



What Is Executive Function?

Executive function is a set of mental skills that help you get things done. These skills are controlled by an area of the brain called the frontal lobe.

Executive function helps you:

- Manage time
- Pay attention
- Switch focus
- Plan and organize
- Remember details
- Avoid saying or doing the wrong thing
- Do things based on your experience
- Multitask

When executive function isn't working as it should, your behavior is less controlled. This can affect your ability to:

- Work or go to school
- Do things independently
- Maintain relationships

Types of Executive Function

Executive function can be divided into two groups:

- **Organization:** Gathering information and structuring it for evaluation
- **Regulation:** Taking stock of your surroundings and changing behavior in response to it

For example, seeing a piece of chocolate cake on a dessert cart at a restaurant may be tempting. That's where executive function can step in. The organizational part reminds you that the slice is likely to have hundreds of calories. Regulation tells you that eating the cake conflicts with goals you may have, like eating less sugar or losing weight.

Problems With Executive Function

Some people are born with weak executive function. And people with ADHD, depression, or learning disabilities often have weaknesses in it.

An injury to the front of the brain, where the frontal lobe is, can harm your ability to stay on task. Damage from Alzheimer's disease or strokes may also cause problems.

Children and Executive Function

Problems with executive function can run in families. You may notice them when your child starts going to school. They can hurt the ability to start and finish schoolwork.

Warning signs that a child may be having problems with executive function include trouble in:

- Planning projects
- Estimating how much time a project will take to complete
- Telling stories (verbally or in writing)
- Memorizing
- Starting activities or tasks
- Remembering

There's no single test to identify problems with it. Instead, experts rely on different tests to measure specific skills.

Problems seen on these tests can't predict how well adults or children will do in real life. Sometimes, watching them and trying different things are better ways to improve weak executive function.

Treating problems with executive function early can help children outgrow it. The brain continues to develop well into adulthood, and experiences can shape executive function as the brain grows.

How to Manage Executive Function Problems

Here are some tips from the National Center for Learning Disabilities:

- Take a step-by-step approach to work.
- Rely on visual organizational aids.
- Use tools like time organizers, computers, or watches with alarms.
- Make schedules and look at them several times a day.
- Ask for written and oral instructions whenever possible.
- Plan for transition times and shifts in activities.

To improve time management:

- Create checklists and estimate how long each task will take.

- Break long assignments into chunks, and assign time frames for completing each one.
- Use calendars to keep track of long-term assignments, due dates, chores, and activities.
- Write the due date on the top of each assignment.

To better manage space and keep things from getting lost:

- Have separate work areas with complete sets of supplies for different activities.
- Organize the work space.
- Minimize clutter.
- Schedule a weekly time to clean and organize the work space.

To improve work habits:

- Make a checklist for getting through assignments. For example, a student's checklist could include such items as: get out pencil and paper; put name on paper; put due date on paper; read directions; etc.
- Meet with a teacher or supervisor on a regular basis to review work and troubleshoot problems.

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Sources 

SOURCES:

National Center for Learning Disabilities: "What is Executive Function?"

Chan, R. *Archives of Clinical Neuropsychology*, 2008.

Elliot, R. *British Medical Bulletin*, 2003.

University of California, San Francisco: "Brain 101: Topics in Neuroscience: Executive Functions."

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