seconds and out from mouth for 5-6 seconds
• Slow motion
• Feet and hand position, no crossing body
• Noisy breath
• Closing eyes
• Finding time to integrate into your day
BIOFEEDBACK APPS

Welltory (iphone and Android). By measuring your heart rate through the camera and light features on your phone. Allows you to quantify your level of psychological or physical stress and provides an estimate your level of stress in real time. (Free)

Stress Guide (iphone). Same as above. (Free)
BIOFEEDBACK APPS

Inner Balance /EmWave by Heart Math. Free (iOS and Android)

Guided meditation sessions are available in lengths of 3, 5, 10, 15, 20 or 25 minutes so you can choose the perfect length to fit with your schedule. Free (iOS and Android)
BIOFEEDBACK SPECIFIC FOR KIDS

Mightier™ biofeedback games help kids 6-14 build emotional regulation skills.

Kids wear a heart rate monitor that controls the difficulty of the game. They learn calming skills to stay focused and in control to win the game. Our expert coaches guide parents through every step.
Dual Drive by EmWave. Scores increase as they relax to continue the game. $$

Tropical Heat by EmWave Same as above. $$
SUMMARY (HOW PARENTS CAN HELP ENCOURAGE EF SKILLS)

- Create daily routines and rituals to provide structure.
- Practice self-regulation skills.
- Model appropriate social behavior.
- Teach time management skills.
- Give advance warning of upcoming transitions.
- Have them talk through difficult tasks. Model thinking aloud during planning and problem-solving situations.
- Improve monitoring skills by asking him to evaluate their performance. Review the accuracy of their evaluation with them.
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- Licensed Clinical Psychologist
- Private practice in Newtown, CT
- Heart Math certified biofeedback practitioner
- Specializing in biofeedback, therapy, and psychological testing (504/IEPs)
RESOURCES

Executive Functioning:
• www.understood.org
• https://www.additude.com/
• www.childmind.org
• www.kidshealth.org

Biofeedback:
• www.heartmath.org
• https://www.heartmath.org/research/science-of-the-heart/health-outcome-studies/
• www.mightier.com