

Executive Function Disorders (EFD)

About Executive Function Disorders (EFD)

Executive function is like the CEO of the brain. It's in charge of making sure things get done from the planning stages of the job to the final deadline. When someone has issues with executive functioning, any task that requires planning, organization, memory, time management and flexible thinking becomes a challenge. Six steps of executive function are:

1. **Analyze** a task
2. **Plan** how to address the task
3. **Organize** the steps needed to carry out the task
4. **Develop** timelines for completing the task
5. **Adjust** or shift the steps, if needed, to complete the task
6. **Complete** the task in a timely way

Executive functions consist of several mental skills that help the brain organize and act on information. These skills enable people to plan, organize, remember things, prioritize, pay attention and get started on tasks. They also help people use information and experiences from the past to solve current problems.

Having issues with executive functioning makes it difficult to:

- Keep track of time
- Make plans
- Make sure work is finished on time
- Multitask
- Apply previously learned information to solve problems
- Analyze ideas
- Look for help or more information when it is needed

Areas Impacted by EFD

Impulse Control

Emotional Control

Flexibility

Organization

Working Memory

Task Initiation

Self-Monitoring

Planning

Prioritizing

What conditions are related to executive functioning issues?

It's unusual for a person to have difficulty with executive functioning but no other health issue. It's far more common to have executive functioning issues in addition to something else. This is what doctors refer to as comorbidity. Here are some conditions that are marked by—or sometimes misdiagnosed as—executive functioning issues:

- **Attention-deficit hyperactivity disorder (ADHD):** This is one of the most common childhood brain-based disorders. It affects attention, impulse control and activity level. And can have an impact on learning. Difficulty with executive functioning is a significant symptom of ADHD
- **Learning issues:** Executive functioning skills in children as young as preschoolers may predict later learning achievement, such as the ability to do math. Studies have shown that children and adolescents with learning issues are more likely to experience executive functioning weaknesses compared to kids the same age who don't have learning issues. Children who are diagnosed with both learning disabilities and ADHD are at greater risk for more severe executive dysfunction.
- **Mood disorders:** Depression, anxiety and other mental health conditions can affect executive functioning.
- **Fetal alcohol syndrome (FAS):** FAS is found in some children who were exposed to alcohol before birth. Many children with FAS have trouble with learning, working memory and other executive functions.
- **Brain damage:** Concussions, strokes or other things that cause damage to the brain are associated with executive functioning issues, especially if the damage is in the prefrontal cortex.
- **Cancer treatments:** Executive functioning skills may be affected by chemotherapy and/or radiation therapy used to treat children for cancers such as leukemia and brain tumors.

Source: <https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/understanding-executive-functioning-issues#item2>

EFD Resources

National Institute of Mental Health

<http://www.nimh.nih.gov/about/organization/dnbbs/behavioral-science-and-integrative-neuroscience-research-branch/executive-functions-program.shtml>

Arizona Rehabilitation Services

www.azdes.gov/rsa/

Neuro Talk

<http://neurotalk.psychcentral.com/thread170320.html>

SwabLearning

www.swablearning.org

Abledata

www.abledata.com

The Alliance for Technology Access

www.ataccess.org

EFD APPS for Computer and Mobile Devices

<u>NAME</u>	Category	Platform	Age
Any.DO	productivity	iPhone iPad	(iOS 7.0 or later) any
Ginger Page	productivity writing	iPhone iPad iPod Touch	(iOS 7.0 or later) any
Dragon Dictation	Communication Business	iPhone iPad iPod Touch	(iOS 7.0 or later) any
MoodKit	Wellness	iOS	any
Breathe2Relax	Stress Anxiety	iOS Android	any
Evernote	Organization	iOS Android Web	any
It's Done!	Productivity Organization	iOS Android	any
Where Am I?	Location	Android	any

